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Wisconsin Horticulture

September, 1951

WISCONSIN HORTICULTURE

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Want a McIntosh or Jug of Cider? Get Them At

A Successful Roadside Market

In the fall of 1950, publicity director Jeannine Kruse, working for the Wisconsin Apple Institute, wrote this story about Ed Stoeber and his orchard. The Editor took the picture of Ed waiting on customers one sunny day and the article and picture were accepted from Miss Kruse by the "Wisconsin Agriculturist and Farmer" of Racine. The following is the story Miss Kruse wrote:

How Plans Are Made

Ed Stoeber took a big bite of a luscious apple. "Ah! Here's the apple I want to grow," he said.

That taste of a new apple, back in 1916, changed Stoeber from an ordinary Wisconsin apple grower into one of the state's outstanding orchardists.

Ed had a few acres of apples near Madison. One day he attended Wisconsin State Horticultural Society convention in Madison and saw the fruit exhibit. One apple in particular caught his eye—a new red variety labeled "McIntosh."

D. E. Bingham, pioneer fruit grower of Door County was showing them and offered one to Ed. He sampled it and resolved to center his efforts on McIntosh.

Oh, he has Wealthies, Greenings and a few trees of other varieties. But 70 percent of the Stoeber orchards now are producing his favorite McIntosh.

Ed's roadside fruit stand out a little way from Madison is a popular spot for motorists. His specialty is selling apples and apple cider. Hundreds of people stop to buy, every week.

"My stand, plus the weekly sales, bring in more money than any other kind of selling I do," says Ed. "News of my stand gets around and it's the best advertising I can get."

Grading Increases Sales

Bright red polished McIntosh apples, along with some green and yellow varieties make an attractive display that customers don't forget. But Ed claims: "I believe the real success of my stand is due to the fact that I grade my apples—six grades for Mac's' and four for the others.

"Folks have a chance to come out and buy any size apple they want, any price they want to pay. They select them with or without blemishes."

"Grading means that each basket will have the same quality apples in the bottom as are shown on top. Customers appreciate this uniform size and quality throughout the bushel.

Another drawing card is Stoeber's apple cider, made from his own hydraulic press and power grater. For cider Ed uses under size and blemished apples which aren't attractive for selling.

Ed sells cider there, as an on-the-spot drink, or in gallon jugs for home use.

At the close of the 1950 season, this successful orchardist offers a few suggestions:

1. Take out unprofitable trees, and hard-to-sell varieties.

2. Grade your apples for uniformity in selling.

3. If you're a young fellow starting out, don't buy an old orchard. Start a new one.

Ed Stoeber, Madison orchardist, waits on customers at his roadside stand on Highways 12-13, west of Madison. Here he fills a paper bag with McIntosh for a customer.

APPLES TO BE PURCHASED FOR SCHOOL LUNCH PROGRAM

The U. S. Department of Agriculture, Production and Marketing Authority, has announced it will again purchase apples for the school lunch program this year. Plans will probably be much the same as in past years. Good varieties packed U. S. No. 1, 2½ inch and up in regular commercial containers will be purchased in carload and truckload lots.

Growers having apples they would like to sell should write Mr. Walter Katterhenry, PMA Office, 117 Monona Ave., Madison, Wis. for detailed information.

The Wisconsin Apple Industry committee working with PMA met September 7 to make recommendations of benefit to Wisconsin growers. The committee consists of G. J. Hipke, New Holstein; Arnold Nieman, Cedarburg; H. J. Rahmlow, Madison; Don Reynolds, Sturgeon Bay; H. J. Schubert, Gays Mills; Wm. Shuga, Bayfield; C. J. Telfer, Green Bay.

Roadside Marketing of *Frosted Sweet Cider*

As Told to the Michigan State Horticultural Society

By Paul E. Muckley, Waynesburg, O.
(Condensed)

Our orchards are located in the hills of southeastern Ohio about 40 miles south of Akron. We have 100 acres in apples, 50 of which are in production and will be retired as soon as the younger plantings have reached a reasonable production level. We are located on a moderately well travelled state highway. Our storage and sales-room is located at this point.

In 1939, we froze 18 barrels in a commercial storage that maintained a zero temperature. We began to scout the refrigeration appliance field to find a suitable storage and dispensing unit. We were unable to find anything that would meet our needs. To meet the situation we found that we could make some alterations in an eight can milk cooler and meet our needs admirably.

In 1940, we took our 18 barrels of Frosted Cider and our newly designed cooler and dispensing unit to the Stark County Fair opening, September 1st. We found that our Frosted Sweet Cider clicked with the public, which received it as a beverage with great enthusiasm. We have continued to maintain a concession at the Ohio State Fair since 1941 and several county fairs where the frosted product is sold by the cup only.

Cider in Summer

The enthusiastic reception by the public of this new summer beverage led us to plan to freeze cider to offer at our roadside market thru the warm summer months. We had formerly opened our market in late September. In carrying out the new plan we open our market late in June just prior to July 1st. We erect a portable sales stand in the large parking area in front of our permanent sales room. This attractive market stand is 12x12 and is made of sections that can be easily assembled or disassembled and stored away. The motorist can approach this stand from all sides as he drives off the highway into the parking area. In addition to Frosted Sweet Cider which is sold by the cup, half gallon and gallon, we usually have Transparent apples by July 1st.

"When I offered to let him pick apples on halves I didn't expect this!"

Begin Sales Early

You can readily see that to begin Sweet Cider sales by July 1st, we have more than doubled our market season at a time when the public is most receptive to a cold, refreshing beverage. The competition of selling Sweet Cider in this period is not a factor. We continue our sale of Frosted Cider until early October at which time we usually have varieties that are ripe enough to make a satisfactory blend of sweet cider.

Our freezing operations do not begin until November at which time we use the satisfactory drops not needed for fresh cider sales. It is obvious that to make good cider the drops used must be good sound stock, and varieties that will make a satisfactory blend. Our apples are stored in crates, orchard run. As they are graded and sold during the winter and cider apples accumulate we continue to make cider and place it into freezer storage. The greater portion of our cider moves into storage after January 1st. There are two reasons for this: 1. It cuts down the period of storage costs. 2. We find the heavy bodied cider of the late fall and winter season more desirable for summer sales. The customer has a sense of appreciation for this quality over the lighter of the early season. We normally freeze 250 barrels during the season.

The cider is well strained as it comes from the press and placed in 50 gallon whiskey barrels, allowing somewhat more than **10 per cent head room.** The cider is taken immediately to a commercial storage 12 miles away where it is frozen and stored at zero temperature.

How to Thaw Frozen Cider

We withdraw the Frosted Cider four or more days before anticipated use. It usually requires four days and nights of summer weather to completely melt the frozen product. If it is not rather warm more time is required or the process may be speeded by using a needle bar and breaking up the ice mass frequently. Just as soon as the ice mass is almost completely melted we move the barrels into positions to be pumped into the storage and dispensing tank. We like to have the barrels set in this position an hour before any pumping. When you use whiskey barrels for freezing, a certain amount of the charcoal is broken down and if pumped immediately after moving into position cloudiness may develop.

How to Restore Thawed Cider

When you freeze cider you are dealing with a concentrate. The sugar content or syrup moves to the center and upward as the water content freezes about it. When you thaw the product the sugar content thaws immediately and remains in the lower portion of the barrel as the ice containing the largely water content rises and floats on the top as it melts. It is therefore necessary to reconstitute the product to restore it to its original form. We do this by pumping the thawed product through a centrifugal pump across a screen covered with two layers of cheese cloth which effectively strains out any undesirable particles. The storage or dispensing tank outlet pipes are slightly raised above the bottom of the tank. The cloudiness that develops in the bottom of any container containing fruit juices is deposited on the bottom of the tank and

we are able to draw off a clear, sparkling product.

I think it is reasonable to conclude that the reason that the small consumer package of frozen sweet cider has not achieved popularity is that you are dealing with a concentrate package which must be completely thawed and re-constituted to be at its best. This, I think, the average customer will fail to do.

It is our practice to withdraw during the summer season from freezer storage at least a week's supply of cider. When nearly melted the barrels not needed for immediate pumping are moved into a walk-in cooler where a temperature of 35 to 40 degrees is maintained. However the length of time that you anticipate leaving it in the cooler should regulate the size of the chunk of ice that you have before rolling it in. We do not like to have the ice completely thaw in the cooler as the temperature of thawing ice is around 32 degrees. We are careful not to allow the temperature of the cider to rise after being thawed. We are anxious that the customer can take his Frosted Cider home and put it into his refrigerator and enjoy it as sweet cider to the last drop.

We sell our Frosted Sweet Cider at a price slightly above the fall accepted price of sweet cider and add the cost of freezing and storage. We are interested in a large volume of sales rather than a smaller number of high cost unit sales.

When cider barrels are emptied we rinse them and fill with water and allow to stand for a couple of days. They are emptied and a sulphur strip is burned in them and they are bunged up tight and put into a basement storage. When we desire to use them the following season we rinse them and steam them before use. Under this care it is possible to use the same barrels many years.

Cider is Good Insurance

We have found that the Frosted Cider has proved an excellent insurance policy for our orchard business. The product frozen one season is sold the following season when orchard products may be in short supply. In addition to that it gives us a long successful marketing season. It has completely solved the off grade and cull problem. We have found Frosted Sweet Cider the most stabilizing factor in our orchard and road side market operations.

APPLE HARVEST TIME

September 20—October 6

Apple growers, their state, regional and national organizations have planned a big promotional program for selling apples during APPLE HARVEST TIME. The dates accepted by the National Apple Institute and its regional organizations together with organizations of retail grocery chains are September 20—October 6.

The Wisconsin Apple Institute has employed two girls trained in promotional work to help with the program. All apple growers will be urged to take part.

The little woman had been converted to a diet made up exclusively of raw fruit and vegetables, and when she asked dad to call the children to dinner, he'd always shout: "Hurry up kids, supper's wilting."

Present and Future Plans at the *Peninsular Branch Experiment Station*

By Walter Rowlands, Director Branch Stations

When, some twenty-nine years ago the Wisconsin Legislature and the University Board of Regents established in Door County the Peninsular Branch Agricultural Experiment Station they had in mind a well established principle of science and civilization—that the best place to study a problem is where that problem is most acute.

The Peninsular Station is exactly what the name implies—a branch of the State Agricultural Experiment Station. Its work, however, is "centered" on the special problems of the area and the type of agriculture of the region.

The fruit industry in Door County is today an outstanding example of what private initiative and private capital can do in the creation and development of a significant resource. The fruit industry in Door County, like all other industries in America, faces problems today vastly more difficult and more complicated than in the past. It is with this thought clearly in mind that the University of Wisconsin has during the past five years made every effort to redesign its facilities and its services at the Peninsular Station better to deal with these new and pressing technical problems.

With continued cooperation and complete understanding on the part of the growers, processors and all others involved, the Peninsular Station may in the future render even more valuable service to this great industry than it has in the past.

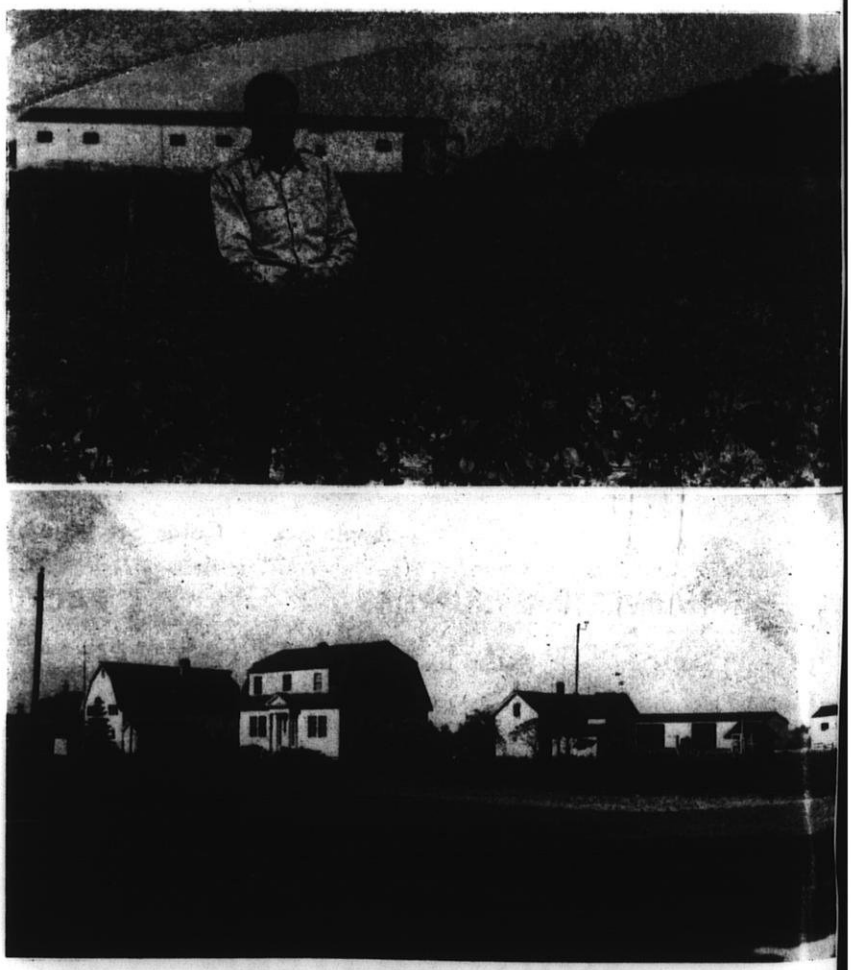
There are many ways of making a living without working, but most of them won't work.—The Ettrick Advance.

Oversleeping will never make your dreams come true.—The Forrest Republican.

By F. A. Gilbert, Superintendent, Ass't.

Since the Peninsular Branch Station has been designated a fruit station, its primary function will be that of conducting research in the growing of fruits. This involves research in horticulture, plant pathology, entomology and certain other cooperative projects with other departments of the University. The conversion to a fruit station has been rather recent, which means that the actual acreage in fruit plots is limited at the present time. However, plantings are being made and will be continued as the different phases of the work develop.

For the past year, considerable effort has gone into improvement of facilities, buildings and appearance of the station. To do this, buildings have been converted to give adequate office and laboratory space, storage space, and refrigerated storage; machinery has been converted for better adaptation to experimental work; and landscaping plans are beginning to



Above, Frank Gilbert, superintendent, Peninsula Branch Experiment Station at Sturgeon Bay in the raspberry test plot.

Below, buildings at the Branch Station. At far left, the root cellar, then the office building, formerly the dairy barn. The foreman's home is in the center

materialize. To further expand the research facilities, greenhouses are now under construction.

The field research in progress at the present time is mainly in orchards of cooperating growers. However, each year an increasing amount of this work will be established on the station.

Dr. J. D. Moore, plant pathologist, and his graduate assistants are doing considerable fundamental work on the cherry virus problem and many of their stock and indexed trees are in station plantings. When the greenhouse facilities are available, the fundamental studies with the virus diseases can be greatly expanded.

Mr. Don Dever, entomologist, who is responsible for the insect program, is conducting most of his research with cooperating growers, but considerable use is made of the station laboratories for the examination and study of fruits and insects.

As Horticulturist at the station, the writer is also conducting research, both on and off the station. Both the grower and station plots are essential and both are in the process of expansion. On the Station, it is necessary to have plots for long term studies and plots to try new ideas where there is a good possibility of tree or plant injury. In the long term plots, systems of culture and management are in the process of being established. In such plots, it will be possible to establish replicated experiments to study the effects of sod, cultivation, nutrition, moisture, etc., on the productive capacity of the fruits grown in the area. In addition, variety plantings have been made; weed control studies are underway and the use of starter solution in strawberries is being investigated.

This briefly outlines the fruit activities at the Experiment Station.

The Keeping Quality of Apples

Pick at Right Time and Ventilate The Storage Room

What are the factors that affect the keeping quality of apples? Some factors are under the control of the grower and some are not.

Weather conditions affect the susceptibility of apples in storage to bitter pit, scald, internal browning and other troubles, and these factors are not under the control of the grower to any extent. More information is needed on these troubles.

Apples from vigorously growing young trees generally do not keep as well as those from older trees, because they tend to be larger and softer.

Healthy Leaves Necessary

Apples keep better if the leaves are normal and healthy and not injured by diseases or insects. Some spray formulas have injured the leaves and caused the apples to ripen prematurely. There is some evidence that apple trees sprayed with mercuric fungicides may bear apples which mature a little more slowly than normal.

McIntosh apples growing on trees having a high nitrogen level do not keep well and seem more subject to brown core in storage. Nitrogen fertilizer to increase yield can therefore be easily overdone. If there is a boron deficiency in the soil, the apples develop cork and do not keep well. On soils with a magnesium deficiency apples tend to ripen prematurely and the same can be said for potassium deficiency. However, there does not seem to be any fertilizers or chemicals that help produce firmer apples and unusually good keeping qualities. The detrimental affect of any deficiency is only evidenced when the trees need the element in order to make a normal, healthy growth.

Thinning can be overdone. If it results in over large apples they are likely to be soft and a poor storage risk.

Hormone sprayed apples may not keep as well as unsprayed apples, because of the likelihood they will be picked later.

Early varieties, and including McIntosh, sprayed several times with hormone, may ripen abnormally fast. There is evidence that fruit sprayed with the new hormone which is supposed to ripen and color some of the early varieties for quick marketing, will split open on the tree without dropping if not picked in time.

Pick Apples at the Right Time

Unless apples are picked at the right time they will not be suitable for good storage. If they are picked too green they lack quality and are subject to storage disorders such as scald. Picked too late they break down quickly and lack quality in a short time. The problem then is one of getting them picked fast enough with available labor. Ordinarily there are only about 5 days when McIntosh can be picked in best condition. A grower with a large acreage of McIntosh is therefore in constant trouble from labor shortage.

Ripening in Storage

Apples, when they ripen, give off gases, which increase the speed of ripening. Over-mature apples give off enough ripening gas to ripen up other apples unusually fast. By circulating air through the storage house to drive out this gas, especially after passing the air through activated carbon made from coconut shells, ripening will be delayed. However, this is of little benefit to apples that were picked at the right time.

DO YOU LIKE

McIntosh Apple Pies

They're In A Class By Themselves Writes New York Grower

Early March, a member of the Poughkeepsie Grange asked me for apples to make pies for the dinner the Grange was serving for the Fruit School for Southern Dutchess.

"What kind would you like?" I asked. "Can I have McIntosh?" was the reply. "I can make the best pies with McIntosh."

She got them. One diner asked for and got three pieces. The crowd was asked how they liked the pie. Approval was loud and general. Some were disappointed when apple pie was not served the next day.

Early April, the Poughkeepsie Grange again asked for pie apples for a dinner. Again McIntosh were chosen above Baldwins, or Spies. "They cook more quickly, take less sugar and men like them" were given as the reasons.

Of course, there were real honest-to-goodness McIntosh, grown on organic soil with mulch and manure, picked while firm but mature, and kept in a well ventilated cold storage in which there was seldom a distinct odor of apples or the presence of harmful amounts of ripening gases. The McIntosh were still crisp in April.

These experiences suggest several things of vital importance to McIntosh growers:—

1. McIntosh can be made into pies that make enthusiastic apple pie eaters. They are the choice for home use and places specializing in home cooking by a considerable portion of the housewives of the Northeast area.

2. The standards for making and judging apple pies used by commercial bakers and in home economics and in general cook books are so different from those used by housewives that they cannot place for prizes in pie baking contests.

3. The true value of an apple pie should be established by submitting a taste of each of pies made from different varieties; the only qualification for choice being the preference of the eater. The same test applies to a contest for the best of a class for McIntosh pies, only, or Cortland pies only.

4. The quality and condition of the McIntosh used is most important. Apples grown so as to lack fibre, firmness, sugar and other qualities, intrinsic in the ideal McIntosh, cannot be expected to contribute to the best in pies. Likewise, McIntosh kept in an unventilated, odoriferous, gassy storage at temperatures often above 32° cannot be expected to furnish McIntosh that will make ideal pie timber.

Give McIntosh a chance and they cannot be prevented from ranking tops for apple pies with countless pie providers. Besides, they are the universal apple in our markets and sell at attractive prices if shoppers know where and how to buy them. **By E. Stuart Hubbard, Poughkeepsie, N. Y. in New York State Horticultural Society News Letter.**

Editor's Note:—This editor agrees with the article by Mr. Hubbard of N. Y. Many times in our home we have had apple pie made of McIntosh apples and compared them with other varieties and the McIntosh has always come out first because of its more pleasing flavor. What is it that makes a good apple pie? Tastes differ greatly among different people and some may prefer a pie made of a dry, hard apple. However, we will wager that a pie made of McIntosh by someone who knows how to use that variety will please a majority.

BETTER APPLE HANDLING WITH NEW TYPE OF GRADER

An orchard grader which grades apples directly into retail containers and is operated in the orchard is being developed by Michigan State College and the U.S.D.A. Operated with a gasoline engine, the machine consists of a receiving belt on which pickers pour their fruit, an eliminator section, a sorting belt and a filling station. It is made to handle from 50 to 60 bushels per hour.

ESTIMATING THE APPLE CROP

For more than three years, the Wisconsin Apple Institute has worked for a more accurate estimate of the prospective apple crop. Officers pointed out that only by knowing what the crop will be can adequate plans be made for marketing.

It was therefore heartening to read in the **American Fruit Grower** this opinion of the problem as it was considered at the annual meeting of the National Apple Institute.

"Two years of large apple crops and relatively low prices have caused some soul-searching and keen analysis among apple growers. The desire to get at the root of the problem was amply demonstrated at the meeting of the National Apple Institute at St. Louis.

"One of the main jobs at this meeting is to estimate the apple crop and usually the estimate is made somewhat conservatively. But this year delegates took a more practical point of view with the idea that there is no sense hiding the facts; if there is a large crop in prospect growers should know about it."

PARATHION RESIDUE NOT OBJECTIONABLE AFTER TWO WEEKS

Scientists have discovered that parathion may be sprayed on apples two weeks before harvest without leaving objectionable residues. Several years ago it was thought that parathion should not be sprayed on fruit later than one month before harvest.

Sometimes it is necessary to use parathion for control of red mite or even late codling moth, several weeks before harvest. At the New Jersey Experiment Station, fruit from trees sprayed with parathion was analyzed 11 days after application and showed only about ½ part per million of parathion—well within the permitted tolerance.

For every man who climbs to the top of the ladder of success, there is one woman who keeps her feet on the ground and steadies it for him.

When I started to work, I used to dream about getting the salary I'm starving on now—Herb Caen in San Francisco Examiner.

In The News

APPLES AND TEETH

The May issue of the Journal of American Dental Association presents some research information pleasing to all who are interested in apples. The findings of a study supported by a grant from the National Institute of Dental Research was read as a prize winning essay before the mid-winter meeting of the Chicago Dental Society.

A wide variety of foods was studied for their tendency to break down the calcium in teeth. Out of 96 different foods shown on tables in the article, only one (cooked carrots) had less tendency to decalcify the teeth than apples. The decalcification potential of apples was rated as 4. Most other fruits were many times higher in their likelihood to decalcify. Ratings of the 16 best of the foods reported as shown below:

Decalcifying Potential of Foods

Food	Rating
Carrots (cooked)	2
Apple	4
Carrots	4
Lettuce	16
Egg Noodle	18
Pineapple (canned)	22
Cucumber	25
Orange Soda	42
Cabbage	43
Popcorn	48
Peach (canned)	48
Corn Chips	49

Some of the foods had decalicification potentials above 500. Most of them were well over 100, so by comparison, apples would have many times less decalcification potential than almost any food that is normally eaten.

The layman's opinion expressed on caring for one's teeth by eating apples appeared to be backed up by scientific fact. It would be interesting to learn the extent to which apples eaten after a meal can be a means of cleansing the teeth from particles of other food that remain and which have high decalcification potentials. Probably, we can take care of our teeth and enjoy it by eating an apple—brush your teeth with an apple.—From **Apple Research Digest.**

APPLE VARIETIES FOR NORTH CENTRAL WISCONSIN

Neillsville Grower Relates Experience

Mr. H. J. Naedler of Neillsville tells us that in his orchard, just north of the city, his best varieties are **McIntosh, Cortland** and **Haralson. Melba, Milton** and **Whitney** also are hardy. He has several Anoka trees which are quite hardy but "no good otherwise."

Varieties not hardy—Jonathan has been killed off, as has Victory, a new Minnesota variety. Prairie Spy has been severely injured. Ben Davis trees winter-killed several years ago. N. W. Greening and Dudley both suffer during severe winters. This experience is of value to anyone wishing to grow fruit in the Neillsville area.

Mr. Naedler says that he has noticed a large mouse population and warns growers to be on the look-out for injury this fall.

AN EASY WAY TO REMOVE STUMPS

Our heading is misleading, but we stated it that way to attract your attention. Why? Because we know that ever since there have been stumps to remove, people have been looking for an easy way to do the work.

In August, one of our prominent members from Chippewa Falls wrote, "Please send a pamphlet on how to remove stumps by using saltpeter or other chemicals. Heard something about it on the radio, but didn't get the details."

Now, we're sorry to disappoint our members, but we're still more amazed that radio stations should broadcast such misleading statements.

On page 170 of the April, 1951 issue of Wisconsin Horticulture, we had an article entitled, "No Magic Way To Remove Stumps." It quoted the Forestry Utilization Department of the University of Illinois as reporting a study of "all recommended methods of stump removal." **They treated 64 assorted hardwood stumps by the recommended methods with eight different chemicals, including a commercial product highly rated as a stump remover. Stumps were then burned with the aid of kerosene, goop, and kindling wood. Not a single one of the eight chemicals made it possible to burn out these stumps under Illinois conditions.**

Well those last three words, "under Illinois conditions," aren't misleading either. Their stumps are just about the same as ours and just as hard to remove.

SWEET APPLE CIDER AND CIDER VINEGAR FOR THE HOME

Are you interested in producing sweet apple cider or cider vinegar? Then write for a bulletin on sweet apple cider and cider vinegar for the home to the Wisconsin College of Agriculture, Bulletin Mailing Room, Madison, Wis.

On preservation of juice, the bulletin has this to say:

"Sterilize fruit jars (preferably those with glass tops) or bottles by boiling for 15 minutes. Fill them to within an inch of the top with cider from which the particles of pulp have been removed, and seal. If corks are used they should be sterilized. Place the containers in a wash boiler or similar receptacle on boards or a wooden rack so as to keep them from touching the bottom.

"Cover the jars with cold water and heat slowly to 175 degrees Fahrenheit. Keep pint containers at this temperature for 15 minutes, quarts for 20 minutes, and gallons for 25 minutes. If one does not have a thermometer the water may be heated until it is just about to boil and then the heat should be turned off. Allow the cider to cool in the water. Cans are now ready for storage. If bottles are used, dip the ends in melted paraffin so as to thoroughly seal them."

1941: We were broke, so lived on hamburger for a week!

1951: We lived on hamburger for a week—so we're broke.—Lu Travis in The Saturday Evening Post.

Next to being shot at and missed, nothing is quite so satisfying as an income tax refund.

—Bloomer Advance.

Sin is not hurtful because it is forbidden, but it is forbidden because it is hurtful. — By "Poor Richard."

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

FAVORITE BERRY VARIETIES FOR 1951

A questionaire was sent to members of the Wisconsin Berry and Vegetable Growers' Association asking for a report on "Your best variety for this year." We have these replies.

Premier received the highest number of votes, with **Dunlap** second. Catskill, Wisconsin 537 and Robinson were the other favorite varieties. Nectarine and Gem were also mentioned.

Harry Barlament, well-known strawberry grower at Green Bay, prefers Catskill, and writes, "Prices were down from last year's market. Had a good crop—about double of last year."

Raspberries

The favorite raspberry variety was Latham—almost unanimously. Roy Rasmus of Waupaca likes the Taylor best. All members report the market on berries as good.

In answer to the question, "How do you fertilize raspberries?" here are the answers. "Mulch only"; "manure"; "sewage disposal and complete fertilizer and compost"; "used 3-12-12 plus separate application of nitrogen". Barnyard manure was used by the largest number of members.

Vegetable Varieties That Did Well

Here are some comments on vegetable varieties. Chippewa potatoes and early Golden Bantam sweet corn were excellent. Beans, lettuce, spinach, peas and radishes were not good due to cutworms. Tomatoes, carrots and cabbage were good. Setting on sweet corn poor. Peppers and eggplant setting well. Sweet corn, cucumbers, tomatoes and potatoes were coming fine. Muskmelons are very good.

Tomatoes

Here are the comments on the tomato crop. The blight situation was not serious. Varieties being grown were mostly the hybrids; Marglobe; John Baer; Stokesdale, Valiant, Italian, Wisconsin 55, Rutgers, Pritchards, Hybrids 2, 4 and 5.

Sweet Corn

Varieties planted by members were: Early Golden Bantam, Golden Bantam crosses; Midget (very early and sweet), Seneca Dawn, Our Choice, Seneca Chief, Wisconsin 800.

Comments: By Harry Barlament; "Our Choice (hybrid) sweet corn, very good quality. Almost free of borers due to dusting program. Excellent sales." C. F. Greiling, Green Bay, writes, "Setting of corn was poor and we're getting only one-half to two-thirds of the yield per acre we picked in past years. Market demand heavy, but prices lower than they should be."

Talks for Convention

Talks on strawberries, raspberries, insects and disease control for vegetables, soils and fertilizers received the highest number of votes for convention topics.

CANTALOUPE

A uniform supply of nitrogen throughout the growing season will give good results with cantaloupe and other vine crops. California workers report that ammonium nitrate at the rate of 60 lbs. of nitrogen per acre, half applied before planting and the remainder when the runners start, insures a good supply throughout the season, increased cantaloupe size and reduced the number of cull fruit.

At the Vegetable Growers' meeting (Muck Farmers Association) Mr. J. A. Schoenemann, vegetable extension specialist, on left, discusses with Dr. L. G. Holm and Dean R. K. Froker of the Wisconsin College of Agriculture, the effect on carrots of the various types of chemicals used in weed control.

Dr. W. H. Gabelman and Assistant B. L. Sims, study some of the hybrid varieties of onions on the University Farm during the Muck Crop Ass'n.'s annual field tour.

VEGETABLE GROWERS STUDY EXPERIMENTAL PLOTS AT UNIVERSITY

Members of the Wisconsin Muck Farmers' Association held their annual field day August 4th at the vegetable research plots of the Department of Horticulture at Madison.

Studies underway include work on chemical weed control, vegetable crop breeding and fertilization.

Dr. L. G. Holm and research assistant, T. W. Tibbitts, discussed the progress of work on chemical weed control in beets, carrots, onions, potatoes, lima beans and cabbage.

Dr. W. H. Gabelman explained the progress of his breeding work with onions, carrots and beets. Growers had the opportunity to view many new hybrid onions from all parts of the country growing side by side with most of the standard varieties now in use.

B. L. Sims, a research assistant working with Dr. Gabelman, summarized some of the results of his investigations on different levels of potash fertilization in relation to high phosphorus fertilization and their effect on yield and quality of cabbage, carrots and spinach.—By J. A. Schoenemann, vegetable extension specialist.

MORE NITROGEN, MORE PEAS

Tests conducted at the Experimental Station at Geneva, New York, showed that pea yields can be increased when nitrogen is added to the soil. Experiments were made on two different soils. In one, the field received a 4-12-4 fertilizer at the rate of 550 pounds to the acre. In the other, a 5-10-5 formula was used at the rate of 450 pounds to the acre. Both of these treatments supplied 22 pounds of nitrogen to the acre and gave 750 and 1,000 pounds more shelled peas to the acre than unfertilized plots on the respective soils. By adding 60 pounds more nitrogen to the acre on each of these soils, the yields were increased by 700 and 500 pounds respectively, and the extra nitrogen also improved the quality of the peas. —From **Horticulture.**

The average husband is one who lays down the law to his wife and then accepts all her amendments—Vernon County Broadcaster.

CANADA BUYS MANY U. S. VEGETABLES

Vegetable exports from the U. S. reached an all-time high of 508 million pounds last year. In '49 some 336 million pounds were shipped out of the country, and in 1946, second highest total on record, export total was 454 million. Foreign demand for U. S. fresh vegetables has increased generally the past decade. Sharp rise last year was caused mostly by relaxation of Canada import controls.

Canada is by far the greatest importer of U. S. fresh vegetables. In 1950 our northern neighbor imported 80% of the total U. S. fresh vegetables exported. Exports have been at a high level compared to those in 1940. Imports too have been much above those in 1940.

Principal commodities sent to Canada were lettuce, carrots, cabbage and tomatoes in that order. Cuba imported U. S. onions, lettuce and carrots. Onions made for 88% of Cuba's total U. S. import. Tomatoes and onions were principal fresh vegetables exported to Mexico.—From the **Market Growers Journal.**

STRAWBERRY WAFFLE SANDWICH

Have you ever eaten a strawberry waffle sandwich? Cooley's Cupboard at Evanston, Illinois, serves this sandwich 365 days a year for tea and evening snacks. It is the largest selling item for an after-show snack. If Cooley's can sell them, why can't others?

This waffle requires a berry that does not break up completely when frozen. It's attractiveness is due to the berries that are served with it.

Cooley's use the Marshall and Robinson varieties as long as they are available. In June they had some Premiers, but they were the most anemic looking berries I've ever seen. Frozen Premiers, when thawed out, look like a skin floating about in a lot of juice. It makes a big difference to the customer. The berries must be firm and dark red in color.

Cooley's bake the waffle real crisp, fold it over, then put in two scoops of ice cream and cover the top with strawberries. It is a meal in itself.—By **Miss Freda Schroeder, Evanston and Loyal.**

THE ASPARAGUS BED

A good seasonal program for care of an asparagus bed.

1. The entire area should be disced or cultivated 3 or 4 inches deep before growth starts in early spring.

2. Regular, shallow cultivation should be practiced between the rows during the cutting season.

3. About July 1 cutting should be stopped and the entire area cultivated or disced to destroy weeds. One or two pounds of a complete commercial fertilizer per 100 square feet should be broadcast and worked in the soil at this time.

4. In the fall the asparagus tops should be left to die and stand over winter. They usually can be broken up and worked into the soil when the area is cultivated or disced in early spring.

Leaving the tops stand over winter instead of removing them allows them to catch snow, prevent deep freezing of the soil and minimize "heaving" or injury to the asparagus crowns. —By John A. Schoenemann, Vegetable Extension Specialist, U. W.

COMMENTS ABOUT VEGETABLES

BEETS AND CARROTS. If you grow beets and carrots early in the season, do not attempt to use them too late, because carrots become strong by late summer and early beets woody and tough. These crops may be sown in mid-summer and will then assure sweet carrots or tender beets for canning or storing.

By placing planks or boards over the planted rows during dry weather, moisture is conserved and sprouting improved. When sprouting starts, planks or boards should be removed and carrots should be thinned to one inch and beets to one and one-half inches.

CHINESE CABBAGE. This fine salad crop should be started in hills of two or three seeds—15 inches apart, and then thinned to one plant per hill.

By using a DDT dust flea beetles can be stopped in the early stages, but should not be used within two weeks before the plant is edible. Rotenone can then be used.

TOMATOES. The consumption of tomatoes in the U. S. is 23 pounds per person per year. In addition, 4.4

lbs. of canned tomatoes, 2.2 lbs. catsup and 4.2 lbs. of tomato and combination vegetable juices are used per person.

In the per capita consumption, potatoes rank first at 100 lbs. per year and tomatoes second. Cabbage is in third place, 31 lbs. per person.

FRUITS AND VEGETABLES IN YOUR HOME FREEZER

What to Do When Power Fails

The Extension Service, U.S.D.A., in its August 2nd bulletin on the home garden and fruit preservation program, has this information about the home freezer.

When Power Fails

Experimental tests indicate that the food in a well filled, 2-cubic foot home freezer did not thaw to any considerable extent for 72 hours after the power was cut. The temperature of the upper layer of packages rose to 32° F. in 96 hours after power loss. The bottom layer of packages took more than 120 hours to thaw. The freezer was at room temperature—80° F.

In large freezers, 12 to 36 cubic feet in size, well filled, it took much longer for the food to thaw. These workers considered it doubtful, in a nearly full, well insulated freezer, if the food would begin to spoil in less than five days.

What Happens When Fruit Thaws Out

Fruits ferment when they spoil. The flavor may be ruined, but the fruits are not poisonous. If badly fermented, they may become intoxicating, like new wine. Thawed fruits can be refrozen. If there is any doubt to their quality, they can be made into jam and jelly.

Meats and poultry are different; these are non-acid and subject to spoilage.

Vegetables spoil rapidly even at 50° F. It is unwise to refreeze vegetables when they have been completely defrosted.

One way to handle a deep freeze when power fails for any length of time is to purchase cakes of dry ice from ice cream manufacturers, creameries, etc. Chip or saw the dry ice into pieces and divide among the compartments. Set in on a board or heavy cardboard right on the packages. A 50 lb. cake of dry ice will hold the temperature down to 15° F. for about 48 hours. Above all, don't open your deep freeze if power fails.

New Treatment Promises Control of Onion Sprouting

A report from Michigan State College in August, 1950, indicated that **maleic hydrazide** completely inhibited the sprouting of Sweet Spanish onions for a period of six months.

The Department of Vegetable Crops at Cornell University, New York, set up demonstrations to determine possibilities of using the materials in that state for varieties grown on muck. Results were published by George Johannessen and Norman Oebker of Ithaca, in the July issue of "Farm Research," published by Cornell University. Varieties treated were Early Yellow Globe and Brigham Yellow Globe .The same treatment that was successful in Michigan was applied to these varieties.

The material was applied at the rate of 1.5 pints of maleic hydrazide (active ingredient) in 75 gallons of water per acre. This is the same as a concentration of 2,500 ppm of maleic hydrazide. The applications were made about two weeks before harvest and at a time when about one-third of the onion tops were down.

Treatments were applied on the Early Yellow Globe and the Brigham Yellow Globe onions on August 17, 1950. The Early Yellow Globe onions were just beginning to go down on August 17. The Brigham Yellow Globe onions were one-third down (the same as the Michigan time of application) on August 17. The Early Yellow Globe onions were havested and topped with shears on August 31, 1950, in an extremely heavy rain. The Brigham Yellow Globe onions were also harvested during a rain on September 4, 1950.

Both lots were cured at a temperature of about 70° F., and fluctuated within a range of about 30° F., The onions were held until October 2, 1950, before being placed in storage.

Conclusions

1. Maleic hydrazide (active ingredient) applied at the rate of 1.5 pints in 75 gallons of water per acre about two weeks before harvest, and when onions were going down, reduced sprouting of Early Yellow Globe and Brigham Yellow Globe in storage at 32° and 40° F.

2. Sprouting was reduced also when these onions were placed under conditions similar to those in retail stores for a period of 5 weeks.

3. Of the unsprouted onions no external difference could be noted between those that had been treated with maleic hydrazide and those that had not.

4. Maleic hydrazide at this time is available only for experimental purposes. Expansion of these tests to control sprouting of onions both in common storage and at wholesale and retail levels is planned for 1951.

SWEET CORN EXPERIMENTS

Ohio, Illinois and North Carolina workers report increases in protein content of corn after liberal nitrogen fertilization. In one experiment unfertilized corn contained 5.7% protein while that fertilized averaged 10.4%.

Earworm Control

Effective earworm control can be secured by continuing regular corn borer control (i.e. 1½ lbs technical DDT in 100 gals. water per acre) through the silking period. Spray should be directed toward silks and ears. A better control is effected when 3 quarts of 25% DDT emulsified concentrate and 2½ gals, white mineral oil (65 to 90 seconds Sayholt Viscosity is diluted to 25 gals. with water. This solution is sufficient for one treatment of one acre. Spray should be directed toward silks. Two or three applications will give almost complete control.

Indications are that pre-emergence weed control in corn is becoming popular. Most chemical weed control in corn is done with 2, 4-D sprays; pre-emergence applications have not been uniformly successful.

Side-dressing nitrogen fertilizer on corn at cultivating time calls for special advantages for growers out to get top yields this year. On soils short on available nitrogen side-dressing often boosts yields 5-20 bushels or more per acre. Application rates can be adjusted according to corn stands; fertilizer is easy to apply and is effective at lower rates. It is used during a season when the fertilizers may be easier to obtain. —From the **Market Growers Journal.**

With a Hundred Named Varieties—Old Fashioned

Geraniums Become Modern

By G. E. Beck

Dept. of Horticulture, U. W.

The show or fancy type of geranium is commonly known to flower lovers as the "Lady Washington" or "Martha Washington" geranium. **Pelargonium domesticum,** as it is known botanically, is often called "Pansy Geranium" too. This favorite of our great grandmothers is a race which has been developed from several species the most predominate of which was introduced to England in 1690 from around Capetown, South Africa, where it was very common.

The current rise in popularity of pelargoniums is undoubtedly due to its success on our West Coast where nurserymen have developed a host of new varieties.

Varieties

At the present time more than 100 different named varieties are available. The bright, deep colors as well as the pastels also add greatly to its popularity. Color collections are available as well as varieties especially adapted for window boxes, patio pots, or garden planting. You can have "Baby", "Haille Selassie", "Little Rascal", and "Pasadena" all in your front yard next year—you see, they're all varieties of pelargoniums.

Ideal For Garden Use

Uses, pelargoniums have lots of them: as single potted plants, combinations (several plants grown in a single container), and out-of-doors they're ideal for placing along the edge of steps, walks, and drives. Their beautiful colors will show up nicely in front of fences and hedges too or when used alone as a bedding plant for mass effects.

Propagate From Cuttings

Martha Washington geraniums are propagated from cuttings which usually root best in "sterilized" sand or expanded mica. The cuttings are somewhat subject to rot, so rooting the cuttings in water isn't commonly recommended. Pot the rooted cutting in a fairly heavy, but well-drained, slightly acid loam. For shifting and repotting established plants add ¼ well rotted manure to the soil; ½ cup of 4-12-4 fertilizer should also be added to each peck of the soil mixture.

Most varieties of pelargoniums tend to be rangy or tall. Pinch the tips of the young plants to develop compact growth.

Don't over-feed the plants because this will cause them to produce beautiful foliage but very few flowers. Over-potting will also cause blindness. Some commercial growers find that slightly root bound plants bloom freely, but never let them get excessively root bound.

It's easy to over water pelargoniums in the fall and winter: they'll take more water in spring, however. Don't let them dry out then because flower bud formation will be limited.

Try some of these formerly old-fashioned pelargoniums at your modern home. You're sure to be pleased with this popular plant.

From the Editor's Desk

MESSAGE TO ALL MEMBERS OF WISCONSIN HORTICULTURAL SOCIETY

This year of 1951 has been one of exceptional activity in all phases of horticulture. Our annual convention will be in Fond du Lac, Retlaw Hotel, November 27th and 28th. I wish to take this means of extending a very cordial invitation to all our members to spend some time with us at the annual meeting. Our program will carry many valuable and timely topics for discussion. The affiliated organizations may find some very helpful suggestions and help bring our organization into a more closely bound society. Our secretary, Mr. Rahmlow, has been extremely busy throughout the year attending your various activities. His reports will be very helpful in planning your next year's program.

It is my sincere hope that your season's operations were successful in every respect. Again may I in behalf of the Wisconsin Horticultural Society, extend this invitation to you to meet with us November 27th and 28th at Fond du Lac.

Sincerely yours,
G. J. Hipke, Pres.

CONSERVATION BULLETIN AVAILABLE

The Wisconsin Conservation Bulletin, published by the Educational Division of the State Conservation Commission, State Capitol Annex, Madison, is available to Wisconsin citizens interested in conservation, free of charge.

The bulletin attempts to tell its readers about the progress of conservation in the state. Here are some of the articles in the July issue: What makes a trout lake? There are fireballs at Fort Atkinson. The ditch. How to restore a dying stream. Water —the master or servant? Mosinee— the latest in forest protection. Conservation Commission meeting.

Published monthly, it keeps one informed of the progress and latest news in conservation. Drop a card to the Commission if you would like to receive the bulletin.

HIGH PRICES — WHOSE FAULT

USDA research workers recently reported that if the farmer gave away beans in a 16c can of pork and beans, the can still would cost 14c at the store. If the farmer would furnish wheat in a 16c loaf of bread absolutely free, bread still would cost 13.4c. If dairymen gave away milk in a 22c quart, it would still cost 11.5c, and if sheep-raisers gave away wool in a $50 suit of clothes, the suit would still cost $40.50.

THE APPLE DISPLAY AT THE WISCONSIN STATE FAIR

More than 250 trays of apples were shown in the Wisconsin State Fair apple exhibit this year. The trays constituted the feature of the fruit show, with a large number of plates being shown as well. The big feature is always the 30 tray exhibit. In this class, William J. Lewis, Richland Center, won first; Waldo Orchards, Waldo, (Arno Meyer) second; William Meyer of Waldo, third and Meyer Orchards of Milwaukee, fourth.

In the ten tray class of different varieties, William J. Lewis, Meyer Orchards, Milwaukee, Waldo Orchards and William Meyer won the prizes, as they did in the single tray classes as well.

In the display of five plates, display five fall or summer varieties, the largest apple and plates of the various varieties, the same exhibitors named above were the prize winners.

CRATH CARPATHIAN PERSIAN (ENGLISH) WALNUT SEED FOR SALE

Mr. Alfred Renshaw, 75 State St of Albany 7, N. Y., who purchased seeds of the Crath Carpathian English walnut from the Wisconsin Horticultural Society in 1938 writes, "I shall be glad to furnish 10 seeds of Crath Carpathian English walnuts to any one individual for $1.00 postpaid."

"You may be interested in my six trees, which were germinated in 1938 from 10 seeds purchased from the Wisconsin State Horticultural Society. They are all bearing this year and one tree in particular, which I refer to as "Rowan No. 1" is of good quality, fair size, and relatively soft shelled. We have a rather severe climate at Albany, temperatures going down to minus 25° F., but these trees have never shown any signs of being winter-killed, except one winter when I over-fertilized with commercial fertilizer."

WISCONSIN NURSERYMENS' ASSOCIATION HAS SUMMER MEETING AND PICNIC

Wisconsin Nurserymen and their families were the guests of Landscape Architect Walter Remond, Milwaukee and Nurseryman Bob Gieringer, Milwaukee at a summer meeting and picnic at Brown Deer Park, Saturday, August 11.

A very nice crowd attended and when all of them lined up for the cafeteria style picnic luncheon, the line was a very long one. We certainly didn't see anyone looking hungry after the luncheon either, and we know of several who remained at the table unusually long after they had finished eating to just rest up. It was a good old-fashioned get-together and everyone got better acquainted and we imagine a large amount of business was done in a sociable manner.

Officers of the Wisconsin Nurserymens' Association are: L. L. Kumlien president, Janesville; Howard W. Anderson, vice pres., Wisconsin Rapids and Thomas S. Pinney, Sec.-Treas. Sturgeon Bay.

COMING EVENTS

September 26-27. Flower Show and Annual Convention. Garden Clubs of Wisconsin, affiliated with the Horticultural Society. Y.W.C.A., Milwaukee.

October 6. Annual meeting, Central Region, Wis. Garden Clubs, at Clintonville.

October 30-31. Annual Convention, Wisconsin Beekeepers' Association. Marathon County Park, Wausau.

November 4. Annual meeting, Wisconsin Gladiolus Society. Retlaw Hotel, Fond du Lac.

November 5-6. Annual meeting. Wisconsin Horticultural Society, Western Wisconsin Fruit Growers and Minnesota Fruit Growers Association. La Crosse Hotel, La Crosse.

November 27-28. Annual convention, Wisconsin Horticultural Society; Wisconsin Apple Institute; Women's Auxiliary, Wisconsin Horticultural Society. Retlaw Hotel, Fond du Lac.

OUR COVER PICTURE

"People of all ages like chrysanthemums," is the title of the picture on our front cover this month.

The picture is especially appropriate this month because the Garden Club of Wisconsin Flower Show at the Y.W.C.A. in Milwaukee on September 26-27 will feature chrysanthemums.

The print was loaned to us by the Society of American Florists. The Society announces National Flower Week on October 28-November 4, this year.

OFFICERS AND DIRECTORS—WISCONSIN BERRY AND VEGETABLE GROWERS ASSOCIATION

Officers: C. H. Braman, Waupaca, Pres.; Elmer Whitby, Chilton, Vice Pres.; E. L. White, Box 147, Fort Atkinson, Sec.-Treas.

Directors: C. H. Braman, Waupaca; N. A. Rasmussen, Oshkosh; Elmer Whitby.

Agnes Phillipson, Oshkosh; John Hauser, Bayfield; Ray Rasmus, Waupaca.

Harry Barlament, Green Bay; Chris Olson, Berlin; F. W. Van Lare, Oconomowoc.

USE OF HONEY BEES IN ALFALFA SEED PRODUCTION

The above is the title of circular No. 876 from the U. S. Department of Agriculture, Washington, D. C. It is written by George W. Vansell, and gives a full discussion of such problems as: factors influencing activity of bees in alfalfa, role of honey bees in setting seed pods, relation between number of colonies and seed yields, and honey production from seed alfalfa.

The work was done in the West, largely Utah, and with a large acreage of alfalfa. The problem in Wisconsin will be somewhat different, but much of the information is of value to beekeepers interested in pollination. The bulletin is available from your U. S. Senator in Washington or from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C., for 25c.

None preaches better than the ant, she says nothing.—By "Poor Richard."

The honest man takes pains, and then enjoys pleasures; the knave takes pleasures, and then suffers pains. — By "Poor Richard."

At the beautiful Lake Geneva Flower Show. Officers and committees of the Lake Geneva Gardeners and Formans' Association and judges of flower classes (including the editor) with some of the outstanding exhibits shown. Front row, from left, Fred Krueger, vice pres.; Phil Robers, treas.; Elmer Vorpagel, sec.; Gus Meister, pres. Standing from left, Max Vold, clerk; Harold Van Buren, gladiolus judge, Hartland; Matt Patten; Leland Shaw, gladiolus judge, Milton; and Gordon Piehl, judge, Hartland. Note the outstanding grapes and delphinium, a part of the horticultural exhibit.—Wis. Hort. Soc. Photo.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
GORDON SHEPECK
Green Bay

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

Treasurer
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

DIRECTORS
Hugo Krubsack, Peshtigo
Arnold Sartorius, Porterfield
Dr. George Scheer, Sheboygan
A. F. Scholtz, Wausau
Val White, Wausau
H. J. Rahmlow, Madison, Ex-Officio
John Cates, Two Rivers
Gordon Shepeck, Green Bay
Walter A. Kurtz, Chilton
Dewey Sleezer, Lake Geneva
Cecil McAdams, Mosinee
Walter Axel, Sheboygan
Dr. R. H. Juers, Wausau
Dave Puerner, Milwaukee
Paul Ravet, Marinette
Leland Shaw, Milton

THE STATE GLADIOLUS SHOW

Manitowoc County Chapter Does Splendid Job of Staging Outstanding Show.

With excellent attendance, over 2400 entries of beautiful spikes plus some very fine baskets and arrangements of gladiolus, the Manitowoc County Chapter deserves a great deal of credit for staging a fine 1951 Wisconsin Gladiolus Show.

Many favorable comments were heard about the fine banquet, at which James Hamilton presided as toastmaster. President of the Wisconsin Horticultural Society, G. J. Hipke, was a guest speaker.

Touhey Gardens of Manitowoc covered the stage with beautiful baskets in addition to their large commercial display. Walter Krueger of Oconomowoc had an excellent commercial display of new varieties and seedlings, as did John Bayless of Mishicot.

The arrangements were very good. We noted some of the comments made by the judges, and one that was repeated several times was "accessories used have no connection with the arrangement". It is a point to be considered when making an arrangement.

Officers of the Manitowoc Chapter, John Gates, pres., and show manager; William Hockman vice pres.; Mary Rezek, sec.; Gil Thompson, treas., also served on committees. In addition, John Bayless was chairman; Joe Rezek, floor manager; Walter Axel had charge of schedules and Jess Hamilton supervised judges. Mrs. A. E. Piepkorn, State Rec. Sec. provided the records.

The Show Winners

Grand Champion of Show: **King David,** Cosmopolitan Gardens, D. Puerner, Milwaukee.

Reserve Champion: **Seedling No. 46-168,** C. J. and G. J. Melk, Milwaukee, Wis.

American Home Achievement Award: **Seedling No. 46-168,** C. J. and G. J. Melk, Milwaukee.

Champion Seedling: **Seedling No. 46-168,** C. J. and G. J. Melk, Milwaukee.

Best Basket: **Seedling No. 46-168,** C. J. and G. J. Melk, Milwaukee.

Best Seedling Basket: **No. 46-168,** C. J. and G. J. Melk, Milwaukee.

Longest Flower Head: **Hawkeye Red,** Shopere Glad. Gardens, Clinton.

Largest Floret: **Dieppe, Otto** Kapschtzke and Son, Sheboygan.

Smallest Floret: **Thos. E. Wilson,** M. Armstrong, Evansville.

Most Open Florets: **Phanthem Beauty,** R. G. Williams.

Farthest Distance: John M. Perkins, Neillsville.

Section Awards

Champion Spike, 500 Class: **King David,** Cosmopolitan Gardens, D. Puerner, Milwaukee.

Champion Spike, 400 Class: **Miss Wisconsin,** Mrs. Walter Axel, Sheboygan.

Champion Spike, 300 Class: **Summer Snow,** John M. Perkins, Neillsville.

Champion Spike, 200 and 100 Class: **White Lace,** L. C. Shaw, Milton.

THE WISCONSIN SEEDLING —RECENT INTRODUCTION SHOW AT JEFFERSON

On August 5, the So. Wis.—No. Ill. Gladiolus Society, chapter of the Wisconsin Gladiolus Society, staged a joint show in Jefferson, Wis. It was an excellent show, well contested, with two glads repeating their winnings of a year ago.

Bridal Orchid, shown by Harold Janes, repeated as Grand Champion, and Melk Bros.' ruffled rose seedling No. 46-168 not only repeated as Seedling Champion, but also won in the 3 spike and basket classes.

The seedling judges, Merle Doty and Harold Janes, did a fine job of scoring the many entries, but were (and this is good) a bit "tight" in passing out awards.

The following seedlings were given a rating of Excellent:

No. 51-47 (white and No. 51-30 (scarlet) by Kleinhans; a fine white (no number) by Welty (single, 3 spike, and basket); No. 55-48-7 (pink) and No. 7-47-1 (light rose) by Flad. Other seedling baskets to receive recognition were No. 1403-1 (rose) by Reliance Gardens, and No. 43-11-B (violet) by L. C. Shaw.

Blue ribbons were awarded to the following new varieties: White Goddess, Sierra Snow, Connie G., Golden Dawn, Atlantic, Gorgeous Deb, Valley Queen, Bonfire, Evangeline, Redowa, Grace Darling, Bridal Orchid, King David, South Seas, Skippy, Celestina, Statuette, Peter Pan, Little Sweetheart, Rose Charm, Honey, Newport White, Betty Duncan, Polynesia, Friendship, Miss Chicago.

A large number of visitors attended, some driving 150 or more miles and many shared in the noontime picnic in the city park near by.

Why not plan now to attend next year with a picnic lunch and some spikes for the show. The probable date will be Aug. 3.—By L. C. Shaw, Milton.

MADISON GLADIOLUS SHOW DRAWS LARGE ATTENDANCE

More than 12,000 people viewed the annual Madison Gladiolus Society Show at the First National Bank on August 5-6. Outstanding were the beautiful new seedlings, recent introductions and artistic arrangement classes.

Officers of the Madison Gladiolus Society sponsoring the show are R. B. Russell, president; H. E. Halliday,

vice president; Mrs. George Harbort, sec.-treas.; Mrs. H. S. Bostock, G. F. Wilkie, Ray Kraft and John Magnasco, directors.

The Winners

Grand champion of show and champion single spike seedling, by John Flad. Champion three spike seedling, Ted Woods.

Recent Introduction, single spike, James Torrie, on Elmer's Rose.

(Continued on Page 18)

AT OUR STATE GLADIOLUS SHOWS

Upper picture, the Wisconsin Gladiolus Society State Show at Two Rivers. Admiring the Champion Seedling Basket, winner of the American Home Achievement Award, shown by Melk Bros., Milwaukee, are, from left, Henry Gauger, exhibitor, with Touhey Gardens; John Gates, show manager and pres., Manitowoc chapter. John Bayless, show chairman; Mrs. A. E. Piepkorn, state sec.; Mrs. Joe Rezek, chapter sec, and Wm. Hockman, vice pres., Manitowoc chapter.

Second picture, Mr. Henry Gauger with the commercial exhibit he staged for Touhey Gardens of Manitowoc at the State Show. This was the largest commercial exhibit and Touhey Gardens also filled the stage with beautiful baskets.

Third picture. Admiring a basket of Melk Bros. Seedling No. 46-128, which won top awards in single spike, three spike and basket section at the State Seedling Show at Jefferson are, from left to right; Lloyd Pateman, Dousman, director of No. Ill.—So. Wis. Gladiolus Chapter; Dewey Sleczer, Lake Geneva, treasurer; Anton Koepke, Elkhorn, vice president; Everett Van Ness, Shopiere, director; Leland Shaw, Milton, president; John Brinkman, Chicago, director; David Puerner, Milwaukee director. This seedling also won top honors at the State Show at Two Rivers. It is a beautiful and consistent ruffled rose and received the American Home Achievment Award.

Lower picture. At the Madison Gladiolus Society Show. From left, Ted Woods, Madison; J. Elton Carter, Des Moines, Ia., who judged Seedlings and Recent Introductions; Champion Basket of Madeline Hefty (Woods '50) exhibited by Roger D. Russell, Madison (right). Wis. Hort. Soc. Photos.

Recent Introduction, three spike, Roger B. Russell on Ann Sherman.

Recent Introduction basket, Mrs. R. B. Russell on Madeline Hefty

Section Champion, open class, any size, R. H. Postweiler on Bold Face.

Section Champion, amateur, single spike, Miss B. E. Struckmeyer on Burma.

Section Champion, 3 spike, Miss Jane Selzer on Montpelior.

The arrangement class was again an outstanding feature of the show. Classes featuring periods of the day, days of the week and months of the year created a great deal of interest.

GLADIOLUS FEATURED AT WISCONSIN STATE FAIR

The Gladiolus display was one of the outstanding exhibits in the Horticultural Building at the Wisconsin State Fair. Baskets, arrangements and one and three spike specimen blooms were shown in large numbers. Wisconsin gladiolus growers deserve a great deal of credit for making such a fine display at a show viewed by almost half a million people. It is excellent publicity and promotion for gladiolus.

We are only able to give some results of the show staged the first three days, at which Harold Janes, Whitewater; Mr. and Mrs. Walter Krueger, Oconomowoc; Willis Miller of Fort Atkinson and Touhey Gardens, Manitowoc, won the **"Best Display"** class, in that order.

In the three spike class, David Puerner, Milwaukee; Touhey Gardens; Mrs. Arthur Piepkorn, Plymouth; Harold Van Buren, Hartland; Mrs. Lois Wightman, Plymouth; Willis Miller and E. A. Lins, Spring Green won the prizes. Champion three spike entry was shown by Harold Van Buren, Hartland.

In the best arrangements of 25 to 50 spikes, T. E. Popp of West Allis; Willis Miller; Mrs. Lois Wightman, Melk Bros., Milwaukee; George Schaeffer, Germantown and Touhey Gardens won the prizes.

The best dining room table arrangement was shown by Mrs. Joseph Monfre, West Allis; second, by Touhey Gardens; third by Mrs. Lois Wightman; and fourth by Touhey Gardens.

The exhibits were changed every three days.

Two Good Lythrums

Pink Lythrum

The Chief handicap of Lythrum salicaria, the common **purple loosestrife** of the northeastern states and eastern Canada, is the shortness of the period of bloom. It is true that the bloom does persist for a considerable time on each plant, with later spikes opening as the earlier ones go out of production, but the quantity of bloom on these later spikes is not sufficient to satisfy the eye.

The Morden Pink Lythrum

The introduction of Morden Pink lythrum by the Dominion Experimental Station at Morden, Manitoba, has meant a great increase in the popularity of lythrum. It is esteemed, not only because of its more attractive color, which approaches a true pink, but also because of its longer blooming season. Morden Pink is evidently a hybrid between rather unrelated forms of lythrum, and to this hybrid origin is to be attributed the sterility which is itself the cause of the long period of bloom.

In my northern district, this excellent lythrum begins to bloom during the first week of July, attains its full display in late July and keeps on with fairly abundant bloom until frost catches the plants in early September. As the last spring frost commonly occurs in the first week of June, this means that only one month of the frost-free season, that between the first week of June and the first week of July, fails to provide us with a display from the lythrum border. There are few perennial flowers that can equal that record.

Dropmore Purple

The second outstanding lythrum is Dropmore Purple, the introduction of Dr. F. L. Skinner of Dropmore, Manitoba. It is also a sterile form, even more vigorous than Morden Pink. Dropmore Purple is not very well named, for the color term makes one tend to expect the same rather dull purple that the common wild lythrum has. The color is much brighter, and really intermediate in tone between that of the common purple and that of Morden Pink. Anyone who is pleased with one variety will want the other, although the colors clash enough so that no one would plant them side by side.

I have several times imported plants of still another lythrum. The Beacon, listed in the catalogs as reddish purple. However, every time it has bloomed for me from plants just received, the row has turned out to differ from plant to plant; they are all doubtless seedlings. Unless a supply of plants can be located that offers something superior and uniform, it is time that the Beacon were dropped from catalog lists.—By Percy H. Wright, Sutherland, Saskatchewan, in **Horticulture.**

WINS AT IOWA SHOW

The American Home Achievement Award was given to Theodore Woods on his Seedling 2-46-2, named Rosita, a light rose, at the Iowa State Show at Algoma, Ia.

Two small-towners were sitting on the front porch of a general store when a city slicker drove up in a flashy convertible. "Hey you," yelled the driver, "how long has this town been dead?"

"Can't be long," drawled one of the natives, "You're the first buzzard we've seen."

Garden Club News

Second Annual Convention
THE GARDEN CLUB OF WISCONSIN

Affiliated with the Wisconsin State Horticultural Society
Y.W.C.A., 610 N. Jackson St., Milwaukee
FLOWER SHOW ON
Wednesday - Thursday, September 26 - 27

PROGRAM — Thursday, Sept. 27
Room 410, 4th Floor

10:00 a.m. Call to order by Mrs. R. H. Sewell, Milwaukee, member, State Garden Club Advisory Board, Milwaukee.

Program Topic: How I Grow Them. 15 minute topic, 10 minutes for questions and answers.

You, Too, Can Grow Roses, by Mr. J. A. Voight, Supt., Whitnall Park.

Begonias for House Plants, by Prof. G. E. Beck, Dept. of Horticulture, U. W.

I Grow Perennials and Like Annuals, by John F. Hauser, Superior View Gardens, Bayfield, Wis.

Showing of Some Slides of New Sets prepared by the Wis. Hort. Society for Garden Club use, by H. J. Rahmlow, Sec.

12 M. Luncheon, Y.W.C.A. Toastmaster, Mr. G. J. Hipke, pres., Wisconsin State Horticultural Society.

Five minute reports from regional presidents.

Some new Ideas on Flower Arrangement, by E. L. Chambers, Madison.

1:30 p.m. Call to order by Mrs. R. La Philliph, pres., Milwaukee Region Garden Clubs of Wisconsin.

Demonstration of Flower Arrangement, by Jos. Hanke, of Hanke's Floral Shop, Milwaukee.

Note: Registration for program, 50c. Price of luncheon, $1.55.

Send luncheon reservations to Mrs. Robert La Philliph, 1335 S. 137th St., Milwaukee.

Convention and show is open to all members of the Wisconsin State Horticultural Society and to the public.

No program on Wed., Sept. 26; Flower Show open in afternoon and evening.

THE STATE GARDEN CLUB FLOWER SHOW

By the Garden Clubs of Wisconsin
Y.W.C.A. Auditorium,
Milwaukee, Sept. 26-27.

What promises to be one of our outstanding flower shows is being planned by committees of Wisconsin Garden Clubs affiliated with the Horticultural Society in connection with the annual meeting on September 26-27.

That the show will be most interesting can readily be seen by visualizing the entries that will appear under the following classes of arrangements.

Accent on Wildlife; Fruit and Vegetable Arrangements; Autumn Reverie; Gems of the Orient; Berries, Shrubs and Foliage Arrangements; Garden Glory; Evergreen Arrangement with Accent; Wall Decoration; Collector's Items; Winter Corsage; Arrangement for Novices; Modern Arrangements; Small Arrangements (less than 10 inches high); Arrangements Featuring Figurines.

Screens

There will be the following classes of screens. Golden Nuggets; Royal Jewels; Jewels of the Sea; Jewels of the Madonna.

Another division of screens will feature compositions representing departments of the Wisconsin Horticultural Society as follows: 1. Honey. 2. Fruit. 3. Gladiolus. 4. Entomology. 5. Berries and Vegetables. 6. Garden Clubs 7. Landscapes.

Tables will feature 1. Jewels of Autumn. 2. Harvest Tables. 3. Christmas Tables.

Horticultural Exhibits

There will be classes for all kinds of Horticultural entries. Lack of space prevents us from listing all of the classes, but anything interesting you may have can be entered. Write to Wisconsin State Horticultural Society, 424 Univ. Farm Pl., Madison, for copy of schedule, or see your garden club president to whom copies have been sent. Chrysanthemums will be featured.

Committees

Mrs. Chester Thomas, well-known in flower show circles, is manager of the show. Other committees are: Schedule committee; Mrs. L. G. Stewart, chairman; Mrs. Val Suttinger, Mrs. Roy Sewell. Mrs. Wm. Armitage, cover design. Mrs. E. A. St. Claire, is chairman, Horticultural Division.

Floor plan: Mr. and Mrs. Victor Schmitt. Properties: Mrs. Cyril Fus. Registration: Mrs. Max Krautschneider, Mrs. Robert Schissler. En-

tries: Mrs. Edgar Bergmann. Specimen Bloom: Mrs. Ray Luckow, Mrs. Carl Lemke. Commercial Exhibits: Mr. Charles Braman. Official Hostess: Mrs. Robert La Philliph, pres., Milwaukee Region. Hospitality: Mrs. O. H. Burgermeister. Floor Committee: Mrs. Charles Braman, Mrs. Dewey Gill, Mrs. John Dooley. Chm. of Judges, Mrs. Geo. Koch.

SOME INTERESTING ARRANGEMENT CLASSES

We must compliment the Madison Gladiolus Society and especially Miss B. E. Struckmeyer of Madison, who prepared the schedule in arrangement classes for some interesting and unusual ideas. One observer remarked that the arrangements really "had a point to them this year." Naturally, they called for a great deal of thought and imagination on the part of the exhibitors, but how can we expect to have anything good unless there is a lot of work connected with it?

We recommend these classes to garden clubs and other organizations for their flower show.

Arrangements for the Day

Class 1. 8 a. m.—Breakfast Time.
Class 3. 4 p. m.—Tea Time.
Class 4. 8 p. m.—Dessert Time.
Class 5. 12 Midnight—Slumber Time.

Arrangements for the Week

Class 1. Sunday—To Church.
Class 2. Monday—A Quiet Evening at Home.
Class 3. Tuesday—Sewing Circle.
Class 4. Wednesday—Picnic on the Terrace.
Class 5. Thursday—Susie's Tenth Birthday Party.
Class 6. Friday—Garden Club Meeting.
Class 7. Saturday—Buffet Supper After the Game.

Arrangements for the year—1951

Class 1. January—Winter Wonderland.
Class 2. February—Stormy Weather.
Class 3. March—High on a Windy Hill.
Class. 4 April—Easter Parade.
Class 5. May—Springtime in the Rockies.
Class 6. June—Blue Skies.
Class 7. July—Strike up the Band.
Class 8. August—Desert Song.
Class 9. September—School Days.
Class 10. October—Indian Summer.
Class 11. November—Harvest Moon.
Class 12. December—Auld Lang Syne.

THE MILWAUKEE REGION TOUR

About 75 persons from the Milwaukee Region of Garden Clubs traveled by bus to the McKay Nursery, Waterloo, Wis., July 19. The McKay Nursery is the largest in Wisconsin, comprising over 500 acres, and truly is well worth visiting.

After arriving at Fireman's Park at eleven o'clock and exchanging greetings, a short business meeting was held. It was then noon and everyone was ready to line up for the hot coffee, delicious wieners 'n buns and ice cream—a treat from the McKay Company.

First we were shown two barn-like structures, one unusually high, where nursery stock is stored for the six week spring planting season. Here a certain temperature and humidity are carried on continually. The other building is used exclusively for packing and interstate shipping.

Too numerous to mention were the number and varieties of trees, shrubs, etc., which covered this spacious tract.

Under leadership of Mr. Ken Altorfer, landscape architect, and Mr. H. J. Rahmlow's kind and efficient assistance, we received much information about the countless number of trees and shrubs. Whether a spruce, juniper or tree for shade or flowering beauty, each had an appeal and quality all its own.

If this trip is a sample of what Regional affairs will be like, I'm sure we are happy to look forward to more of them in the future.

Again, many thanks to Mr. Altorfer, the McKay Company and Mr. H. J. Rahmlow.—By Martha Getzlaff Koch.

OSHKOSH FLOWER SHOW OUTSTANDING

The Oshkosh Horticultural Society staged an outstanding flower show in August, and the Oshkosh Daily Northwestern has this to say about it:

"From all accounts among the nearly 1000 persons attending, the display of flowers presented at the Recreational Building by the Oshkosh Horticultural Society is entitled to the highest distinction for excellence.

"It was one of the most interesting and largest shows of its kind ever held in this city. As a result of its pronounced success, there is an enthusiastic movement in progress to make the Horticultural Society event an annual affair."

The editorial was quite lengthy and eloquent and we congratulate the Oshkosh Horticultural Society for creating so much interest among the people of Oshkosh for their show.

Garden clubs study horticulture. Milwaukee Region Garden Club members watch Mr. Ken Altorfer, landscape specialist with the McKay Nursery Co., demonstrate the pruning of evergreens during their summer tour to Waterloo, Wis., in July. Guests were garden club members from Fort Atkinson, Jefferson and Lake Mills.—Wis. Hort. Soc. Photo.

ANNUAL MEETING
CENTRAL REGION, GARDEN CLUB OF WISCONSIN
Affiliated with the Wisconsin State Horticultural Society
Clintonville, Saturday, Oct. 6

10:00 a.m.....Call to order by Regional Chairman, Mrs. Marlin Steinbach, Clintonville. Announcements.

Program topic: How I Grow Them. Moderator, Mrs. Fred C. Wipf, Iola, member, State Garden Club Advisory Board.

(15 minute topics; 5 minutes for questions)

How I succeed with strawberries, by Mr. E. A. Rosenberg, Clintonville.

How I grow raspberries, by Mr. Charles Braman, Waupaca.

My favorite annuals and why I grow them, by Mrs. Marion Leer, Iola Garden Club.

Showing of new colored slides of sets available for garden club programs, by H. J. Rahmlow, Sec., Wis. Horticultural Society.

11:30 a.m. Business meeting. Report of nominating committee. Election.

12 M. Luncheon, served by church organization.

1:30 p.m. Topic: **Suggestions for Your Club Flower Show.** Moderator, Mr. E. F. Moldenhauer, pres., Clintonville Garden Club. A representative from each club will be called on for 5 minute report of best features of the club's flower show.

2:00 Fun With Flowers. How to Use the Materials You Have., by Mrs. Forest Middleton, Madison.

Regional officers: Mrs. Marlin Steinbach, Clintonville, pres.; Mrs. Glen Lockery, Rosholt, vice pres.; Mrs. Harold H. Smith, Amherst, sec.; Mrs. F. C. Wipf, Iola, treas.

Registration fee 50c.

Clintonville Garden Club Officers: Mr. Earl Moldenhauer, pres.; Mr. Carl Sholund, vice pres.; Mrs. James Lockwood, 2nd vice pres.; Mrs. Frank J. Bucholtz, sec.-treas.

Nominating Committee: Mrs. Vernon Rosholt, Rosholt; Mrs. G. H. Willett, Iola; Mrs. Josephine Voie, Scandinavia.

GARDEN MAGAZINE

Exchange Flowers with others who have extras. Join round robins. Three sample issues 35c. Year $1.00 GARDENER'S MONTHLY NEWS, RAYMOND 14, Minnesota.

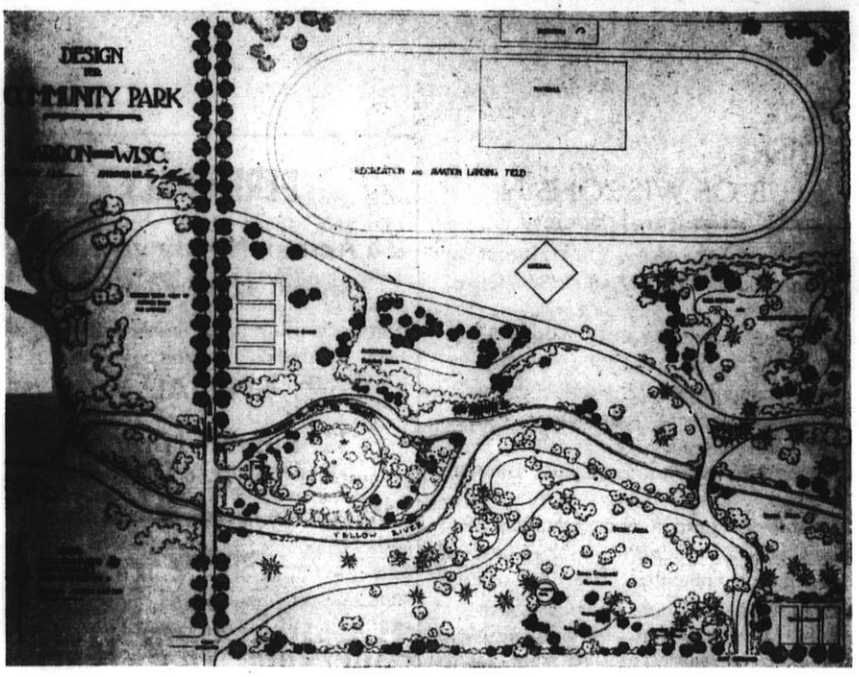
"HARVESTING" THE LEAF CROP

"Harvesting" the leaf crop was carried on in a number of cities last fall. The leaves are raked up and baled and then used for bedding for farm animals or sold to folks who wish to make a compost pile.

Our own leaves should now be raked up and piled in an out-of-the way corner, either in a pit in the soil or stacked up on top of the ground. If we throw some soil over the leaves when we have a layer of about one foot in depth and then continue to add soil at every six or 12 inches of new layer, it will not only compact the leaves, but bacteria will be washed through by rains and help decompose them rapidly.

AFRICAN VIOLETS

It's time to be thinking of houseplants. How about a few more African Violets for your collection? I have an exceptionally fine lot of plants this fall in both the old and new varieties. Stop in and see them when out for a drive or I'll be glad to ship them to you before the weather turns too cold. Mrs. O. F. Isenberg, 433—3rd St., Baraboo.



A landscape architect's plan for a community park development, including recreation field, picnic area, bird refuge and wild flower garden, small children's play area, drives, walks, and bathing beach.

Landscape Architecture Promotes Greater *Enjoyment in Our Parks*

By Geo. Ziegler, Dept. of Horticulture, U. W.

Whether you are planning a family picnic, a baseball game, or a quiet day by a lake or river, a little mountain climbing or a community celebration—Wisconsin has many parks to suit your purpose.

We in Wisconsin are much inclined to take our parks for granted. This is fortunate as it means we use them as part of our daily life; and that, of course is the reason for which parks are designed.

The landscape architect, in many cases, is directly responsible for your using these parks, as he has played an important part in their location and general lay-out which makes them attractive to you.

The Park Plan

Let us trace the development of a community park in a small town. First a site has to be selected. The landscape architect can be of great help in this as he is trained to visualize possible uses for various areas. Which section is best for recreation, which for picnic, bird sanctuaries etc. In this way the best use can be made of the available land. Next a plan is drawn up, as the one in the illustration, designating the location of trees, shrubs, drives, walks and areas for different uses. This is a scale drawing which can be used for the complete development of the park, whether it a period of years. By following a plan is all done at once or stretched over such as this, no costly or time consuming mistakes need be made. Everything done will be towards an ultimate goal. Any group sponsoring a park project will find it much easier if the complete picture is down on paper.

The Trail At Devils Lake

Many of you, no doubt, have climbed the East Bluff trail at Devils Lake State Park. It makes an easy assent up the talus slope without disturbing any of the natural beauty. In fact it fits in so well that you can hardly find the next step until you are about to take it. When a particularly good view is to be had the trail turns or widens so that it is brought to your attention. Rest areas under pines are also frequent, making this climb an unforgettable pleasure. This trail represents many hours of planning and labor on the part of a landscape architect .It is there, we use it, and consider it a part of our Wisconsin life. We should, for that is exactly what it is.

However, it is due to the forethought of someone and the work of a landscape architect to give it to us in this delightful form. And so it is with most parks, both large and small throughout the State.

The landscape architect, by his study and labor is responsible in great measure for the enjoyment we get from our Wisconsin parks.

A council ring in the University of Wisconsin Arboretum designed by Jens Jensen, Wisconsin landscape architect of Ellison Bay, as a memorial.

Sketch of the first prize panel at the International Flower Show, N. Y. Designed by Mrs. Malcolm Fleming, Atlanta. Magnolia pods, poppy seed heads, open milkweed and catalpa pods were used.

An aura of fascination will always surround the age old hobby of collecting things. It is true that some collectors' items involve the expenditure of hundreds of dollars. Fortunately, though, there are also many items which may be had free for the collecting. All one has to do is to look to Nature for her bountiful gifts along the roadsides, fields, woodlands, or in our very own gardens.

Glimpses into antique shops reveal the fact that some of our grandmothers were very much aware of Nature's generosity to the humble, artistic soul. Walls of these shops feature her dried flower and seed "pictures".

Design on a Wood Panel

Memories of these designs were recently brought to mind by an exhibit at the International Flower Show held in New York City last year. The exhibit which proved to be one of the most popular classes in the show drew

Let's "Take Up a Collection" and Make A

Design On A Wood Panel

By Elizabeth Stewart, West Allis

forty entries. The class called for a "design on a wood panel using seeds and/or seed vessels".

Times, tastes and interiors have changed with the years. While some of grandmother's dried pictures were very simple and lovely, few persons would be interested in duplicating any of her most ornate and intricate Victorian pictures. The wood panels, however, might not only be right at home in period interiors of today, but could assume important decorative roles in homes of modern decor.

Directions for Making a Panel

For those who might wish to try a hand at making a decorative panel, here are the directions: Select a board, piece of plywood, plank or tree slab. The size, color and texture of the panel will depend upon the wall space it will occupy. The wood may be left in its natural state, varnished or painted. Horticultural material to be used should have a certain amount of firmness and lasting quality. Seed pods, heads, sliced pine cones, grasses, twigs, bits of drift wood, fungus, nuts, strawberry corn, etc., are good possibilities. One's imagination is the limit, so-o-o, happy hunting!

It is best to lay out the proposed materials for the design on paper first. Then when a pleasing design has been worked out, the material can be attached to the board with furniture or household cement. Possibly some large bulky objects might have to be weighed down temporarily with stones or heavy objects. Materials can be given a coat of shellac and the decorative panel will last indefinitely.

Select Material Now

It is not too late to take up a collection from our gardens against the time when frost will take away all of our fresh flowers. By the process of drying our flowers we can take their colors and memories with us through the long dreary winter months.

A few on the extensive list of flowers which dry well include cockscomb (celosia), larkspur or smaller types of delphinium, statice, zinnias, yarrow, astilbe, manarda and some roses. Red or yellow roses keep their color better than the paler ones. Incidentally, dried roses are more fragrant than the fresh. Roses and strawflowers

(Continued on Next Page)

Attics often yield treasures. An old picture frame makes an ideal container for this dried arrangement. A piece of masonite was tacked to the frame in place of the picture. Dried materials, including dock, broom corn, corn tassels, leaves, celosia and fern spore fronds were used to form a large leaf pattern. Dark material with the appearance of more weight and strength was used to form the structural outline of the design. The somberness of the dark material was relieved by veins of light colored material, weaving in and out of the arrangement.

should be cut before they are fully open, and dried in the usual way.

How to Dry Material

Flowers must be picked at exactly the right time for successful results. This is usually when they are at their prime. All leaves should be stripped off immediately and the flowers hung upside down to dry in a cool, dark, dry place. Darkness is an important factor in retaining the colors of flowers. If a few gracefully curved stalks are desired, one may dry materials such as celosia in a tall container, leaving the heads to droop over the edge.

Part of the fun of drying horticultural material is the occasional successful result of an experiment with something entirely new. Only a limited amount of material for drying has been listed. There is much more that is just awaiting our discovery and our "collection box."

HOW MANY FAMILIES GROW AND PRESERVE FRUITS AND VEGETABLES?

About 17 million families are raising vegetables this year, according to the Extension Service of the U. S. Department of Agriculture.

About 46% of all families in this country are preserving fruit and vegetables from their own gardens or what they purchased. These results are from a nation-wide survey conducted by George Gallup of the American Institute of Public Opinion.

It means that these families will use more vegetables on the family table the year 'round.

The survey asked these questions:

1. Do you have a vegetable for home use this year? Answers were, Yes, 39%, No, 61%.
2. Do you expect to can any fruits or vegetables this year? Yes, 46%; No, 50%; Not certain, 4%.
3. Do you expect to freeze any fruits or vegetables this year? Yes, 16%; No. 70%; Not certain, 5%.

Most dogs have plenty of friends because they wag their tails instead of their tongues.—The Albany Herald.

A dime is a dollar with all the various taxes deducted.

1951 Rose Garden Review

By John E. Voight, Superintendent
Whitnall Park Botanical Gardens

The Wisconsin gardener has an outstanding guide to aid him in the selection and cultivation of all types and varieties of roses at the Whitnall Park Rose Gardens. The following report provides data as compiled during the 1951 season.

New Varieties

As usual, the interest in the new hybrid introductions prevailed, however, a goodly number of the old stand-bys continued to be reliable and top favorites. Among the newest roses introduced to the gardens, the following varieties have proved worthy of consideration: Applause, Chief Seattle, Curly Pink, Fashion, Golden Scepter, Helen Traubel, Independence, Shades of Autumn, Sutter's Gold, Suzon Lotthe, Symphonie, Vogue and Volcano.

All of these varieties have responded very well to a regular program of watering spraying, feeding and weeding. Such old varieties as Betty Prior, Crimson Glory, Dainty Bess, Christopher Stone, Dickson's Red, Eclipse, Eutin, Floradora, Gruss an Teplitz, Mary Margaret McBride, Golden Jubilee, McCredy's Scarlet, Mirandy, Nocturne, Peace, Permanent Wave, Pink Bountiful, Pink Satin, Show Girl and Sister Therese all put on their usual outstanding performance.

Disease and Insect Control

The usual program of spraying to control fungus diseases and insects has been carried out to satisfaction. Control measures have been very effective and we offer the following information.

Spray Formula

Wettable sulfur—3 tablespoons
Fermate—1 teaspoon
Arsenate of lead—3 tablespoons
Spreader (or sticker)—1 teaspoon
Black leaf (40)—3 teaspoons
Water—3 gallons

In combating midge and thrips, DDT may be included in the mixture at a rate of 1½ tablespoons of 50% concentration (3 gallons of the solution). Sulfur is omitted when temperatures become high, at which time the fermate is then increased to 3 tablespoons (3 gallons of solution). The spray is applied at 10 day intervals during the early morning. During wet spells, the frequency is increased, as black spot and mildew increase rapidly in such periods. It should always be remembered that the spray must cover the undersides of the leaves as well as the top in order to gain the maximum effect.

Watering

Perhaps the most important phase of rose culture is watering. During the months of summer heat, a regular surface watering program is maintained. A generous supply of water helps to maintain a steady flow of vital nutrients through the plants. Watering is discontinued about September 1st, allowing the plants to harden off and conditions them for the severities of our winters. If given sufficient water, plants will produce truly spectacular results of which they are capable.

Prepare For Winter

For the winter, Hybrid Teas, Floribundas and Polyanthas are hilled with soil using a ¼ in. wire mesh cylinder for each plant, average height 12 inches, diameter 12 inches. Tree roses, climbers, and Perpetuals are laid down and covered completely with soil. When the soil freezes solidly, a covering of marsh hay is applied between and over the plants.

It should always be remembered, the chores in a rose garden are neither difficult nor time consuming, but they require regular attention.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
H. J. Rahmlow, Madison, Cor. Sec'y.
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

BEEKEEPERS DO THE SPEAKING AT OUR STATE SUMMER MEETS

More than half of the beekeepers attending the annual summer meetings in late July at West Bend and Ladysmith were called upon to answer questions and give experiences or tell about their honey crop as a part of the program. This made the meetings most interesting and everyone went away feeling they had learned a great deal.

Only a few speakers appeared — Mrs. Harriet Grace, Madison, American Honey Institute; Mr. John Long, state inspector; Mr. Art Kehl,' G. B. Lewis Co., and representatives of the American Beekeeping Federation, Mr. Glen Jones, secretary, of Atlantic, Ia.; Mr. Edw. Wolfe, assistant publicity director for the Federation, of Atlantic; and Mr. E. H. Adee of Nebraska, president of that state's Association and chairman of the Federation's membership committee.

A Good Crop Indicated

A good crop of excellent quality white honey was reported by almost all beekeepers. The crop will be reduced however by winter losses, spring dwindling, and failure of package bees to build up.

Couse of Poor Colonies

These factors were given as the causes of loss: Spring dwindling due to nosema; poor queens — probably infected with nosema; failure of package bees. As many as 8 out of 10 package bees from some breeders failed. The queens laid from two to three weeks and then died. The bees also died rapidly, leaving colonies which were of no value for honey production. Nosema was given as the cause. Some beekeepers reported good luck with package bees.

Want Help on Nosema

At the Ladysmith meeting, discussion waxed warmly about the possibility of help to beekeepers on the nosema problem. It was unanimously agreed that nosema today causes greater loss to beekeepers than all other diseases combined. A resolution was passed asking the Department of Agriculture to adopt regulations to prevent nosema infected bees from entering the state. Mr. John Long was asked to investigate the possibility of such action, and beekeepers voted to have an entire session of the annual convention in Wausau devoted to the subject of nosema. It was reported that one beekeeper had invested $1000 in package bees and had little to show for it in July.

Booster Packages Fail

Several beekeepers reported buying booster packages, adding the bees to weak colonies or package bees that were not doing well. The results were not satisfactory and the conclusion was it is a waste of money to buy booster packages unless one is certain that nosema is not present. The new bees added may bring more nosema or may become infected from the old bees and have little value. Success from booster packages depends then on having bees free from nosema infection and also having good queens.

Swarming a Serious Problem

Many beekeepers reported difficulty in controlling swarming, and that topic was opened for discussion by Henry Schaefer, president of the State Association. He outlined a method adopted by a Minnesota beekeeper who came to a yard several years ago in which swarms were hanging from the trees. Being unable to devote much time to this yard he simply placed several empty supers on the bottom boards, placed a moving screen over these and stacked the colonies on top. The field bees returned to the empty supers, weakening the colony above and results were quite satisfactory. H. J. Rahmlow, secretary, spoke on the subject of swarming and stated this method is similar to recommendations for dividing colonies when sealed queen cells are present. It can be done in several ways. Mainly, however, the "eye of the beekeeper" is responsible for swarm control. We must watch carefully to see that queen cell cups are killed before they are sealed and plenty of room given before the swarming impulse becomes developed.

Real honey promotion—at the Marathon County Fair at Wausau. The booth type of exhibit with someone in attendance at all times is excellent promotion. At left, Mrs. Albert Sahr of Wausau and Mrs. John Coates, Colby, superintendent, are kept busy answering questions and demonstrating goods made with honey.

He outlined several quick methods for doing this.

Honey Receives Publicity

Mrs. Harriet Grace, director of the American Honey Institute, Madison, spoke at the West Bend meeting and showed many newspaper and magazine clippings, with pictures, stories and recipes promoting honey as a result of the work of the Institute. The value of these pictures and articles if paid for at the regular advertising rates would amount to hundreds of thousands of dollars.

Mrs. Grace also reported some excellent bulletins and posters available to all beekeepers to advertise honey. A new bulletin is called, "Honey in Infant Feeding." Physicians say that honey is a safe and wholesome food for infants and we should take advantage of that statement to promote a greater use of honey for children.

Honey Advertising

Mr. Arthur Kehl of the G. B. Lewis Co., gave an excellent talk on honey promotion. He pointed out that in Wisconsin alone there are 10,000 beekeepers and many times that in the United States. He said the Electrolux Co. employs 50,000 salesmen, but does no advertising. As a result of the excellent work of these salesmen, there are few people in the nation who have not heard of Electrolux products. Ask any person on the street corner and you will find more of them know about Electrolux than know about honey, yet we have the most salesmen available. He also emphasized we should never knock our competitors products, but praise our own. If you knock the other fellow you are advertising him.

The Federation

Mr. Glen Jones, secretary of the National Beekeepers' Federation, recalled the work of the Federation in Washington, which helped place a floor under the price of honey. Also, the work done by the pollination committee in getting greater recognition for honey bees for pollination. He said that the nation has really awakened to the value of bees. Mr. Edward Wolfe and Mr. E. H. Adee also spoke on the work of the Federation and urged beekeepers to join.

Disease Control

Mr. John Long took an active part in the discussion of various diseases of bees. European foul brood has come into the picture and caused some loss. American foul brood is being controlled but not as effectively as would be possible if more funds were available. He urged all beekeepers to see that their county boards appropriated money to help the inspection work in their counties. He expressed willingness to study the possibility of doing something to help the nosema problem.

"OBSERVATION OF BEE DISEASES IN 1951"

"NOSEMA"

Nosema has probably caused Wisconsin beekeepers their greatest loss again this year. Many colonies which survived the winter looking like a fair colony, continued to dwindle away and were weaker in bees by May 1, than on April 1. Many of these colonies died late in April and early May. Some who tried to unite two or even three of these colonies to make one had little if any success. Old bees badly infected with nosema soon spread the infection to the young, healthy bees. This period of nosema lasted up until the time of, and even in some cases, after supers were placed on the colonies.

Package bees shipped into this state, in many cases, showed heavy infection with nosema. The amount of infection depending upon some unknown factor in how or when the package was produced. (For example, shipments of packages from same shipper on same dates were not consistent). In fact, many packages showing a moderate or heavy infection of nosema were a poor investment if not an entire loss.

"European Foulbrood"

A definite increase in European Foulbrood occurred in many counties in the state. The European Foulbrood this year was a type in which many of the larvae were killed after the sealing of the brood. This caused a lot of confusion to many owners. European Foulbrood of this type also was found in many colonies of Golden Italians formerly considered immune to European Foulbrood. Probably the greatest amount of European Foulbrood was found in colonies headed by queens of American Foulbrood resistant strains, or in colonies being fed with Sulfa.

"American Foulbrood"

Although American Foulbrood has been found in many counties of the state again this year, its behavior has been normal in most respects. Neglected yards, moving of diseased yards without permits, or moving of infected equipment has accounted for most new outbreaks.

John F. Long

BEEKEEPING IN SEPTEMBER

Winter Losses Can Be Reduced By Careful Attention to Our Colonies in September.

The Queen

All colonies should be inspected in September to see if the queen is in good condition. Drone layers and failing queens should be destroyed at once. If colony populations are now small, it will not pay to re-queen or even try to winter over the poor bees. Kill the queen and allow the brood to hatch. During that time colonies will produce queen cells and may bring in considerable pollen. After all brood has hatched, place a little cyanide in the entrance, clean out the hive and save the brood chambers containing honey and pollen for next spring's use. They will be ideal for starting packages or feeding.

The Winter Brood Nest

Now is the time to organize a winter brood nest so that colonies will not starve. Auger hole entrances should have been closed since August and then the upper entrance opened in mid-October for winter use. Closing these entrances in early fall helps induce the colony to prepare its own winter organization by storing honey in the upper brood chamber.

By the first of October, this is the organization necessary for winter.

1. A large population of bees.

2. The upper brood chamber almost filled with honey with the exception of empty cells in the lower portion of two or three combs in the center of the hive.

3. The middle brood chamber about ½ full of honey with clustering space for brood rearing in the center comb. The bees will move upward into the empty cells in the upper brood chamber in October and November.

4. The lower of three brood chambers should contain a few combs of honey for use next spring. The colonies should not be raising brood in the lower brood chamber in October. If they are, move the brood into the middle brood chamber, otherwise they many remain in the lower one over winter and starve.

Check Brood Chambers for Winter Stores

Some colonies with vigorous queens will raise brood in the upper brood chamber and may not store enough honey for winter. This will surely result in starvation or require heavy feeding. All colonies should be check-

ed now and those having light brood chambers should have all supers removed so that any nectar coming in from goldenrod etc. may be stored in the brood chambers. In northern Wisconsin, beekeepers sometimes have trouble from aster honey which is not thoroughly ripened, and they prefer to use sugar syrup, rather than allow this aster honey to remain for wintering.

Brood rearing will stop in early to mid-October depending upon the vigor of the queen. Feeding should begin at that time, so that all combs in the upper brood chamber may be filled with winter stores, with the exception of some empty cells in about 3 center combs.

Do not attempt to over-winter poor colonies—those with small populations and poor queens. They will consume more honey than they are worth.

MRS. JOSEPH ELSINGER

Mrs. Joseph Elsinger, wife of a well known Dodge County beekeeper, passed away on August 5th after a long illness. She is survived by her husband and three sons. She was a member of our County and State Beekeepers' Auxiliary.—By Mrs. Felix Elsinger, Knowles, Wis.

CULLING BEE COLONIES

Every beekeeper in Wisconsin has heard about cow-testing associations and how cows are tested for production to see if they produce enough to make a profit for the farmer above the cost of their feed. Cows that do not produce a profit are culled from the herd.

Perhaps beekeepers should have a bee colony testing association, or at least do the culling themselves. We also have colonies that do not produce enough honey to pay for the cost of their care.

A colony with a small population and having a poor queen may consume 40 to 50 pounds of honey during the winter, worth about $4 to $5. During a severe winter these weaker colonies may starve after having consumed considerable honey and be a total loss.

If we can determine which are our poor colonies and gas them in October, we could save the amount of honey they would consume, which would be about enough to pay for a 2 lb. package and queen in spring.

ANNUAL CONVENTION WISCONSIN STATE BEEKEEPERS' ASSOCIATION

Marathon County Park, Wausau, Oct. 30-31

Complete program will be published in our October issue. The program this year will be in the form of topics. Each topic will be conducted by a moderator, who will call upon beekeepers and experts present for discussion. Here are the topics.

Tuesday, October 30

This season's honey crop. How we produced it and how we are selling. Moderator, H. J. Rahmlow, Madison.

Are we prepared for winter? Moderator, Henry Schaefer, Osseo.

There will be reports from the Central States Bee Culture Laboratory and talks by Art Kehl, Watertown, and Robert Dadant, Hamilton, Ill. Entertainment at the banquet will be provided by the Marathon Co. Beekeepers' Association.

Wednesday, October 3

Topic: Is nosema our worst enemy? Moderator, John Long, Madison.

Pollination. Moderator, Robert Knutson, Ladysmith.

Round table on honey promotion, bottling, etc. Moderator, Walter Diehnelt, Menomonee Falls.

Spring management. Shall we feed in spring? Moderator, William Judd, Stoughton.

Sounds like an interesting program, doesn't it? Plan now to attend.

BEES AND EQUIPMENT

For sale: 25 colonies of bees, 140 extracting supers, comb honey supers, 60 excluders, extra bottom boards, top boards, inner covers, 4 frame extractor, storage tanks, acid covers; a complete set up.

This eight frame equipment is in good condition and contains all drawn combs. John W. Schroven, Stockbridge, Wisconsin.

Wisconsin Horticulture

October, 1951

ANNUAL CONVENTION PROGRAMS

WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural Society

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Subscription by membership in the Wisconsin State Horticultural Society. Annual dues are $1.25 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

Outstanding Event

Orchard Tour

Minnesota and Wisconsin Growers View Tests At Sunridge Orchard

The weatherman and Mr. Wm. Connell of Sunridge Orchards at Menomonie cooperated to give fruit growers of Minnesota and Wisconsin a perfect day for an orchard tour on Thursday, Sept. 6. About 125 registered for the luncheon. In addition there were more than 25 high school students attending the program. Prof. C. L. Kuehner and William Connell did an outstanding job of presenting an educational program throughout the day.

Spray Tests Viewed

The tour began in a section of orchard sprayed with puratized and crag. Fruit and foliage looked excellent—there was no scab. The leaves were large and of a healthy color. Everyone was impressed by the scab control obtained with this material.

(Continued on Page 32)

SCENES ON THE TOUR AT SUNRIDGE ORCHARDS, MENOMONIE

Upper picture, Wisconsin welcomes Minnesota. Mr. Arnold Nieman, Cedarburg, vice president, Wisconsin Horticultural Society, welcomes Mr. William Benitt, Hastings, Minn., president of the Minnesota Fruit Growers' Association.

No. 2. High school agricultural students were the first to arrive at Sunridge Orchards, near a truck load of baskets being unloaded for the Wealthy crop. In the doorway is Mr. William Connell, host.

No. 3. Growers and our Minnesota guests, and members of the staff, Department of Horticulture, University Farm, St. Paul, Minn.

No. 4. Demonstrating how to place apple bait in mouse runways. Observing are, from left, Mr. William Connell, owner of Sunridge Orchards; Mr. Archie Johnson, county agent, Menomonie; Mr. Arnold Nieman, Society vice president; and W. D. Fitzwater, rodent control specialist, who urged growers to use both the oats bait and also apple bait with zinc phosphide.

The regular spray program used by Mr. Connell was: Lime sulphur through calyx time and then Ferbam with a combination of lead arsenate and DDT (6 lbs. of DDT and 6 of lead in 500 gallons of water).

Viewing the section of the orchard sprayed with the regular program, it was the opinion of observers that while control of scab was excellent, the leaves did not look as good as in the puratized-crag block.

It might be well to record some observations by visiting growers from other sections of the state. Those coming from the shores of Lake Michigan—Kenosha, Cedarburg, etc., remarked that obviously the elevation of the orchard and its air drainage accounted for the fact that scab control was practically perfect in this orchard. It was not so in the eastern part of the state where cloudy, foggy, rainy weather made it impossible for some growers to control scab with any program. These observations were made by some of our most careful growers so we cannot say they did not use proper spraying methods. They also observed that puratized and crag would not have given such good results in their section.

The Orchard

Mr. Connell stated that he purchased the orchard in 1939 and since that time has replaced 6,500 to 7,000 trees. His main varieties are McIntosh, Cortland and Wealthy.

Some new varieties from the Minnesota experiment station have been planted for trial. A small block of Fireside trees were bearing this year. This variety seems to develop good quality and color in some sections of the state but not in others. It needs further testing.

Apple Leaves Sprayed With Nu Green

Mr. Connell had sprayed a block of trees with NuGreen at the rate of 5 lbs per hundred gallons of water, making three applications. It was applied at petal fall and in the first two cover sprays, (10 and 20 days after calyx). Good results were obtained from the use of NuGreen this year. Since there had been plenty of rain, the ground application of nitrogen fertilizer also showed up well, there being an excellent cover crop in all parts of the orchard. Comments were that NuGreen might be a good method

(Continued on Page 33)

5th Annual
Joint Fruit Growers Meeting
Wisconsin State Horticultural Society — Minnesota Fruit Growers' Association
Hotel La Crosse, La Crosse, Wis.
November 5 - 6, 1951

PROGRAM—MONDAY, NOVEMBER 5

Mr. Gilbert Hipke, president, Wisconsin State Horticultural Society, presiding

9:30 a.m. Registration. Set up fruit exhibits.

Program Topic: Insect Control in the Orchard.

10:00 a.m. My experience with concentrate spraying. By Victor Leidel, La Crescent. Robert Sacia, Galesville.

10:45 a.m. The 1952 apple spray program for insect control. Dr. C. L. Fluke, University of Wisconsin, Department of Entomology.

11:45 a.m. Election of directors, Minnesota Fruit Growers Association.

AFTERNOON PROGRAM

Mr. William A. Benitt, president, Minnesota Fruit Growers' Association, presiding.

Topic: Apple Disease Control. Apple Promotion.

1:30 p.m. The Minnesota orchard spray warning service. T. L. Aamodt, Minnesota State Entomologist.

2:00 p.m. The 1952 apple spray program for disease control. Dr. J. D. Moore, University of Wisconsin.

3:00 p.m. Our apple promotion program. Harold Schubert, president, Wisconsin Apple Institute.

Apple Promotion In Minnesota; Harold Peterson, Ext. Economist in Marketing.

3:45 p.m. Your questions answered. Leader, H. J. Rahmlow, secretary, Wisconsin State Horticultural Society.

4:15 p.m. Exhibitor's time. Visit their exhibits.

Meeting of directors, Minnesota Fruit Growers' Association.

6:30 p.m. Banquet, Hotel La Crosse. Mr. Ben Rusy, District Extension Leader, Madison, toastmaster. Program to be announced.

TUESDAY, NOVEMBER 6

Mr. Gilbert J. Hipke, presiding

Topic: Apple Blossom Thinning. Harvest Sprays.

9:00 a.m. Experiment and experiences with blossom thinning and harvest sprays in Wisconsin. Round table conducted by Prof. C. L. Kuehner, U. of W.

11:15 a.m. Experimental work with harvest sprays during 1951. Prof. T. S. Weir, University of Minnesota.

Our experiences with blossom thinning and harvest sprays in Minnesota. By Dr. W. G. Brierley, University of Minnesota.

12:00 noon. Luncheon for officers and directors of Minnesota and Wisconsin organizations.

AFTERNOON PROGRAM

Mr. William A. Benitt, presiding

Topic: Pruning and apple varieties

1:45 p.m. Round table discussion on pruning.

2:30 p.m. Round table discussion on new apple varieties. Leader, Prof. W. H. Alderman, University of Minnesota.

FRUIT SHOW

Growers are invited to bring samples of new or old varieties of apples, pears, and other fruits for display.

A prize of $10.00 is offered for the best bushel basket of apples displayed. The best entries to be auctioned at the banquet, the grower to receive the first $5.00 with the balance, if any, to be divided equally between the grower and the expense fund for these annual Minnesota-Wisconsin meetings. Bids will be limited to $15.00 for any one basket.

COMMITTEES

Banquet — Al Francour, County Agent, La Crosse, Wis.
Exhibits — E. M. Hunt, Sec., Minnesota Horticultural Society.
Judging — C. L. Kuehner, Leon C. Snyder.
Program — J. D. Winter, H. J. Rahmlow.
Registration and Publicity — Al Francour.

for applying nitrogen in a dry year when ground nitrogen is not readily available. Growers in other states have reported superior results from the use of NuGreen as indicated by a better set of fruit buds. However, Prof. C. L. Kuehner pointed out its use is in the experimental stage and we need more information before drawing any conclusions. He urged that if growers use NuGreen they should leaf check trees for comparison.

Another comment was that we need nitrogen to grow cover crops to protect the soil in case of a dry year. Heavy cover crops allowed to remain in the orchard between the trees build up a mulch that is excellent protection against the drying weather of mid-summer. There are more tree roots in the middle of the rows than there are under the trees.

Color-Set Used

The new pre-harvest drop control chemical, Color-Set 1004, was used on several varieties. For more information on this material, see page 273 of the August issue of Wisconsin Horticulture. Dutchess trees had been sprayed with Color-Set and the apples were still hanging, though over-ripe. Mr. Connell said that all the fruit would have been on the ground if it had not been sprayed. Prof. Kuehner remarked that in most cases the sprayer fruit held on to the tree well, but there is danger of picking too late; Color-Set may hasten maturity.

Mr. Dawson Hauser of Bayfield stated that he had sprayed different apples with Color-Set on August 19. On the unsprayed rows, the loss of fruit was heavy during a storm, while those sprayed hung on much better. The fruit on unsprayed trees did not have as good color. Prof. C. L. Kuehner remarked that Melba trees in the University orchard were sprayed on August 6th. About five times as many were picked off the ground on August 15th under trees where no spray had been used than where Color-Set had been applied.

Watch Out For Mice

Rodent Control Specialist W. D. Fitzwater urged growers to look for mouse runways in the orchard during late September and early October. "We cannot afford to take chances with mice," he said.

In discussing the type of bait to use, he warned that mice may become immune to strychnine and therefore the exclusive use of oats bait may not give the best results. The poisoned oats bait keeps from year to year and therefore is preferred by many growers. He advised the use of zinc phosphide on pieces of apple, placing a piece in mouse runways under the trees. The combination of zinc phosphide bait and strychnine covered oats is the most effective. The best time to use the bait is in October and early November before there is any snow.

Invited to Minnesota in 1952

Mr. Wm. Benitt of Hastings, Minn., president of the Minnesota Fruit Growers' Association, invited members of the Wisconsin State Horticulture Society to join them in 1952 for a tour to the Minnesota Fruit Breeding Farm, subject of course, to seasonal conditions. He expressed appreciation to Mr. William Connell, Prof. C. L. Kuehner and all who helped with the wonderful field tour and demonstration at Sunridge Orchards.

FRUIT SHOW
ANNUAL CONVENTION

WISCONSIN HORTICULTURAL SOCIETY
Retlaw Hotel, Fond du Lac
November 27 - 28

Committee in charge: Prof. C. L. Kuehner, Madison, chairman, assisted by Fred Magnus, Appleton: Dick Hauser, Port Washington; LeRoy Meyers, Hales Corners and Wm. Meyer, Waldo.

NEW APPLE VARIETIES

Plate of 5 Apples

Classes

1. Macoun
2. Haralson
3. Secor
4. Fireside
5. Prairie Spy
6. Lobo
7. Beacon
8. Any other new variety properly named

To be judged by the Danish or Merit System. All plates scoring "Excellent" to receive $1.00; "Very Good," 75c and "Good," 50c. Number of prizes in each rating limited to ⅓ of the number of entries.

STANDARD VARIETIES

Plate of 5 Apples

12. Golden Delicious
13. N. W. Greening
14. Wealthy
9. McIntosh
10. Cortland
11. Delicious—any red

Premiums on each class, 1st prize, $2.50; 2nd prize, $1.50; 3rd prize, $1.00.

Judges, R. L. Marken, Kenosha; C. L. Kuehner, Madison.

SEEDLING APPLE EXHIBIT

Five Apples Not Previously Shown

Prizes: 1st, $5.00; 2nd, $3.00; 3rd, $2.00.

Only seedlings of merit will be awarded prizes. Bring in person or mail to Retlaw Hotel, Fond du Lac, to arrive Nov. 26th.

APPLE PACKING

Packed bushel basket of apples of any variety packed and faced with the cover in place. Apples must be of good quality. To be judged on packing only.

Prizes: 1st, $10.00; 2nd, $7.00; 3rd, $4.00; 4th, $3.00. Each additional entry, $2.00. Prizes for this class will be given by the Wisconsin Apple Institute.

Prize winning bushels will be offered at auction at the annual banquet. Proceeds will be used for the apple advertising program of the Wisconsin Apple Institute. Owners will be given the market value of the apples in addition to the premiums excepting for 1st and 2nd prize winners.

HARDY CARPATHIAN ENGLISH WALNUT EXHIBIT

All growers who have produced any hardy Carpathian English walnut seeds are invited to exhibit them. Sample of three nuts or more from one tree. Premiums: 1st prize—$2.00; 2nd prize—$1.50; 3rd prize, $1.00; 4th prize—75c; 5th prize—50c.

NEW WAY OF PRUNING FOR LARGER APPLES

Dr. R. H. Roberts Presents New Method at Science Meeting

Wisconsin apple growers can use a new way of pruning to get larger apples.

When trees are pruned in the usual way, small, weak branches are taken out. But University of Wisconsin research shows that growers can get much better yields of marketable apples by just cutting back the old, small, or weak branches, instead of taking them out completely.

The new system was reported by R. H. Roberts, speaking before the American Institute of Biological Sciences in Minneapolis.

Wisconsin apples are likely to be small, Roberts explained, when old age slows down the growth of the trees. They become overloaded with blossoms and produce fewer large apples.

This is especially true of varieties like Wealthy, Dudley, Golden Delicious and Red Delicious, he says. **McIntosh trees should be pruned in the ordinary way** because of their different fruiting habit.

The new system calls for cutting off half the length of all weak and small branches. This takes about as long as hand-thinning the small apples—as much as an hour and a half for a twenty-year-old tree.

The trimming must be done in the winter—a slow season for apple growers. Ordinary pruning takes less time, but the new method saves a lot of grading and sorting during the busy harvest season.

An extra dividend from the new system of pruning, is the probability that pruned trees will bear fruit every year instead of every other year, as many varieties do now.

Trees which were pruned in 1950 yielded good crops of large apples last year and many had a good off-year crop this year.

"I don't like your heart action," the doctor said, applying the stethoscope again.

"You have had some trouble with angina pectoris, haven't you?"

"You're right in a way, Doctor," said the young man sheepishly, "only that isn't her name."

APPLE MARKETING AT SKI-HI FRUIT FARM

How To Sell Fruit

The Bassetts of Ski-Hi Fruit Farm just off of Highways 12 and 13, south of Baraboo, have learned how to produce apples and sell them. Arthur Bassett, Sr., has claimed for years that it is more important to sell them at a profit than it is to produce them —there isn't much money in just growing them.

Drive to Ski-Hi Fruit Farm any day during apple picking season and you will see scenes like that shown on this page. The top picture shows Mr. and Mrs. Arthur Bassett, Jr., preparing to wait on customers. Art does the heavy work, placing the varieties separately according to grade, while his wife, who is an excellent saleswoman, waits on customers.

Center Picture, Variety Display

In the center picture is a typical storage room scene with Mrs. A. K. Bassett, Sr., at left waiting on a customer. She has been doing it for many years. In addition to apples—gourds, honey, grapes, and some vegetables are sold.

Notice an important factor in apple selling—varieties are kept separate. There is a variety and a price for everyone's need and purse. Here we have Delicious, McIntosh, Tolman Sweet, Wolf River, and Wealthy. Some customers come to buy low priced apples, some buy the best, so it's important to have what the customer wants. Signs giving prices save a lot of explaining.

Lower Picture, Excellent Advertising Sign

The lower picture shows a typical Sunday crowd of apple buyers. It was about 4:30 p.m. when we were ready for the picture and called for everyone to step outside. They were all in the sales room looking over the apples and selecting their purchases.

Note the sign "SKI-HI." The large letters can be seen for miles, and visible along Highway 12 from either diretion. It's one of the best signs to attract customers we have seen. Of course, some who come may not be profitable customers, as for example Mrs. H. J. Rahmlow (white coat in center of lower picture). She just picked out a nice apple to eat, and—as happened in this case—received from the Bassetts a bag of big, red apples to take home. By HJR.

Apple Promotion and the School Lunch Program

Wisconsin Apple Institute News

Two important meetings of value to the apple industry were held in Madison on September 7th. At a noon luncheon, officers and board members of the Wisconsin Apple Institute met with the publicity department of the Wisconsin Department of Agriculture and our new publicity directors to plan an apple promotion campaign.

In the afternoon, members of the Apple Industry Committee met in the office of Mr. Walter Katterhenry, P.M.A. director for Wisconsin, and discussed recommendations relative to purchase of Wisconsin apples for the School Lunch Program.

Apple Promotion

Upper Picture

Shown on this page in the upper picture is a group planning apple promotion. Seated, from left, Harold Schubert, president, Wisconsin Apple Institute; Nancy Boebel, director of newspaper publicity; JoAnn Shurpit, radio publicity director; G. J. Hipke, New Holstein, president of the Wisconsin Horticultural Society and a director of the Apple Institute. Standing, from left, Claire Jackson, director Administrative Division, Department of Agriculture; Don Wilkinson, director of publicity; C. J. Telfer, Green Bay, member, Apple Industry Committee; Einar Hammer, publicity department; Sam Goldman, Sturgeon Bay, Apple Industry Committee; Arnold Nieman, Cedarburg, and H. J. Rahmlow, Madison, Apple Industry Committee and Horticultural Society officers.

Lower Picture

Lower picture, the Apple Industry Committee meeting with P.M.A. chief and School Lunch Program officials. Seated, from left, G. J. Hipke, Harold Schubert, Gays Mills and Madison; Walter Katterhenry, chief, P.M.A., Madison; Gordon Gunderson, and standing directly behind him, R. J. McDermott, Wisconsin School Lunch Program. Standing, from left, H. J. Rahmlow, Madison; Sam Goldman, Arnold Nieman and C. J. Telfer.

Publicity Plans

Plans for publicity included:

1. Cooperation with the national program of Apple Harvest Time. Governor Walter Kohler signed a proclamation designating Sept. 20 to Oct. 6 as Wisconsin Apple Harvest Time, the time for consumers to buy apples during the harvest.

2. **Radio Publicity.** Miss Shurpit prepared radio talks on apples, their use and recipes. She sent script to County Home Agents; tape recordings to stations requesting them, appeared over the Milwaukee Television station on a 40 minute broadcast and talked over several stations, always calling attention to Wisconsin apples.

Newspapers. Miss Nancy Boebel wrote articles about Wisconsin apples with recipes for both the daily and weekly newsapers of the state. Pictures of apple pie and other apple dishes were sent to daily papers and mats of pictures and recipes were sent to weekly papers. She cooperated with the Department of Agriculture publicity department members and they also sent stories in their regular releases about apples.

3. **Stores.** Urged grocery stores to stock Wisconsin apples during Harvest Time and make special displays. Provided store posters and recipe books.

School Lunch Program

Apple Industry committee made these recommendations to the P.M.A.

(Continued on Page 37)

In The News

YOUR FARM MACHINERY
Why Not Shake It To Pieces

The National Retail Farm Equipment Association says 45 to 85 percent of farm machinery failures are directly traceable to **these eight bad practices:**

1. Don't check the tires. Let them go flat. They'll shake the engine to pieces that way.

2. Don't clean the filters. Your engine will wear out several times as quick when the filters are clogged.

3. Let the loose bolts alone. They'll fall out some day and then the breakdown will not be far off.

4. Use baling wire or any piece of scrap iron as a substitute for a broken part. Soon you'll have lots of scrap iron for further repairs.

5. Skimp on grease. That way parts wear faster and break sooner.

6. Let it rust. This is a sure-fire way to the scrap heap.

7. Don't ever clean your engine. The dirt will cover small defects so that you'll have a big breakdown instead of a little one.

LETTER FROM FIELDHOUSE FRUIT FARM

Mr. Virgil Fieldhouse of the Fieldhouse Fruit Farm, Dodgeville, writes these interesting comments on fruit growing this year.

"We have been proud of our Beacon apples this year. They sold readily and people came back for more. The Milton is popular for eating the first part of September. Our Haralson set very heavily and are our main cooking apple for winter use.

We used some T.C.A. and Crag Herbicide No. 1 this year for weed control. Good results are dependent on moisture control and especially good where overhead irrigation is used. With it we kept our new planting of strawberries quite free from fox tail and other weeds until midsummer. A few weeds got by and we have some pursland, pig weed and coarse red crab grass that do not seem to be controlled by the Crag. We used some T.C.A. on tomato planting ten days before planting, but the plants were badly stunted.

OCTOBER

POWER PRUNERS

Thinking about purchasing power pruners? At U. S. Plant Industry Station farm, last winter, it required roughly one hour to prune a tree with hand tools and slightly over 60/100 of an hour to prune a like-sized tree with power pruners. In an another orchard, where trees were very thick, and had not been pruned for a long time, thus requiring much detailed cutting, it was almost impossible to use hand tools while it required 4/5 of an hour to prune a like-sized tree with power pruners. In both cases, the power pruners were used from elevated platforms with catwalks into the trees.—From the Maryland Fruit Growers' News-Letter.

FERTILIZER TESTS

Fertilizer tests in Massachusetts seemed to show that it is the amount of nitrogen that a tree receives rather than the method of application that is important. In plots comparing various amounts and types of fertilizer and mulch, it was found that NuGreen "failed to stand out in red color." Only where the actual amount of nitrogen applied as soil applications exceeded that applied as NuGreen, did Nugreen show up favorably in respect to color development, according to W. D. Weeks of Massachusetts Station.—From Maryland Fruit Growers' News-Letter.

Of all the things you wear, your expression is most important.

—Iron County Miner.

MICHIGAN GROWERS ADVISE NOT PICKING POOR APPLES

Don't pick unpopular varieties or small apples. That's the gist of a resolution adopted by the Michigan State Horticultural Society at their summer meeting in Grand Rapids. The following is the resolution:

"Whereas consumer, grower, and market interests are best served by sales of quality apples which eliminate waste in food, time, and labor, so common in the marketing of off grade fruit and unpopular varieties therefore be it resolved by the members of the Michigan State Horticultural Society that:

1. Cost of picking, grading, storing, hauling and dumping be saved by not picking all unpopular varieties, and give immediate consideration for future tree removal.

2. Likewise, to refrain from picking undersized apples smaller than 2½ inches, excepting Jonathan and Grimes, and inferior fruit due to scab, if substantial percentages of crops on trees, varieties or blocks consists of such fruit."

(Continued from Page 36)

State Committee. They were sent at once to the Fruit and Vegetable Branch of the U. S. Department of Agriculture, Washington, by Mr. Katterhenry.

1. That the apple purchase program be put into action immediately, during the harvest season, in order to save our early, soft, varieties, such as Wealthy, McIntosh, Snow.

2. That Wealthy and Snow be added to the list of commercial varieties for purchase in Wisconsin.

3. There is no objection to a 2½ inch size minimum on varieties that usually meet that size, but urged 2¼ inch and up.

The committee expressed appreciation to the Fruit and Vegetable Branch and to the School Lunch Program for their willingness to consider the needs of the industry and their cooperation.

HONEYBEES INCREASE CLOVER SEED PRODUCTION

Insect Pollination Vital Factor In Increasing Seed Yields

Alsike, medium red, white Dutch and Ladino clovers are practically self-sterile, and are dependent upon insect pollination to insure cross-pollination and subsequent seed set. Sweet clover, mammoth red clovers, and alfalfa vary in their degree of self-fertility, but in all cases are dependent on insect pollination to insure self-and-cross-pollination so necessary for profitable seed yields. The flower structure of all these legumes makes wind pollination a negligible factor.

The size of the pollination job for an acre of legume bloom is much larger than most of us realize. For example, an acre of alsike or red clover blooms contains 400,000,000 or 216,000,000 individual florets respectively. To have 100 per cent pollination occur each floret must be visited by a pollinating insect. Under field conditions this would seldom happen. However, under experimental conditions where 100 per cent pollination took place with alsike clover, yields varying from 12½ to as high as 20 bushels of seed an acre have occurred.

Utilization of Honeybees Solution to Pollination Problem

Experimental studies conducted by the Department of Entomology, Ohio Agricultural Experiment Station, show that seed yields are directly correlated with the density of the honeybee population.

Extensive studies were carried on over a 3-year period involving detailed observations in fields of red clover for each day of the second blooming period. The pollination of red clover by honeybees is incidental to the collection of large quantities of pollen, and nectar in small amounts. Of the 28 kinds of pollinating insects collected during a 3-year period, studies showed that more than four-fifths of the total pollination services were performed by honeybees.

By D. F. Beard, Extension Agronomist, W. E. Dunham, Insect Pollination Specialist, C. A. Rees, Extension Apiarist. Condensed from Ohio Beekeeping.

FRENCH APPLE CAKE— OUR FAVORITE DESSERT

This recipe for French apple cake was sent by Mrs. Oscar Conrad of West Allis. She states that it is the favorite dessert of the Meyer family, and that both Mrs. A. J. Meyer and Mrs. LeRoy Meyer (Meyer Orchards, Hales Corners) use it often and that it is unfailing and simple and inexpensive to make. They turn to it whenever they want something special:

Butter well a deep 8 inch pie tin or a casserole dish. Cover the bottom with 2 cups sliced, tart apples.

Place over apples ⅔ cup sugar and sprinkle either with cinnamon or nutmeg. Add rind and juice of lemon. Sprinkle over 1 Tablespoon flour, dot with 2-4 Tablespoons butter.

Batter

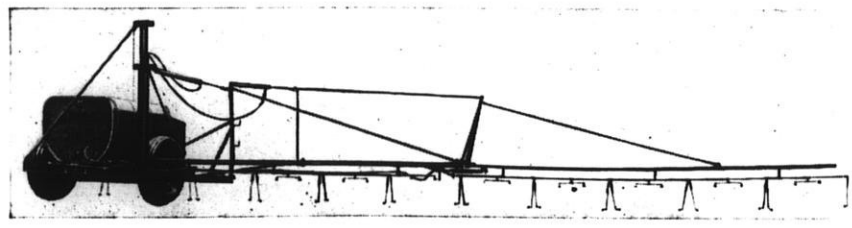
1 cup flour
½ cup sugar
1 teaspoon baking powder
¼ teaspoon salt

Beat 2 egg yolks well. Add 1 Tablespoon melted butter and ¼ cup milk together with the egg yolks to the dry ingredients. Blend well and cover apple mixture with this batter. Bake in a 425° oven for 30 minutes. Turn out on platter and cool slightly. Now beat 2 egg whites and add 4 teaspoons of sugar and 1 teaspoon vanilla and put over cooled cake. Return to oven and bake 15 minutes at 300°. Serves six. **By Mrs. LeRoy Meyer**

WATCH FOR FIELD MOUSE INJURY

Check your orchard a little earlier than usual this year is the advice of G. C. Oderkirk of the U.S. Rodent Control service. He says that apparently mice are quite active in orchards in Wisconsin this year and will be more so from now on. They have observed damage in other years quite early and it might be well to check the orchard from now on rather than waiting until October.

Even in August we had word from an orchardist who said that mice were busy then and had already nibbled the bark from some of his trees. If mice are going to be that serious, then baiting will become the most important of all fall jobs.



A single spray boom which will spray from 12 to 14 rows of potatoes and 10 to 12 rows of tomatoes and comparable areas of other row and field crops on the market. This is a new row crop boom, with extraordinary span. It is built for one side spraying in fields where roadways are provided.

Berries and Vegetables

MESSAGE FROM THE PRESIDENT

As a result of answers to a questionnaire sent to all members, it has been decided to hold our next annual meeting at Oshkosh on Wednesday, November 14, separate from the Wisconsin Horticultural Society's Annual Convention in Fond du Lac on November 27-28.

Also as a result of the replies, a very fine program has been arranged which should more than satisfy all our members, and others interested in attending and helping make possible "More and Better Quality Berries and Vegetables".

I earnestly hope you all attend, bringing friends and horticulturists interested in our work.

It will now be up to our members to make this the most outstanding meeting we have ever held.—**By Chas. H. Braman, Pres. Waupaca.**

TOMATO BLIGHT AGAIN CREATES HEAVY LOSSES

The tomato crop, which was practically ruined in southeastern Wisconsin in 1950 by late blight suffered a 75% loss this year from the same cause.

The weather man, largely responsible for the condition, helped a little in early September with about 10 days of dry weather, which dried out the disease, saving some of the crop.

Growers used the new materials, dithane and parzate, as well as fixed coppers in an effort to control the disease, but when weather conditions are favorable for quick spread of blight, as a night temperature of from 40 to 60 degrees with fog, there is little hope of perfect control with any materials known today.

Articles in some of our scientific magazines on the subject have been misleading. One such article stated, "Late blight, worst enemy of tomato crops in recent years, has been thoroughly whipped, at least in the midwest." It just isn't true, and won't be as long as we are in a wet and subnormal temperature cycle.

Annual Meeting
Wisconsin Berry and Vegetable Growers Association
Affiliated with the Wisconsin Horticultural Society

Court House, Oshkosh
Wednesday, November 14, 1951
Hosts: The Oshkosh Orchard and Garden Growers Association

9:30 a.m. Call to order by Charles Braman, Waupaca, president. Announcements and Welcome to County Agent Verne Peroutky, Oshkosh.

TOPIC: HOW TO GROW STRAWBERRIES AND RASPBERRIES.

Newer Varieties of Strawberries. Discussion led by C. L. Kuehner, Extension Horticulturist, U. W., Madison.

10:15 a.m. Weed Control and Fertilization Studies in Strawberries. A summary, including work at the Peninsula Branch Station. By Frank Gilbert, Horticulturist and Superintendent, Sturgeon Bay.

11:00 a.m. Field observations during berry plant inspection. By E. L. Chambers, State Entomologist.

11:30 a.m. Round table on berry problems. Observations by growers. Moderator, H. J. Rahmlow, Madison.

12 M. Noon luncheon. Place to be announced. Election of officers. Business meeting.

1:45 p.m. TOPIC: VEGETABLE GROWING.

Recent developments in vegetable growing. Special reference to tomatoes, sweet corn and cantaloupes. By O. B. Combs, Chairman, Department of Horticulture, U.W.

2:15 p.m. Weed Control in Vegetables. By John Schoenemann, Vegetable Extension Specialist, U. W.

2:45 p.m. 1951 Tests of Materials for Vegetable insect control, by R. Keith Chapman, Dept. of Entomology, U. W.

3:15 p.m. Observations on berry growing. What about everbearing strawberries? By Prof. J. G. Moore, Department of Horticulture, U. W.

3:45 p.m. Round table on vegetable problems. Observations by growers. Moderator, H. J. Rahmlow, Madison.

MEMBERSHIP APPLICATION BLANK
Wisconsin Berry and Vegetable Growers Ass'n

To Mr. E. L. White
Box 147, Fort Atkinson
Dear Mr. White:

Enclosed please find $1.25 in payment of membership in the Wisconsin Berry and Vegetable Growers Association and the Wisconsin State Horticultural Society, including **Wisconsin Horticulture,** for the coming year.

SIGNED.....

ADDRESS.....

Berrypatch Work

CAN WE PLANT STRAWBERRIES IN THE FALL

Most strawberry growers have not been successful with fall planting of strawberries. There usually is considerable over-winter loss and most growers advise against it.

The experience of Bernice M. Ritchart of Mauston, Variety Gardens, is different. She writes:

"About four years ago I planted Beaver strawberries in the late fall, right up to the day the ground froze. The snow came and protected them quite well all winter. Every plant survived. These plants began sending runners early next spring, and I received an abundance of young plants. That next season was hot and dry and there was a scarcity of young plants from spring planting, so the fall planting paid dividends.

"My plants are freshly dug and I try to ship out the same day I dig them—perhaps that is the answer.

"I find raspberry plants winter 100% when planted in fall. My neighbor planted 100 Latham plants last fall just before it froze up, then he planted 200 more this spring. The fall planting came through without loss and showed a marked advantage in size and development over the spring planting."

FALL PLANTING OF STRAWBERRIES

From John Krueger, Bayfield. We would not recommend planting strawberries in the fall, first, because our plants do not have a large enough root system at the time they would need to be transplanted. Also, it would ruin our plant bed. By the time they would have a large root system it would be too late. We turn down lots of orders for fall planting.

From Stanley Hall, Hall Nursery, Elmwood. It's possible to plant strawberries in the fall with good success if conditions are favorable. However, regardless of results, it means extra work and expense. If conditions are unfavorable, one may lose most or all of the plants. On heavy soil such as we have, we don't think fall planting is practical because we have more work than with spring planting.

FROM J. F. SWARTZ, SWARTZ NURSERIES, KENOSHA

In regard to fall planting of strawberries: We have never sold plants in the fall because our plants are grown in beds which are dug clean, that is, the entire bed is lifted and no old plants are allowed to remain. In this way we are assured of keeping a true strain as no seedling plants can start in the plant beds.

Another reason is that strawberry plants continue to develop roots late in the fall and in spring before digging and if plants were dug early in fall, most of them would not have the root system that they would have by planting time in spring.

The big advantage in fall planting would be that plants would start growing earlier in the new bed than if planted in spring, as some growers are unable to set out plants before the middle of April.

One year we tried digging plants in the fall and heeling them in over winter. We then planted them by hand in the spring and had good success. On the whole our opinion is that fall planting is something to try on a small scale and we do not believe it would be practical in large plantings.

QUESTIONS ABOUT GROWING SQUASH

Question: Will it hasten the maturity of squash to remove some of the blossoms from the vine.

Answer: I don't believe there is any advantage in removing the blossoms of squash vines in order to produce more mature squash. Maturity of squash depends upon many things other than the amount of food stored in them. Length of growing season, temperature, rainfall, soil conditions and fertilization are the more important just to mention a few.

Removal of blossoms and young squash will perhaps promote size of the few squash that are left on the vine, but it cannot to my knowledge promote maturity. In fact, promoting the growth of size of the squash by blossom removal may indirectly delay maturity. Therefore, it may defeat your purpose.—By John A. Schoenemann, Vegetable Extension Specialist, U. W.

GROWING STRAWBERRIES AT THE KRAHN NURSERY AT LOYAL, WISCONSIN

By Freda Schroeder

On August 25, 1950 we planted oats in three rows of strawberries for a trial. In June the weed situation was terrible except in these three rows. After the berries were set something had to be done so we removed the straw in between the rows and tilled down the center, replacing the straw. This helped control the weeds some, but we still had some. In the three rows where we had planted oats we also tilled between the rows as some weeds were showing through the straw. When picking time came these three rows were free of practically all weeds. In fact we were so enthused about the trial experience that this year we planted oats in all of our year old beds and tried it on the spring plantings. The oats, we feel, protected our strawberries from the first light frosts, as up to Thanksgiving it was still eighteen inches high, whereas the buckwheat had frozen off by August 25th. In 1952 we intend to till between the rows before the mulching has been removed from the plants. We also changed from buckwheat to oats in our raspberries.

Strawberry Varieties

Tennessee Shipper rated first at our nursery with Robinson second. We also like the Thomas which comes on later than Robinson and works in nicely for supplying stores up until the Everbearing is ready. Arrowhead will not produce on our soil.

Tennessee Shipper is the finest berry we had. The yield is so heavy I doubt if this berry could be raised unless irrigation is available. The berries are high on the plants, firm, but still very sweet and dark in color. We had to irrigate this variety long before Robinson as the leaves would show signs of wilting. It's not a large berry.

Red Rich did fairly well for us. The berry is as fine as I ever tasted; dark red all the way through.

The June Raspberry gave us the best yield. With the amount of moisture we had this year some of the berries were like plums. While mildew and Anthracnose showed up on our Lathams we did not have any trouble with the June.

Governor Kohler Enrolled by *Junior Vegetable Growers*

In official ceremonies at the state capitol the junior vegetable producers of Wisconsin recently bestowed on Gov. Walter J. Kohler, Jr. honorary membership in the National Junior Vegetable Growers Association.

The presentation of a diamond pin to the chief executive was made as part of the state's observance of Wisconsin Vegetable Week, proclaimed by Governor Kohler.

The ceremonies were held at the Governor's office and were attended by members of the state chapter of NJVGA, including Calvin Beals of Madison, Mary Kane of Waunakee, both members, and Miss Doris Mae Gnauck of Madison, state NJVGA leader.

The junior growers thanked the governor for his recognition of Wisconsin's vegetable producers, explained to him the importance of the industry in Wisconsin's economy and the part that young farmers have in it.

The National Junior Vegetable Growers' Association is made up of thousands of boys and girls all over the nation who plan careers associated with the production and marketing of vegetables. Each year the NJVGA offers $6,000 in awards, provided by A&P Food Stores, for outstanding accomplishments in the association's production-marketing program.

Calvin Beals, Madison, (right) recently presented Gov. Walter J. Kohler, Jr., a diamond pin making him honorary member of National Junior Vegetable Growers Association. NJVGA annually offers $6,000 in awards, provided by A&P Food Stores, to assist young farmers in developing improved production and marketing methods. Doris Mae Gnauck, Madison (left) state NJVGA chairman, and Mary Kane, Waunakee, attended ceremonies at capitol.

HATS OFF TO THE JUNIORS AT OUR COUNTY FAIRS

Have you ever seen an exhibit of vegetables at a county fair with 182 plates of carrots, 181 plates of beets, 120 of tomatoes, 60 entries of green peppers, 97 garden boxes, 96 entries of potatoes and 60 huge squash? If not, it's hard to imagine what fine things the juniors are doing at some of our fairs. These, in addition to many more, were the entries at the Waupaca County Fair at Weyauwega in September. The 4-H Club members have really outdone adult exhibitors, both in quantity and quality.

Hats off, too, to the 4-H Club leaders, the Home Agents, the County Agents and Assistant County Agents who are leading the club members in their successful projects.

Educational Judging

At the Sauk County Fair at Baraboo we happened to pass a building in which 15 or more 4-H Club girls were modeling dresses on a raised platform, so we paused a moment to see what was going on. A County Home Agent was judging the dresses the girls constructed in 4-H projects. After she had studied them and decided on the placing, she called the girls forward and then, over a loudspeaker, told the girls and visitors just how she had placed the dresses, commenting on the good points of some of them and making suggestions for improving others.

Such a demonstration makes the fair educational. We hear much about the educational value of county fairs, but too many of them neglect this feature.

Let's modernize our county fairs. They must be modernized if they are to continue to serve their purpose. By eliminating exhibits that have no meaning and which are obviously made only to win a cash award, we can really make something of the departments which have true and lasting value. We have in mind the grain exhibit at one small county fair, which we were asked to judge. The samples of oats, barley, wheat, etc., were still in bags, tied up. The superintendent untied the bags and asked us to place the samples. After they were judged, the bags were thrown back on a pile and no one but the judge ever saw them.

Unless an exhibit has meaning and value, there is little use in keeping it just for the sake of saying, "We must have grain exhibits at our fair." If there is no interest in certain exhibits they should be eliminated. Otherwise, they should be displayed in such a way that they are educational.

The flower show has become an outstanding feature at some county fairs. Fair officials will do well to consider the possibility of the flower show as an attraction for larger fair attendance by the women.

From the Editor's Desk

THE 83RD ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY
Retlaw Hotel, Fond du Lac
November 27 - 28

The complete program for our annual convention will be published this year in the November issue of Wisconsin Horticulture. Note that the time is the last week in November, later than we have held it for many years.

The program will be divided into these topics:

1. Better quality fruit by chemical thinning.
2. Improving quality by insect and disease control.
3. Better preparation of fruit for market.
4. Improving quality by new methods of pruning.

The Wisconsin Apple Institute will meet with us and will hold their annual business meeting at a noon luncheon on Wednesday, November 28. Berry and vegetable growers meet in Oshkosh on November 14.

The premium list for the fruit show will be found in this issue.

Womens' Auxiliary Program

The Womens' Auxiliary is planning an excellent program. On the forenoon of Tuesday, Nov. 27, Prof. G. E. Beck of the Dept. of Horticulture will talk on, "You, Too, Can Grow House Plants." In the afternoon, Mrs. Forest Middleton of Madison, will talk and demonstrate on the subject, "Fun With Flowers, Fruits and Vegetables. How to use the material you have for holiday decoration."

Watch for detailed program.

Premium List
Womens' Auxiliary Exhibit

Apple dishes: Bring a pie or apple dessert made from the new Wisconsin Apple Institute recipe bulletin, "Wisconsin Apples — 44 New Ways to Use Them."

Recipe must be shown — either copied or in marked copy of bulletin. If you have not received a copy of the bulletin, write Wisconsin Horticultural Society, 424 University Farm Place, Madison 6, Wisconsin, for one.

Arrangement: Fruit and/or vegetables with or without other accessories for holiday season.

Premium: Judging will be by the Merit System. Awards: Excellent, $1.00; very good, $.75; good, $.50.

Notice: **All entries will be served at the tea at 4 p.m.** Copies of new recipe bulletin by Wisconsin Apple Institute will be sent on request.

LIST OF HORTICULTURISTS HONORED BY THE WISCONSIN HORTICULTURAL SOCIETY IN PAST YEARS

Two Certificates Will Be Presented At Our Annual Convention This Year

1929
*Herbert H. Harris, Warrens
John F. Hauser, Bayfield
*George J. Kellogg, Janesville

1930
Louis G. Kellogg, Ripon
*William S. Knight, Bayfield
*Ernest W. Sullivan, Alma Center

1931
*Frederic Cranefield, Madison
William P. Longland, Lake Geneva
C. P. Whitnall, Milwaukee

1932
*Mrs. Francis K. Hutchinson, Lake Geneva
*Mrs. Caroline E. Strong, West Allis

1933
*Huron H. Smith, Milwaukee

1934
*Herman C. Christensen, Oshkosh
*Axel Johnson, Lake Geneva
*Walter J. Moyle, Union Grove

1935
James Livingstone, Milwaukee

1936
*Augustus W. Lawrence, Sturgeon Bay
*Mrs. Emilie Louise Roloff, Madison

1937
*Delbert E. Bingham, Sturgeon Bay
James G. Moore, Madison

1938
Nicholas A. Rasmussen, Oshkosh

1939
*Walter J. Kohler, Kohler

1940
William G. McKay, Madison
*Peter C. Swartz, Waukesha

1941
Arthur K. Bassett, Baraboo
*William A. Toole, Baraboo

1942
Ray H. Roberts, Madison
Arthur J. Schultz, Ripon

1943
J. Earl Leverich, Sparta
Mrs. Chester Thomas, Milwaukee

1944
C. J. Telfer, Green Bay
S. S. Telfer, Ellison Bay

1945
Walter Diehnelt, Menomonee Falls
Conrad L. Kuehner, Madison

1946
Wm. H. Alderman, University Farm, St. Paul
George H. Scheer, Sheboygan

1947
Charles Darwin Rosa, Beloit
Joseph C. Schubert, Gays Mills

1948
Charles L. Fluke, Madison
George W. Keitt, Madison

1949
Mrs. N. A. Rasmussen, Oshkosh
Mrs. E. A. St. Clair, Wauwatosa

1950
Donald Wagener Reynolds, Sturgeon Bay
*Karl Storrs Reynolds, Sturgeon Bay

***—Deceased**

COMING EVENTS

October 30 - 31. Annual Convention, Wisconsin Beekeepers' Association, Marathon County Park, Wausau.

November 4. Annual meeting, Wisconsin Gladiolus Society, Retlaw Hotel, Fond du Lac.

November 5 - 6. Annual meeting, Wisconsin Horticultural Society, Western Wisconsin Fruit Growers' and Minnesota Fruit Growers' Association, La Crosse Hotel, LaCrosse.

November 14. Annual meeting, Wisconsin Berry and Vegetable Growers' Association. Court House, Assembly Room, Oshkosh, Wis.

November 27 - 28. Annual convention, Wisconsin Horticultural Society; Wisconsin Apple Institute; Women's Auxiliary, Wisconsin Horticultural Society. Retlaw Hotel, Fond du Lac.

IS NATURE OUT OF BALANCE?

Is There a Scarity of Birds and Would a Greater Bird Population Reduce the Threat of Insects?

Recently, a member from Oshkosh asked if there is a scarcity of birds and if this is the reason why we have more insects today than ever before.

The question was put to Prof. E. H. Fisher, Extension specialist in Entomology, of the University of Wisconsin. Here is his reply:

"I am not aware of any findings which indicate an unusual scarcity of birds. There is positive evidence that some large scale insectide applications have not permanently reduced bird populations in areas treated; the temporary reduction has been due to the lesser amount of insects present for a short period. Of course we must realize the necessity of certain insect controls in order to insure against crop, property and livestock losses.

"There is no permanent balance of nature, but rather a somewhat rhythmical fluctuation. The biotic potential of insects is much greater than that of birds, therefore we may expect sporadic outbreaks of insects, but much more time would be necessary for bird populations to increase proportionately, and it is doubtful whether birds have that potentiality even with time. This has been a rather good year for some insects such as midges and mosquitos which have caused concern by many people; however these same weather conditions were not conducive to large grasshopper and European corn borer populations."

OUR COVER PICTURE

"A fantasy in fruit and flowers," is the title of our cover picture this month. It was the feature exhibit in the front of the flower show building at the Wisconsin State Fair in August.

The exhibit was staged by Henry Benz, Racine florist. It features a variety of chrysanthemum and the very attractive Wisconsin Dairy Queen, Miss Marlene Czerwinski, admiring the gorgeous 'mums. The photo was taken by Mr. Clifford Hutchinson, in charge of publicity, Wisconsin Department of Agriculture.

The botanical name of Pinks comes from a Greek word meaning "flower of the gods?"

SPECIAL PLANT SOCIETIES

AFRICAN VIOLET SOCIETY OF AMERICA, 5030 McCalla Ave., Knoxville, Tenn.

THE BULB SOCIETY 2446 Huntington Drive, San Marino, Cal.

AMERICAN FUCHSIA SOCIETY, California Academy of Science, Golden Gate Park, San Francisco 18, Cal.

THE HEMEROCALLIS SOCIETY, George Lenington, Sec. c/o The Kansas City Insurance Co., Box 39, Kansas City, Mo.

NORTH AMERICAN LILY SOCIETY, Robert Rappleye, Sec. Dept. of Botany, University of Maryland, College Park, Md.

AMERICAN PENTSTEMON SOCIETY — 213 Lambert St., Route 5, Portland, Maine.

WILD FLOWER PRESERVATION SOCIETY — 3740 Oliver St., N. W., Washington, D. C.

AMERICAN ZINNIA SOCIETY — C. L. Derr, 1940 Queens Rd., Pasadena, Cal.

This list was obtained from the July-August issue of the National Gardener.

Mr. E. L. Chambers, superintendent of the flower show at the Wisconsin State Fair for 25 years, is presented with a fine watch as a token of affection and esteem by staff members who assisted him in staging the beautiful flower shows at the fair during past years. From left, Richard and Doris Chambers; Ted Osmundsen, Sturtevant Florists; Mr. Chambers; Bill Osmundsen; Miss B. Esther Struckmeyer, Madison; Mrs. William Schmitz of Milwaukee, a florist, and H. E. Halliday, assistant to Mr. Chambers. Exhibitors also contributed.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
GORDON SHEPECK
Green Bay

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

Treasurer
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

DIRECTORS
Hugo Krubsack, Peshtigo
Arnold Sartorius, Porterfield
Dr. George Scheer, Sheboygan
A. F. Scholtz, Wausau
Val White, Wausau
H. J. Rahmlow, Madison, Ex-Officio
John Gates, Two Rivers
Gordon Shepeck, Green Bay
Walter A. Kurtz, Chilton
Dewey Sleezer, Lake Geneva
Cecil McAdams, Mosinee
Walter Axel, Sheboygan
Dr. R. H. Juers, Wausau
Dave Puerner, Milwaukee
Paul Ravet, Marinette
Leland Shaw, Milton

We Visit The Glad Shows

By Ralph Burdick, Edgerton

This year, our first of showing glads, we attended a show every weekend beginning the last of July, with the LeRoy, Ill. show, then Jefferson, Two Rivers, East Lansing, Mich. and finally Wausau.

The little glads seem to have found favor with the Illinois growers, all color classes being well filled even though the show committee had divided the 100 and 200 size classifications. Contrary to many other shows, even exhibitors were not allowed in show rooms while judging was in progress and a large crowd was kept waiting in stifling heat until four in the afternoon before the doors were opened. Judging of many classes must have been very difficult. For example, in the single spike classes, one table was nearly full of very uniform Spic and Span.

Jefferson Show

At Jefferson we found it the handiest for setting up. The show room itself lacks nothing except perhaps a little better lighting. Several tables of fine seedlings were shown and many recent introductions. A three spike of Betty Duncan with ten open and single spikes of Bridal Orchid, Evangeline, Sierra Snow, Gorgeous Deb, and Ravel were particularly fine.

The State Show

The State Show at Two Rivers held in the beautiful community building has perhaps the most attractive setting of all and about the friendliest bunch of growers we ever met. Quality of entries here was very good. Judging from the large number of entries in the Junior division, I believe the Manitowoc County society is doing a wonderful job promoting love of the gladiolus among those who some day must replace the present growers. We were greatly interested in the competitive spirit shown among the children. Spikes of Pactolus, Sunspot, Silcherlied, Maureen Gardner, and a seedling basket of bright rose were outstanding. Seedlings shown here were very good, five or six receiving ribbons. To those arrangers who are always in search of new accessory material, a walk on the shore of Lake Michigan, only a few blocks from the show, can be very rewarding. We saw a trunkload of driftwood picked up by a friend of ours in the time between luncheon and two o'clock.

The Central International

We travelled across Lake Michigan via Milwaukee Clipper, as did several other Wisconsin people, to reach the great Central International show at East Lansing. Later, at the banquet, Roger Russell and I counted those we had seen in attendance and arrived at fourteen Wisconsin visitors.

When we arrived we found a show room on the small side for one of this size, but use of the bleachers for commercial exhibits solved this problem quite nicely and really made for better displays. The commercial growers showed varieties in basket quantities that most of us have only infrequently seen as single spike entries. There were very beautiful baskets of C. D. Fortnam, Tipflite, and Black Cherry and an entire display of Spartan, which is a different shade of red, very nice for baskets and mass effects but not too good close up because of the dark flecked edge of the bloom. Glenn Pierce had an outstanding display of miniatures featuring arrangements, complete with unusual accessories, made by a professional and using several of his fine dahlias. It was one of the most photographed sections of the show.

As would be expected, the quality evidenced here was unusually fine. Many spikes were seen with ten, twelve, and even fourteen open. The court of honor held a three spike salmon seedling with, I think, fourteen open on the second day and all in good condition. It also held a magnificent Phantom Beauty, and the best White Xmas we have ever seen. Tom Manley of Valleevue showed many new varieties. Two of these were very interesting Moongold, a 400 size yellow with beautiful placement and Palette, a bright scarlet with an electric blue blotch that seems to pulse before your eyes. A beautiful three spike of Ivoree seemed to bear out everything that has been said of it in reports in the bulletins and brought me back several times to admire it. Exceedingly long flowerheads over what has been seen before were evident in an entry of Connie G. Joseph Hartmans' sport of Pastel and two miniature seedlings; Claucacy from Maurice Maynard and Miss Formality from Glenn Pierce were added to the want list.

Need a Good Yellow Variety

We are still looking for a really good large yellow, the closest seen this year being Catherine Beath, listed as 400 in size although those seen have been more nearly three hundred in our opinion. Many good yellow seen last year have not appeared in

ar.y show we attended and it looks like hybridizers have an open field he re.

The campus of Michigan State College is also the site of an N.A.G.C. trial garden and we spent some time inspecting those on trial. Forty two varieties were seen, two of them being especially fine. One was a very nice yellow with lots of buds, the other a salmon with cream throat.

Although not as large as last year's Central International at Madison and being somewhat weaker in arrangements and attendance by the public, the show was of very high quality and well worth attending.

The Wausau Show

The Wausau regional is one that is fast outgrowing its show room. Many high class blooms were entered especially in a large amateur division. Very little difference in either quality or quantity could be noticed between amateur and open sections. Arrangements were very good and quite original. Here the children had their own classes for arrangements and these were well filled. Very fine Perpetual trophies are also provided by this chapter.

Commercial florists had exhibits that were very interesting and gave us a new slant on what can be done with glads and imagination by trimming buds and other expedients not thought of by amateurs like us. The ladies of the Marathon County chapter made glamellias and corsages in a small roo moff the show room and these were tastefully displayed on black velvet, attracting considerable attention from visitors. Three spike entries of Pastel and Sunspot and an unidentified amateur spike of light rose pink with darker flecking and striping and with twelve open in perfect formal placement particularly caught our eye.

Tired of arriving home to find the garden full of section champs we hope to train all our glads to bloom only for the week end shows another year.

CURE GLADIOLUS BULBS QUICKLY

Gladiolus bulbs should be cured quickly to reduce danger of diseases in storage. Cut off the tops after digging, place bulbs in storage room at 75 to 80 degrees F. for a couple of weeks. Screens or slatted bottom trays are best for this purpose of ventilation. After the bulbs are graded, dust with DDT for thrip control. Keep in storage room at 35 to 40 degrees.

ANNUAL MEETING WISCONSIN GLADIOLUS SOCIETY

Sunday, November 4
Retlaw Hotel, Fond du Lac

10:00 a.m. Meeting of Board of Directors.

12 M. Noon luncheon.

1:30 p.m. Annual business meeting. Election of officers.

2:00 p.m. Report of gladiolus research at the University of Wisconsin this past season. By G. E. Beck, Extension Floriculturist, U. W.

What you should do with your glad bulbs now. By H. E. Halliday, State Department of Entomology, Madison.

Round table of questions and answers on gladiolus problems. Moderator, H. J. Rahmlow, Madison.

MESSAGE FROM THE PRESIDENT

The 1951 Gladiolus year is drawing to a close and my opinion is that it was a good one. Despite unfavorable weather and growing conditions in some sections, our glads again proved to be the queen of flowers, as our shows so adequately demonstrated. The seedling and late introduction show at Jefferson, sponsored by the So. Wis.—No. Ill. Society was a grand display of flowers. Our state show at Two Rivers was a great show, also the Marathon Co. Chapter show at Wausau.

The Society's State Show at Two Rivers was well staged and arranged and Manitowoc Chapter members worked hard. The Hamilton Community Center Building was an ideal location and setting. Manitowoc Chapter Society is to be congratulated for putting on such a great show and to top it all, to wind up with over $500 balance above expenses. A good job—well done. The show manager, John Gates, and his Chairman, John Bayless, and Co-chairman, Gil Thompson, and their committee members did a grand piece of work—hard work. Special mention and orchids to Mary Rezek, sec'y. of the Chapter, for her untiring effort.

It shows what can be done when every member pitches in and works for one objective—to make the show a success.

John Gates and his gang want to thank all who helped in this—their first State Show, the State Officers, and especially our Secretary, Mrs. A. E. Piepkorn, who so graciously gave her time and helped in so many ways,—**By Walter A. Kurtz, Pres.**

Miss Adeline Lyster, Madison, judge of the Artistic Arrangements section and Albert Scholtz, Wausau, general chairman of the Marathon County Chapter show, August 25-26, at the Y.M.C.A., Wausau, viewing an arrangement of Burma.

The Marathon County Gladiolus Show

By Mrs. Ed. Kramer, Wausau

Gladiolus of every color were displayed at the annual show of the Marathon County Chapter on August 25 and 26. About 1200 spikes of gladiolus and 95 arrangements were shown.

The grand champion gladiolus of the show and winner of the Perske trophy was a spike of "Tivoli" shown by Mark Splain, Wausau. He also won sweepstakes in the open class, thereby receiving the D. C. Everest trophy.

Reserve champion went to the variety "Evangeline" shown by John Perkins of Neillsville, who has been a consistent winner here the past several years. Second day champion went to Carl W. Porath, Wausau, for a spike of "Spic and Span." The best showing of recent introduction was "Florentine," exhibited by Mrs. Carl Hornick, Menomonee, Mich.

Other winners were: Second place sweekstakes, open class, Mrs. Adela Mackmueller, Schofield; 3rd open sweepstakes, to Jambo Creek Gardens, Menomonee, Mich. Show sweepstakes amateur class, C. W. Porath, Wausau; Sweepstakes for novice, Ed Schaepe, Wausau.

Longest Flowerhead—Mighty Monarch, John Perkins, Neillsville.

Longest floret—Mt. Kosciusko, Elmer Sorges, Wausau.

Smallest floret—Mrs. Adela Mackmueller, "Airy Fairy".

Most florets open—A seedling, C. W. Porath, Wausau.

Most ruffled—"Bobs", Mrs. Carl Hornick, Menomonee, Mich.

In the Artistic Arrangement classes, Mrs. George Portman, Wausau, won the Artistic Arrangement sweepstakes, receiving the Dr. Lemke trophy. Mrs. George Drumm, Wausau, won the champion Artistic Arrangement award and the Marathon County Chapter trophy.

A fall bridal wedding with glads was shown by the West Hill Floral Co. A bride's bouquet, bridesmaid's bouquet and mother's corsages were beautifully displayed. A Christmas arrangement of red gladiolus with pine boughs and cones was exhibited by Leaps greenhouse while immense bowls of gladiolus were shown by the Harold Phillips flower shop.

"Tivoli," shown by Mark Splaine, Wausau, was grand champion single spike in the open division and "Spic and Span," by Wm. Hackman, Two Rivers, was the division champion. In the amateur class, Mrs. Lloyd Prahl's 3 spikes of "Miss Wisconsin" won division champion honors. Mat Britten, with "Elizabeth the Queen" won the 3 spike novice division champion honor. Single spike champion was "Miss Chicago" by C. W. Porath, Wausau.

Miss Adeline Lyster, Madison, judged the arrangements and commented on the large number of charming arrangements and corsages displayed. She expressed her gratification for the interest shown by children in making and entering 25 arrangements.

JOHN PERKINS HONORED IN NEILLSVILLE FOR GLADIOLUS SHOW AWARDS

"John Perkins wins the sweepstakes award at the Gladiolus Show," was the heading in an article in the Clark County Press of Neillsville on August 15th.

The article continues, "Takes two championships—19 firsts and 7 seconds. He placed on 29 of the 32 spikes of glads he took to the show, winning 19 first places. Of the 1200 varieties of glads in existence, Mr. Perkins grows 90 plus 500 which he has bred himself."

"He transports the gladiolus in a rather unique manner. He ties three spikes on a thin stick which fastens on a wooden platform in a 30 lb. cherry can. Four sticks go into a can through holes made in the lid. The four sticks are tied together at the top, firmly fastening the stems together. In this way 12 spikes can be carried."

"Mr. Perkins has been growing glads for the last 11 years he has been teaching agriculture at the high school. He grows no other flowers and has grown 500 seedlings by hybridization."

THE SO. WIS.-NO. ILL. GLADIOLUS SHOW ELKHORN, AUG. 31-SEPT. 3

The basket and vase classes at our show at the County Fair at Elkhorn were keenly contested. In the first 2 days of the show a basket of Spic and Span from Shopiere Gladiolus Gardens and a vase of Honey shown by Melk Bros. were winning the championships. Blue ribbons also went to the following: Dickmann's Gardens (Silver Wings and Great Lakes); Shopiere Gladiolus Gardens (Red Charm); Dick Becker (Eliz. the Queen); Lloyd Bentz (Blue Beauty and Lady Jane); Willis Miller (Orange Gold); and Melk Bros. (Golden Crown, Pink Classic, Evangeline, and Patrician).

Dewey Sleezer won over Anton Koepke in a very close decision for best commercial display, but look out for Tony next year. His glads are tops, and he is learning fast how to show them to advantage.

In the 2nd part of the show (3rd and 4th days), 1 and 3 spike competition produced an average of 7 entries per class even after 3 had been subdivided; and the arrangement sections, new to our show had a total of 40 entries.

Mrs. Harold Turner won the Society Rosette and the NAGC Rosette for her Grand Champion spike of Connecticut Yankee, and Anton Koepke's 3 spike Champions (Spic and Span) captured the Wisconsin Trophy. The Illinois Exchange Trophy went to Aubry Dickmann whose Silver Wings was the best spike of an Illinois introduction in the show. The Champion Arrangement Rosette went to Mrs. Everett Van Ness.

Other varieties receiving blue ribbons, starting with smaller sizes were: Muriella, Kewpie, Cupid, Yellow Paradise, Variation, No. 104-45-4 (Flad), White Challenge, Golden Arrow, Palermo, Valley Queen, No. 43-5-1 (Nielson), New York, Mighty Monarch, Boulogne, Burma, Elizabeth the Queen, Siboney, King Lear, Gray Dawn and High Finance.—By Leland C. Shaw, Milton.

The thing called common sense is none too common. — The Bonduel Times.

Garden Club News

2nd Annual Convention Garden Club of Wisconsin

A GREAT FLOWER SHOW— A FINE PROGRAM

A wonderful flower show. Those words are hardly adequate to describe the show presented by the Garden Club of Wisconsin called "Garden Treasures," at the YMCA in Milwaukee on September 26-27.

This issue goes to press just after the show and there is not time to give all the highlights or the premium winners in this issue. We will have, in the November issue, a detailed account of what the speakers said by Mrs. Martha Getzlaff Koch, of Wauwatosa.

The Committees

Orchids to Mrs. Chester Thomas, flower show chairman, for the success of her efforts in making this an outstanding show; also to the committee members who helped her, and to Mrs. Roy Sewell, chairman of the Garden Club Advisory Board who worked so successfully to build the Garden Club of Wisconsin and weld it into a harmonious unit in which garden club members will find real enjoyment and interesting garden club activities.

Many exclamations of surprise were heard at the artistry and beauty of the arrangements in the show. There were entries that needed study; that held the attention. We saw exhibitors and visitors alike studying the comments of the julges found on the merit system award cards on the arrangements picturing various flower arrangements for important occasions. The horitcultural exhibits were good, with many new varieties shown.

The Program

The forenoon program, "How I Grow Them," was enjoyed by everyone. There were some substitutions for speakers listed. Mr. Arthur Boerner of the Milwaukee Rose Society gave a splendid talk on "You, Too, Can Grow Roses," Mrs. R. E. Kartack, Baraboo, spoke about how to grow begonias and other house plants in place of Prof. G. E. Beck, who was ill. Mr. E. L. Chambers talked on the control of insect pests in the garden in his usually instructive manner. Later he gave a most humorous and entertaining talk on, "New Ideas on Flower Arrangements" during the luncheon period. Mr. G. J. Hipke, Society president, presided at the luncheon and encouraged the present fine feeling between clubs and the Society.

Mr. H. J. Rahmlow showed slides of various sets available to organizations from the Wisconsin State Horticultural Society. He asked that clubs which would like to have him appear on their program during the coming year contact him early so he can organize a schedule of more than one club meeting on a trip.

The afternoon program was concluded with a fine demonstration on flower arrangements by Mr. Joseph Hanke of Hanke's Florist Shop, Milwaukee. Mr. Hanke put together many arrangements which brought forth applause from his audience.

FALL MEETING REGION I—GARDEN CLUB OF WISCONSIN

K of C. Hall, Main St., Jefferson, Wis. Wednesday Evening, October 24, 1951

6:00 p.m. Pot luck supper. Bring your own dishes. Coffee will be furnished. Music and singing.

7:30 p.m. Business meeting.

8:00 p.m. How I Grow Them. Chrysanthemums, by Mr. Justus Brueckner, Jefferson.

8:15 p.m. Zinnias. Colored slides of sets available from Horticultural Society, by H. J. Rahmlow, Madison.

8:45 p.m. Fun With Flowers, Fruits and Vegetables. How to make arrangements with what you have, by Mrs. Sam Post, Madison.

GARDEN CLUB MEMBERSHIP DUES INCREASED

Membership dues for garden clubs and other affiliated organizations of the Wisconsin State Horticultural Society have been increased from 75c to 85c per year for clubs of over 10 members. This action was taken by the Board of Directors at their summer meeting in July, and was brought about by the increase in the cost of printing and paper amounting to about $600 per year. The Board felt it would be better to increase the dues slightly than to attempt to cut down the size of the magazine. We contacted a number of affiliated organizations and they indicated they preferred an increase in dues rather than a decrease in quality of service.

Individual membership dues, which includes groups of less than 10 or individual memberships, were increased from $1.00 to $1.25 per year

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CLINTONVILLE GARDEN CLUB STAGES SUCCESSFUL FLOWER SHOW

With 866 individual registrations, representing Clintonville and 41 other communities and an estimated attendance of 2,000, the Clintonville Garden Club staged a successful flower show at the Harvest Festival during the last week of August. There were 119 individual exhibits of flowers. The merit system of judging was used and many beautiful annuals, perennials, gladiolus, roses, dahlias, house plants and table and tray arrangements were shown. The Clintonville newspaper published a number of pictures of the event.

H. J. Rahmlow of the State Horticultural Society spoke to the club at the monthly meeting September 10.

WAUWATOSA GARDEN CLUB MEETING

The harvest season was combined with spring when the Wauwatosa Garden club met on September 18th.

All types of garden products were displayed with a wonderful variety of flowers such as: large hydrangeas which had the tinge of dusty pink; a maroon-colored flower nick-named "Kiss me over the garden gate," brilliant salvias, various colored petunias, nasturtiums, large white, lavendar and purple asters; orange, and yellow mums, gaillardias, orange calendulas, dahlias, geraniums, phlox, rubrum lilies, dwarf zinnias, and others.

Among the smaller displays was a china mule weighted down with orange and copper marigolds, and a tiny cup and saucer filled with small English (lavendar) asters.

Spring was seen in a sound picture "Springtime In Holland" of the Netherlands. Holland may be called the "Venice of the North" besides ranking as one of the popular playgrounds of the day.

Countless tulips of many varieties, daffodils, hyacinths, crocuses, scilla, and grape hyacinths nodded gracefully at us. And speaking of daffodils,—the following is how Wordsworth would explain what he saw through poetry:

The Daffodils

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host, of golden daffodils,
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.
Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay;
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.
For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon my inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.

The club's annual dinner will be held at the Hillcrest Tea Room on October 16th with Mr. H. J. Rahmlow as speaker.

—By Martha Getzlaff Koch

ROSHOLT GARDEN CLUB TAKES PART IN GOOD NEIGHBORHOOD DAY

The Rosholt Garden Club took an active part in the Wisconsin Good Neighborhood Day at the Frank Flees farm in Marathon County on September 11 by helping with the landscaping of the monument stone.

We were invited to take part by Dr. Przedpelski, associate county agent of Portage and Marathon Counties.

First we built up a wall of stone about 20 inches high and 15 feet across, all around the large monument, filled it in with good top soil mixed with fertilizer. Then we planted a six-foot upright cedar tree on each side of the stone, with four low spreading hemlocks at the front towards the road and one towards the back.

To get additional color in this picture the next step was to plant some marigolds right up to the stone and also edging with blue and white sweet allysum. After these have frozen this fall we will go back to the farm and plant two hydrangeas, one on each side of the hemlock.

Prof. George Ziegler of the University of Wisconsin landscaping department laid out the driveway and planned all the other landscaping around the buildings.

The whole project was quite wonderful with thousands of people taking part and no doubt all of you have read about it in the papers or heard about it on the radio. The transformation of the Flees' farm was complete and all in the space of one day. More than 1,000 persons co-operated in the task.

The granite monument erected on the farm to commemorate the day is a huge, smooth-faced stone, taken out of one of the Flees' farm fields. It was properly inscribed with the words, "Wisconsin Good Neighbor Day, Frank Flees Farm Project."

The committee working with me on the project were Mrs. Glen Lockery, Mrs. Carl Rosholt, Mrs. Alvin Mathison, Mrs. Ed Johnson, Mrs. Art Doede and Mrs. Norman Rosholt.—By Mrs. Vernon Rosholt, chairman, Roadside Development Committee, Rosholt Garden Club.

WEST ALLIS GARDEN CLUB CELEBRATES 35TH BIRTHDAY

The West Allis Garden Club members celebrated their 35th anniversary Wednesday, August 16, 1951 at an all-day picnic at the home of Mrs. J. N. Kienzle, Waukesha.

Following a picnic luncheon members heard an account of the early history of the club prepared by Mrs. Clara E. Harrington and Mrs. J. N. Kienzle.

Until February, 1916, the club was organized informally by Mrs. C. E. Strong. It comprised seven members and was known as the Neighborhood Garden Club. They met every two weeks at homes and discussed gardening, exchanged plants, seeds and slips and visited nurseries. Two of these seven members are living and still belong to the West Allis Garden Club—Mrs. Clara E. Harrington and Mrs. W. J. Brubaker.

In February, 1916 it was formally organized with a full staff of officers and became known as the West Allis Garden Club. In October of the same year it became an affiliate of the Wisconsin State Horticultural Society and has continued this membership to the present time. We have enjoyed many benefits through this affiliation.

When the club was organized it had fifteen members, five of which still belong to the club at the present time. The present membership is 25, and is limited to that number as few homes can accommodate more.

One of the club's early projects was encouraging garden clubs in the schools of West Allis and another was the founding of a "City Beautiful Club" in 1914. Today this principle of beautifying the suburb is still followed in the garden club's action in saving needless destruction of trees and promoting civic improvement and conservation through student essay contests.

In 1932 the club donated a beautiful birch tree to the West Allis Park Commission in honor of the George Washington Bi-Centennial to be planted in the grounds of the West Allis City Hall. Appropriate exercises were held. The West Allis High School Band played; the Mayor, Assemblyman and the Park Board President gave talks. A minister gave the invocation and benediction and then the Garden Club President, Miss Esther

Miller, dedicated it. After all the ceremonies, the tree died. Something in the soil killed it—not the exercises.

Among other fine projects, the club has been identified with are: the Peace Garden Protests against dams being built in water falls in the state where the scenic beauty would be ruined, cutting Japanese cherry trees in Washington D. C. around the Tidal Basin, cutting beautiful roadside trees locally unless absolutely necessary, and has always advocated selected cutting of Christmas trees and other trees in the State or National Forests.

Two years ago the West Allis Garden Club joined with the other garden clubs in and around West Allis and the Home and Garden section of the West Allis Woman's Club to form the Garden Club Association of West Allis and Vicinity. This organization presented two garden and flower shows in the Allis-Chalmers Club House under the sponsorship of the West Allis Park Commission and Allis-Chalmers.

Following the reading of the history which will be continued at later meetings, the club was entertained by the President, Mrs. Ray Luckow, with slides showing her beautiful begonias and views of her garden and also of Mrs. J. N. Kienzle's garden.—**By Mrs. Clara E. Harrington, Pub. Chair.**

DANDELION CONTROL

Applications of 2-4, D may be more effective in the control of dandelions if the treatments are made in the fall rather than in the spring, says Dr. B. H. Grigsby, Michigan State College. Dr. Grigsby reports that the results of test sprayings conducted in **October** and in **May** on comparable plots indicated fall applications gave the higher percentage of kill of roots of old dandelion plants, and effectively destroyed young seedlings before they were able to develop strong root systems, and in addition nearby ornamentals seemed less susceptible to injury from the chemical at this season of the year.

Spring applications appeared to give a rapid top kill of dandelions and destruction of the roots to a depth of one or two inches, but the deeper parts of the roots remained healthy and eventually produced a cluster of new plants.—From the American Nurseryman.

SOME DON'TS FOR THE GARDEN

Don't fail to mow the lawn before frost sets in in order to avoid having the grass grow too long. It will be very difficult to handle next spring if it is matted down.

Don't plant thin-barked trees this fall in Wisconsin. In our climate, cherries, birch and thin-barked shrubs are best planted in spring. For most people that includes hybrid tea roses.

Don't be misled by magazine articles which claim that stumps can be easily removed with chemicals. None has yet been found that will do the job.

Don't allow the tree leaves to remain on the lawn. They will mat down and in many cases injure the grass. They are most easily raked off in fall.

Don't fail to mound up soil around the canes of your hybrid tea roses before freeze-up. After the ground has frozen add about 3 inches of marsh hay to cover the mound for winter protection. Otherwise your roses may be killed to the ground during the winter.

HOW TO GROW

African Violets in the Home

By Mrs. O. F. Isenberg, Baraboo

The fascination of the African violet in your home will become more pronounced as the fall and winter days come again. I know your interest will automatically turn to them after the outdoor flowers have faded and gone.

Watch Light

To start the Saintpaulia off right for its winter bloom, watch the light situation, because from fall through spring the plants will tolerate as much light as we can give them. The days are short and so many of them are dark and dreary. From November to February south windows will be much to their liking. Sufficient light is still one of the most outstanding factors in bringing your violets into bloom. Watering and temperature are equally important. When furnace heat is on, you will find watering is much more necessary than during the humid summer months.

When bloom buds burst forth, feed your plants occasionally. When in bloom the plants require feeding. Hyponex is good, Rapid-Gro, Plant Marvel and many other houseplant fertilizers are beneficial, but abide by directions, overfertilizing may cause root injury and will cause your plant to become limp and die.

New Varieties

So many new varieties are being produced by our large commercial growers and hybridizers that the interest one has to add to a collection can never cease. This fall we will have some beautiful new doubles released to us called the "Rainbow Series." This includes a double white and double pink which carry blooms like double Neptune, a dark blue which has large husky double blooms with an occasional yellow pollen eye protruding among the wide deep blue petals.

In the Girl varieties (characteristics are lacey leaves and ivory spot at the base of stem) many new ones are available such as Bronze Girl, Sailor Girl, Sea Girl, White Girl etc. They have a rather dainty habit of growth, not too large for our ordinary window sills.

The Fringettes have lovely wavey leaves and fringed flowers which come in shades of blue, red and white. The blooms of these do not fall off as readily as the ordinary singles.

The Gypsy Series are indeed lovely in their pale pastel colors and outstanding foliage.

The Duponts and Amazons are still in the lead for enormous sized blooms. The foliage is heavy and leathery, so different from any other.

The hanging basket violet, Saintpaulia "Grotei" is very popular. It has dainty pale blue flowers on long stems and the leaves are different, somewhat similar to the species Kewensis. It trails downward beautifully.

For the last two years, Lady Geneva, (blue with a white edge) has been very much in demand. Now we have a Rainbow Geneva, which is red with a white edge. How can our interest wane!

The "Fantasy" is also a new violet and a must. It has a large bloom of orchid pink with many small purple blotches over the entire bloom. It was truly correctly named.

The Hybridizers are now bringing forth only varieties which are really different in both foliage and flower. This is certainly an accomplishment much appreciated by growers and collectors.

There was a man who called a spade a spade—until he stumbled over one in the dark.—The Sharon Reporter.

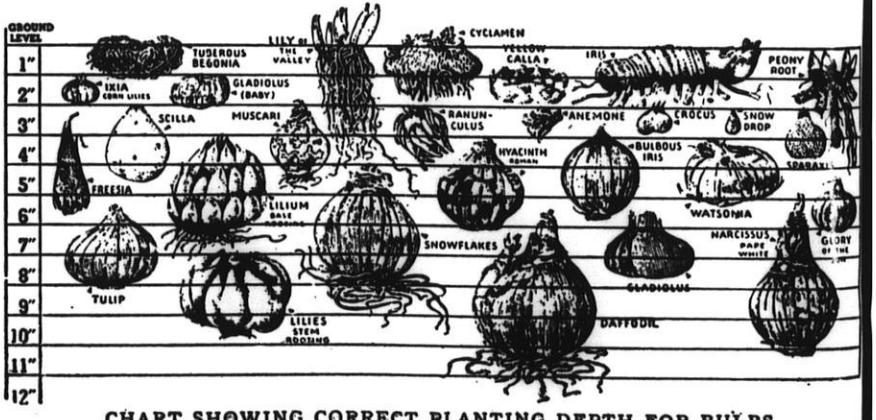
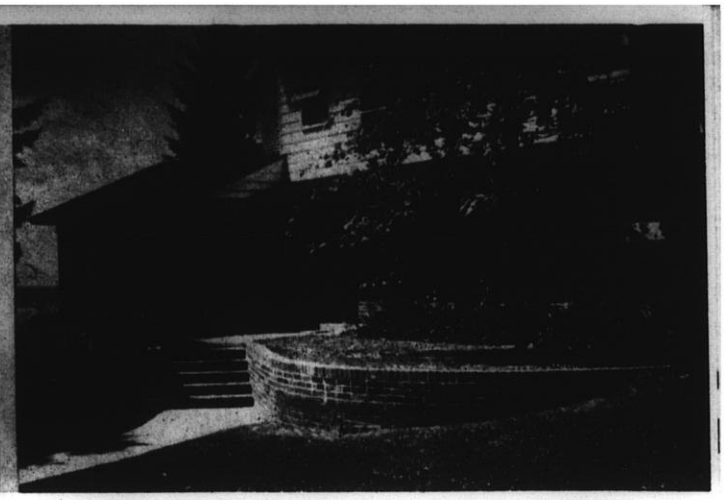


CHART SHOWING CORRECT PLANTING DEPTH FOR BULBS

Traditional landscape treatment of the front yard—open lawn, shrubs at corners to minimize height, vines to soften rigid building lines.



Contemporary architecture necessitates asymmetrical plantings. Retaining wall repeats material used in house.

Landscape Architecture Helps You

Put Up A Good Front

By Joseph S. Elfner
Department of Horticulture, U. W.

Your house and yard as seen from the street give you the opportunity to "put up a good front." We have developed a traditional landscape treatment of this part of the yard that is proper in its pleasing practicality. You recognize it in the unbroken, easily maintained areas leading up to the front of the house. You feel the effect in the suggestion of open-armed welcome to the visitor, expressed by a direct approach to the front door. It presents you with an orderly feeling of things as they should be—the house enframed with trees, tied to the ground with plantings of shrubs at the foundation.

Architectural Defects Minimized

It overcomes architectural defects—more massive plantings about the foundation of a large house set on a high foundation; smaller scale trees and shrubs around the "minimum house" type. That's intelligent landscape design. You're probably more familiar with the technique in choosing clothes—vertical stripes for the stout figure and other similar illusions.

This, then, is the accomplishment of landscape architecture in helping you to "put up a good front." Your home is presented to the public in its most pleasing aspects. Its architectural defects are minimized. You establish your abode in its proper relation to neighbors and the community. It has a friendly rather than a forbidding aspect. It reaches out to friend and passerby with a greeting of good will. Yes, I think we have a tradition of hospitality in our landscape architecture.

Changing Conditions Influence Landscape Architecture

We are aware, however, that there is change in our daily lives. The speedier tempo of our work-a-day lives induces a desire for privacy and seclusion in our living at home. Automobiles whisk us to and from work at a pace that eliminates neighborly chat over the front porch rail. Traffic has pushed us into the backyard for rest and relaxation. Architecture reflects the change by placing garage and servant elements close to the street, living quarters to the rear. This arrangement sometimes results in a harsh effect that does less than say "welcome" to the visitor. Overdevelopment often imposes small lots on the landscape pattern. Intense use of all space becomes necessary. Open front lawns become service or garden areas. They may be enclosed by walls, fences, or hedges.

Perhaps such a prospect displeases you. But if necessity causes you to accept the change, remember this: Even an enclosed front yard or one which must provide car-park and drive, service deliveries, garden space—even this situation need not deprive you of an attractive approach to the house. Fences or walls may be given an appearance of fitness by using the same materials found in the exterior of the house—stone, redwood siding or boards, brick. A restricted entrance gate in wall or fence may be recessed to allow for a simple planting. This emphasizes the entrance and softens the enclosure. A wide drive or parking space that also serves as the approach to the front door need not be a bare concrete slab. Use color and texture with exposed-aggregate concrete. Create pattern by means of expansion and construction joints that divide the slab into harmonious and interesting geometrical shapes.

Whatever your situation may be—traditional or contemporary—let it reflect the best aspects of planning. Show off the house; emphasize the entrance. Don't make them compete with distracting plants that hide pleasing elements of the structure. A carefully thought out landscape development will definitely help you to **put up a good front.**

CHRISTMAS SHOW ANNOUNCED

The Wauwatosa Garden Club will present its second annual Christmas Show on November 30th, from 11 a.m. to 9 p.m.

The show will be held at the Wauwatosa Women's Club at 1626 Wauwatosa Ave. The show is for the benefit of the Lowell Damon House. Donations of $1.00 will be accepted.

Garden Notes

MILWAUKEE ROSE SOCIETY NEWS

Organization Issues Bulletin, "Rose Tips"

The official bulletin of the Milwaukee Rose Society — "Rose Tips" — just reached our desk. Editor is Dr. Leo J. Cogan. President of the organization is Mr. John Voight of Whitnall Park and co-editor is Mrs. Lloyd Dean. Mrs. George A. Camham, 4125 North 25th St., Milwaukee 9, is secretary.

The object of the organization is, as stated in the bulletin, "To inform on local rose problems; to promote friendliness; to amuse and entertain."

The September bulletin had this interesting article entitled, "Love Your Roses," by Pete Moss. It's well worth reading.

Love Your Roses

"The following is a brief excerpt from Dean Hole's 'A Book About Roses,' written nearly a hundred years ago — and do we not hear the same today?

" 'Is it not sad that we can not grow Roses? We have spared no trouble, no expense, and we do so dote on them!' The last time I heard a howl of this kind I felt myself insulted as a lover of the Rose and of truth; and instead of yelping in concert, as I was expected to do, I snarled surlily, 'You have taken no trouble which deserved the name; and, as to expense, permit me to observe that your fifty Rose-Trees did not cost you a fifth of the sum which you paid for your sealskin jacket. You don't deserve beautiful roses, and you won't have any until you love them more.' "

"Surely this old-timer knew what he was talking about, and when someone complained about the poor success had with some roses supposedly recommended by him, he used the following firm language:

" 'I never in my life recommended a person of your profound ignorance to have anything to do with roses. You asked me to give you a list of the best, I did so reluctantly, knowing that you had neither the taste nor the energy to do them justice.'

"Moral: If the love of Roses is not in your heart try growing Petunias!"

FEEDING TULIPS HARMFUL

Don't fertilize tulips before, after or during flowering if growing in reasonably good soil. That's the advice of scientists working at the research center of Vaughan's Seed Store in Western Springs, Ill. Tests on millions of bulbs out of doors and under glass show that while fertilizer will produce bigger flowers the year it is applied, it hurts future bloom.

A bulb, is a storage device to help plants survive with less food than needed if they continue growth all summer long. Too much food stimulates splitting. Instead of flowering the bulbs divide, each half sending up a single leaf. Unless moved to poorer soil, each half again splits. Kept on a relatively lean diet, bulbs stay large and flower for years.

The custom of using bone meal on tulips works because the bone meal does no harm. Modern bone meals contain practically no nitrogen, and the little they do contain is not available during bulb growing periods. Phosphorus in bone meal is also unavailable except in minute amounts.

An important precaution against splitting is to plant tulips deep, with the tops of the bulbs between 6" and 8" below the surface of the ground. Shallower planting encourages splitting, and hurts flowering.

DO YOU KNOW?

THAT

even though Coreopsis is the Greek name given that flower, its interpretation, "bug-like," actually refers to its seeds?

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the bright-colored Gaillardia is also known as Blanket-Flower because its vivid colors are often copied by the Indians in weaving their blankets and rugs?

---

the Latin name of Mignonette is Reseda, meaning "I calm," and refers to the flower's supposed healing power for bruises?

---

another name for the Zinnia is "Youth-and-Old-Age" because you often see partly faded flowers and new buds, side by side?

---

an interesting fact about Christmas Holly is that the prickly Holly leaves extend only part way up a tree, where nature evidently feels that the prickly protection is necessary? The Holly leaves on higher, less vulnerable branches, are practically spineless.

---

the Four-O'clock is not the only flower which prefers to "rise" or bloom at a certain time of day? Some of the others which have their own alarm clocks are: Dandelions, 4:00 a.m.; Poppies, 5:00 a.m.; African Marigolds, 7:00 a.m.; Pinks, 8:00 a.m.; Star of Bethlehem, 11:00 a.m. Night bloomers are Moon-flowers, Night-Blooming Cereus and others. The early risers also go to sleep early . . . usually by mid-afternoon.

---

there is great variety in flower forms? Some of them are composite or disc-shaped (Daisy): bell-shaped (Canterbury Bells); lipped or sack-like (Snapdragon); trumpet effect (Easter Lily); spurred (Columbine), a flower with slender appendages; overlapping or whorling petals (Rose).

---

the four species of Poppies which are cultivated are (1) Oriental, (2) Iceland, (3) Shirley or Corn, and (4) Opium Poppy?

---

the Anemone Pulsatilla is better known as the Pasque Flower because it blooms at the Paschal or Easter season?

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
H. J. Rahmlow, Madison, Cor. Sec'y.
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

PREVENT WINTER LOSSES NOW

Light Fall Honey Flow Resulted In Shortage of Winter Stores

The fall honey flow did not materialize in most of Wisconsin due to weather conditions. Here at Madison, colonies were not able to maintain their weight after the clover honey flow was over. Brood rearing, however, was quite active during August, and so many colonies are lighter than they have been in several years. Feeding will be necessary.

We have noticed an unusual amount of pollen in some colonies. No doubt such crops as ladino clover, alfalfa, and fall flowers produced more pollen than nectar. This pollen is low in the brood chambers where it will be available to the winter cluster. When brood rearing begins in late January, this pollen will enable bees to obtain a balanced food supply for brood rearing. That will also mean a heavy consumption of honey. As a result, there will be danger of starvation in February and March.

Winter losses can be prevented now by feeding so that the upper brood chamber is practically filled with stores. First check combs to see if the weight of the brood chambers that seem quite heavy, is due to pollen or honey. If there is considerable pollen present, it means less room for honey and greater danger of a food shortage next winter.

Colonies can still be culled—the weak colonies or those having poor queens can be gassed and the stores used for feeding other colonies.

The most productive colonies—those with the most active queens, are most likely to be short of winter stores, because an active queen occupies a large portion of the brood nest, storing the honey into supers. So it may be entirely that our best colonies are in greatest danger of starvation.

Remember our slogan "Insulate your colonies with honey for good wintering."

ANNUAL CONVENTION
WISCONSIN BEEKEEPERS ASSOCIATION
Marathon County Park, Wausau, October 30-31

Tuesday, October 30

(The Board of Managers will meet Monday evening, October 29 at 8:00 p.m.)

10:00 a.m. Registration. Fee to cover convention expenses—50c.

10:15 a.m. Call to order by Pres. Henry Schaefer, Osseo. Announcements. Discussion topic: This season's honey crop. How we produced it and how we are selling it. Moderator, Mr. Schaefer.

11:15 a.m. Topic: Are we prepared for winter? Moderator, H. J. Rahmlow, Madison.

12 M. Pot luck luncheon. Bring a dish such as potato salad, beans, sandwiches, cake, etc. Those who do not bring food may purchase ticket for 75c.

1:30 p.m. How to Freeze Fruit and Vegetables. Varieties and handling methods. By Prof. O. B. Combs, Chm. Dept. of Horticulture, U. W. Joint meeting with Auxiliary.

2:15 p.m. Year 'Round Colony Management. The work of the Central States Bee Culture Laboratory. By Dr. C. L. Farrar, U. W., Madison.

3:15 p.m. Profit from Wax. How to produce it and how we use it.

3:45 p.m. Business meeting and election of officers, Wisconsin Beekeepers' Association. (If you have something on your chest, here is the place to unload it.) Better organization. Committee Reports.

6:30 p.m. Annual banquet in dining hall at the park.

BANQUET PROGRAM

Welcome to Wausau, by Mayor Herbert Giese. Community singing, led by County Agent W. J. Rogan, Wausau. "Americanism," address by T. A. Duckworth, Employer's Mutual, Wausau. Movies, by Henry Schaefer, Osseo. Music by Hanson's Orchestra.

Wednesday, October 31

9:30 a.m. Topic: Is nosema our worst enemy? What can be done about it? Is A.F.B. coming back? Moderator, John Long, Madison.

11:00 a.m. Round table on honey promotion, pumping, bottling, labeling, pollination. Moderator, Walter Diehnelt, Menomonee Falls.

12 M. Luncheon—Plans to be announced.

2:30 p.m. Our State Fair Exhibit. Some pointers on selling honey. By Art Kehl of G. B. Lewis Co., Watertown, and the State Ass'n's Advertising Committee: Wm. Judd, Stoughton, Chairman; Ed Ranum, Mount Horeb, and H. C. Braithwaite, Baraboo.

3:15 p.m. Unfinished business. Conclude business meeting.

NOTICE

Marathon County Park is on Highway 29, west of the business district of Wausau. Beekeepers' meetings will be in the dining room in the park. **Dormitories are available for sleeping accommodations for about 100 persons. Price: 50c per person.** Blankets and pillows are provided but you must bring your own linens for the beds. Write Mrs. Albert Sahr, Route 2, Wausau, for reservations.

Banquet price: $1.75—plenty to eat guaranteed.

WATER CONTENT OF HONEY

Honey Will Absorb Moisture Though the Cappings

There are several facts related to water content which have considerable practical significance to anyone who packs honey.

(1) Honey is hygroscopic. That is a good ten dollar word to spring on an unsuspecting neighbor. It means that honey can exchange water with the air. This is first demonstrated by the bees when they evaporate water from nectar as part of the process of making honey. If you were to place a plate of well ripened honey in a very damp atmosphere the honey would absorb moisture from the air and become very sloppy. It follows therefore that water content of honey is unstable and variable particularly when it is in the comb. Incidentally, water can be given off or taken in right through cappings. A few years ago I had the opportunity to study this property of honey experimentally and found among other things that a honey of 17.4% water content did not take any more water on or give any water off in a relative humidity of 58%. This gives a rough guide to best humidities for storage.

Much water can be absorbed into honey by leaving uncapped supers sitting in damp storage. Supplying heat will generally lower the humidity of the room.

Honey may also absorb water and be made a lower grade by leaving empty supers sitting above bee escapes during several rainy days. With the bees out of the supers the air may get cold and damp and the honey shoot up in water content.

Cause of Fermentation

(2) High water content causes fermentation. Water content of honey may be accurately measured by means of a hydrometer or a refractometer along with Dr. Chathaway's tables Many tests have been run to prove that high water honeys ferment readily. Sugar tolerant yeasts thrive better and better as honey moisture increases above 17.2%.

(3) What can be done about it. The old rule about honey being ripe when the combs are three parts capped is not correct but it does serve as a guide to point out that uncapped honey is often unripe.

Care can be exercised in the use of bee escapes and in storing honey at extracting time to prevent excess absorption of water.

Many commercial beekeepers have constructed small hot rooms in their honey houses. If these rooms are equipped with a fan it is possible to expose supers of comb in the hot rooms and often remove 2 or 3 per cent of water.—**By Prof. E. C. Martin, Michigan State College, in East Lansing, in The Beekeepers Magazine.**

BEEKEEPER WANTED

The University of Wisconsin has an opening for a State Civil Service man to work with bees. For information, write to Dr. C. L. Farrar, King Hall, University of Wisconsin, Madison, Wis.

"My music teacher says I have a fine voice and should go far."

"Splendid! I'll help you pack."

—Midland Co-operator.

Many a small boy is the kind of a kid his mother wouldn't want him to play with.—Bonduel Times.

COLOR STANDARDS FOR HONEY

U.S.D.A. Standards Used for Interstate Sales

Wisconsin has its own grades for honey and they are quite suitable for beekeepers selling their honey within the state. However, in selling honey to buyers in other states, it will be necessary to use the U.S.D.A. color standards, which have recently been revised.

The official instrument for determining color classification has been the Pfund Wedge Comparator, which is commercially available. This instrument contains amber glass a wedge shaped cell for holding a honey sample and a scale with pointer to indicate wedge position where a color match is obtained. The Pfund Wedge Comparator is excellent as a laboratory instrument but is impractical for field use.

Color Comparator Available

A new honey color comparator, complete with permanent glass color standards, clear blanks, and empty sample bottles is now commercially available. For information on where it may be obtained, etc., write the Fruit and Vegetable Branch, P.M.A., U. S. Department of Agriculture, Washington 25, D. C.

U.S.D.A. Color Standards

	Pfund Wedge Scale, mm
Water white	8
Extra White	17
White	34
Extra Light Amber	50
Light Amber	85
Amber	114

Honey Exhibit — Annual Convention

All beekeepers attending the convention are urged to bring honey for the exhibit. Each jar must be labeled.

Class 1. Ten 1 lb. jars of Wisconsin Fancy White honey.
Class 2. Ten 1 lb. jars of Wisconsin Golden honey.
Class 3. Ten 1 lb. jars of Wisconsin Dark honey.
Class 4. Three sections of Wisconsin Fancy White Comb Honey.

Premiums on each class: 1st prize, $1.50; 2nd prize, $1.00; 3rd prize, $.75. Two jars from each prize winning lot will be used at the banquet.

Score card

Quality of honey—40; Sales appeal in jars—30; Sales appeal of label—30.

General Committee, Marathon County Beekeepers' Association: Chm., Mr. Joseph Grys, Mosinee; Kurt Karan, Merrill; John Killian, Dancy; Mrs. Albert Sahr, Wausau. Meals: Mrs. Albert Sahr, Mrs. John Killian, Mrs. Joseph Grys.

Womens' Auxiliary Meeting
Wisconsin Beekeepers' Association
Marathon County Park, Wausau
October 30-31

Program Tuesday, October 30

10:00 a.m. Call to order by the president, Mrs. Emerson Grebel, Beaver Dam. Announcements.

Topic by members: New uses for honey. How our family uses honey and foods they like, made of honey.

10:30 a.m. A Homemaker's experience with honey—some short-cuts in housekeeping. By Mrs. Virginia McNaughton Williams, Wausau. (Formerly with the American Honey Institute, Madison.)

11:30 a.m. Annual business meeting, Womens' Auxiliary. Election of officers.

Noon Luncheon

12:00 noon. Pot luck cafeteria style luncheon. Bring a dish such as potato salad, baked beans, sandwiches, cake, etc. Bring enough for your family and a little more. Price for those who do not bring food, 75c.

Afternoon Program

1:30 p.m. Freezing Vegetables and Fruit. Varieties and Handling Methods. By Prof. O. B. Combs, Chm., Department of Horticulture, U. W. Joint meeting with beekeepers.

2:15 p.m. How the exhibits were judged. Discussion of exhibits and recipes by the official judge.

3:15 p.m. Demonstration of cake decoration. By Mrs. Rose Nesbitt, Dancy, Wisconsin.

4:00 p.m. A tea for auxiliary members and guests. All prize winning exhibits will be served. Tea will be furnished by Wisconsin Beekeepers' Ass'n.

Committee for Tea: Mrs. Henry Schaefer, Osseo; Mrs. Henry Piechowski, Red Granite; Mrs. W. E. Chadwick, Winters.

Banquet Program

6:30 p.m. See beekeepers' program for details.

Banquet Decoration Committee: Mrs. Robert Knutson, Ladysmith; Mrs. Geo. Hotchkiss, Eau Claire; Mrs. Clarence Pfluger, DePere.

Wednesday, October 31

A tour of Rib Mountain and/or Paper Mills will be arranged if enough members are interested.

Auxiliary Officers: Pres., Mrs. Emerson Grabel, Beaver Dam; Vice Pres., Mrs. Wallace Freund, West Bend; Sec.-Treas., Mrs. John Pagel, Medford.

Notice

Marathon County Park is on Highway 29, just west of the business district on the west side of Wausau. Womens' meeting will be in the lounge to the rear of the dining room and meeting place for beekeepers' sessions. **Dormitories on the grounds are available for sleeping accommodations for about 100 persons.** Price 50c per person. Blankets and pillows are provided, but you must bring your own linens for the beds. Write Mrs. Albert Sahr, Route 2, Wausau, for reservations.

Banquet price: $1.75—plenty to eat guaranteed.

PREMIUM LIST

Womens' Auxiliary Exhibit

Class 1. Honey fruit and nut bread, 1 loaf. Prizes: 1st prize, $2.00; 2nd prize, $1.50; 3rd prize, $1.00. Every other entry, $.50.

Class 2. Honey cake, any kind, not less than 50% honey. 1st prize, $2.00; 2nd prize, $1.50; 3rd prize, $1.00. Every other entry $.75.

Class 3. One dozen honey cookies not less than 50% honey. Prizes: 1st prize, $1.50; 2nd prize, $1.00; 3rd prize $.75. Every other entry $.50. Cookies and nut breads will be served at the tea at 4 p.m.

Exhibit Committee: Mrs. Harold Knight, Dalton; Mrs. Joe Mills, Ripon; Mrs. Frank Kies, Winter.

Wisconsin Horticulture

November, 1951

WISCONSIN HORTICULTURE

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Subscription by membership in the Wisconsin State Horticultural Society. Annual dues are $1.25 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

One Way of Pruning

The Aging, High-Topped Apple Tree

By C. L. Kuehner

From Circular 390, Wis. College of Agriculture

Pruning the apple tree (See Fig. 1) is a real problem on farms where the orchard has not received good care over a period of years.

Pruning such trees is largely a renovation or renewal job. It is a necessary requirement for renewed better production. It must not be too severe. Severe pruning is wasteful of good fruiting wood and may bring about the sunscalding of large limbs. This may eventually bring decay to these limbs. Excessive pruning may also produce undesirably heavy suckering. Moderate pruning can accomplish the necessary renewal regardless of whether one deals with the neglected apple, pear, cherry or plum tree. (See Fig. 2.) Such moderate pruning consists of opening the top and removing weak wood from the lower inside main branches. Naturally, the dead, badly diseased and broken branches and branch stubs must be removed. The tops of the trees usually need to be lowered if excessively high. In this case, some of the higher, upright growing branches are removed at points where they are joined by lower branches of nearly like diameter as shown in picture 2.

To avoid sunscald and undue suckering, it is best to spread this kind of pruning over a period if two or three years rather than doing all of it within the same year. This kind of pruning brings light to the interior and lower branches. It facilitates picking and spraying, and helps to develop desirable suckering in the lower areas of the tree.

Suckers are needed to replace worn out fruiting branches. They require light to branch well and to start early and satisfactory fruit bearing. For this reason, it is usually necessary to thin the suckers or to space them where they develop too densely on the lower main branches and the trunk of the tree. Thinning must be moderate. The suckers may need to be spaced again in two or three years, leaving only the strongest, best

Fig. 1. A neglected apple tree in need of pruning and fertilization. Terminal growths are short, indicating need for nitrogen. The top needs moderate thinning. The inside lower main limbs are overloaded with weak downward hanging branches. Many of these should be removed. An application of nitrogen fertilizer will stimulate the tree to more vigorous growth.

Fig. 2. A formerly neglected tree after it was pruned and received an application of nitrogen fertilizer. The top was opened by several pruning cuts which removed upright branches at junctions with horizontal branches as at A. Many of the downward hanging shaded branches were removed. The combination of treatments, pruning and fertilization, together with good mulching, have rejuvenated the tree to vigorous annual bearing.

branched ones about three to four feet apart. Meanwhile as these suckers develop during the next few years, they will require still more space. This space is obtained by pruning away the older weak branches around them.

As a rule, old trees which have not been pruned for years are filled with thin diameter secondary branches. They are found, for the most part, underneath and between the larger main limbs in the lower half of the tree. They may, or may not, be crowded with many weak spurs. These branches must be removed. It will rid the tree of much of its non-bearing wood and eliminate a considerable percentage of the smallest, poorest colored fruit. The removal of these branches also improves light conditions in the lower parts of the tree and makes thorough spray applications possible. See picture 3.

From Circular 390, Management of Bearing Farm Orchards, Univ. of Wis. Madison. Cuts, courtesy Wis. College of Agric.

Fig. 3. This shows a portion of another old Wealthy tree after cull pruning was completed. Cullwood branches were removed at points indicated by arrows. The branches which remain are productive terminals of good length and diameter as at A.

SOME NEW APPLE VARIETIES AREN'T BETTER THAN OLD

After several years of testing at the Experiment Station orchards in Madison, several of the newer varieties of apples haven't shown enough superior qualities to take the place of some of the older varieties that have become well established in the state.

They are Carpenter Seedling, Early McIntosh, Goodhue, Iowa Brilliant, Mac Early, Mendel, Ogden, Orenco, Patricia, Petrel, Rainier, Red Sauce, Skillet Creek, Thurso, Van Buren Duchess, and Young American Crab.

Although these varieties have some good qualities, horticulturists aren't recommending them for general planting in the state.

From **What's New In Farm Science, 1951.**

Fashion Notes: There will be little change in men's pockets this year.—Gillett Times.

A really good turn is one that gets the covers back on your side of the bed.—The Viola News.

Fig. 4. Two-year growths from a Wealthy tree. Upper view branch is vigorous with many large leaves and numerous strong fruiting spurs on two-year old growth between A and B. Lower view branch is weak with few small leaves and very weak spurs on two-year growth as at C-D. In cull pruning, see arrows in Fig. 3, this weak wood is cut away. Vigorous growth as in upper view here, and at A in Fig. 3 is productive and should not be removed.

Wisconsin Apple Institute News

Excellent Apple Promotion, Wisconsin Apples For the School Lunch Program

More housewives are asking for Wisconsin apples as a result of radio and newspaper publicity put out by the Wisconsin Apple Institute this year. Miss JoAnn Shurpit's 1 hour demonstration on how to use apples with three different recipes over WTMJ-TV on September 28 was the highlight of the year's activities. Her emphasis that Cortland apples do not turn brown when used in salads was one of the items listeners remembered, and they're asking for Cortlands for this purpose. The Milwaukee Journal had almost a full page of pictures and recipes in late September from articles sent by Miss Nancy Boebel, newspaper publicity director.

The radio releases this year are a new feature of the program. Tape recordings were made, duplicated and were sent to many county home agents who used them on their regular radio programs all over the state. They appreciated this help and it certainly helped the apple industry.

The Wisconsin Department of Agriculture made a number of tape recordings on apples which were broadcast over 22 different stations in the state according to Mr. Frank Wing, radio supervisor.

Apples For School Lunch Program

On Thursday, October 4, the Apple Advisory Committee, consisting of Arnold Nieman, Cedarburg; Don Reynolds, Sturgeon Bay; G. J. Hipke, New Holstein; H. J. Schubert, Gays Mills and H. J. Rahmlow, Madison, together with growers S. S. Telfer, Ellison Bay and Alrick Erickson, Sturgeon Bay, met with Mr. Walter Katterhenry and Wallace Lillesand of Wisconsin PMA and Robert McDermott and Gordon Gunderson of the Wisconsin School Lunch Program to make allotments of apple offerings for the program. A total of 44 carloads were offered and 28 were accepted by the purchase program.

The Wisconsin Committee decided to make the allotments in truckloads of 500 bushels each, a total of 14,000 bushels. It is hoped that another allotment will be made within the next month or two by USDA.

The committee also sent a message to the national office expressing regret that the important Wisconsin varieties, Wealthy and Snow, were not included on the program and suggesting that consideration be given to N. W. Greening. The price paid for these apples is $1.80 per bushel, for McIntosh and Cortlands, U. S. No. 1, 2½ inch and up.

83rd ANNUAL CONVENTION

Wisconsin State Horticultural Society

Wisconsin Apple Institute

Retlaw Hotel, Fond du Lac, November 27-28

PROGRAM TUESDAY, NOVEMBER 27

8:30 to 10:00 a.m. Set up fruit exhibit. See October issue for premium schedule.

10:00 a.m. Call to order by Pres. G. J. Hipke. Announcements.

Better Quality Fruit By Chemical Thinning. Report of 1951 Experiments. By Dr. B. Esther Struckmeyer, Department of Horticulture, U. W., Discussion (10 minutes each). How Chemical Thinning Looks to Us. By Dawson Hauser, Bayfield; and William Connell, Menomonie.

11:10 a.m. Improving Quality by Pruning. By Dr. R. H. Roberts, Department of Horticulture, U. W.

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12 M. Luncheon meeting, Board of Directors, Wisconsin Horticultural Society. Also luncheon meeting Board of Directors, Wis. Apple Institute.

1:30 p.m. New Methods of Spraying Fruit Trees. Concentrated Sprays. By Dr. H. C. Young, Ohio Experiment Station, Wooster, Ohio. Discussion and questions.

2:30 p.m. Observations on **apple insect control** with emphasis on plum curculio. By Dr. C. L. Fluke, Department of Entomology, U. W.

Fruit Bud Moth Control. By Don Dever, Department of Entomology, U. W.

3:00 p.m. Forum on orchard problems. Moderator, Prof. C. L. Kuehner, Department of Horticulture, U. W.

ANNUAL BANQUET

6:30 p.m. Ballroom, Retlaw Hotel. Presentation of honorary recognition certificates.

Some Appropriate Remarks. By James Kavanaugh, County Agent, Green Bay.

"Wrong Varieties", by H. J. Gramlich, Agricultural Agent, N. W. Railroad, Chicago.

Additional Program to be Announced.

Auction: Prize winning bushels of apples. Maximum bid, $10.00.

Wednesday, November 28

Joint Meeting with Wisconsin Apple Institute

9:30 a.m. New Fruit Fungicides and Their Adaptability for Better Timing of Sprays. By Dr. H. C. Young, Ohio.

10:15 a.m. Our 1952 Apple Spray Program for Disease Control. By Dr. J. D. Moore, Department of Plant Pathology, U. W. Discussion and questions.

10:45 a.m. Our Apple Promotion Work. Apples for School Lunch Program. The National Outlook. By H. J. Schubert, pres., Wisconsin Apple Institute, Gays Mills.

11:30 a.m. Annual business meeting, Wisconsin Horticultural Society.

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12 M. Noon luncheon and business meeting, Wisconsin Apple Institute. Pres. H. J. Schubert presiding. All growers invited to attend.

1:30 p.m. Wisconsin Apple Institute program. H. J. Schubert presiding.

A More Effective Marketing Program for Wisconsin Apples.

Can Promotion Help Sell Wisconsin Apples? By Frank Wing, radio publicity supervisor, Wis. Department of Agriculture, Madison.

Forum on Apple Selling, By A. K. Bassett, Sr., Baraboo; Dawson Hauser, Bayfield; Arno Meyer, Waldo; Don Reynolds, Sturgeon Bay; Arnold Nieman, Cedarburg. Questions and answers.

WISCONSIN APPLE INSTITUTE MEMBERSHIP

Mr. Armin Frenz, Cedarburg, treasurer of the Wisconsin Apple Institute, sends the following list of paid-up members in the Institute for 1951 as of Oct. 10.

Oswald Baehman and Co., Thiensville; O. Bolliger, Bayfield; John C. Bremer, Adell; Arthur Brunn, West Allis; Carl Erickson, Herbster; Frenz Orchards, Cedarburg; L. R. Fischer, Hastings, Minn.; John W. Fromm, Cedarburg; Martin Fromm, Cedarburg, Mrs. Agatha Guth, Bancroft; Frederick M. Gygax, Waukesha; Arthur Halbig, Sheboygan Falls; Hall Enterprises, Casco; Herbert Hasslinger, Nashotah; Dawson Hauser, Bayfield; L. B. Irish Orchards, Baraboo; Jefferson County Fruit Growers, Fort Atkinson; Kickapoo Orchard Co., Gays Mills; Arthur Kittinger, Caledonia; Frank Krause and Sons, Fountain City; The Larsen Co., Green Bay; Henry Mahr, Caledonia.

Alfred J. Meyer and Sons, Milwaukee; Milwaukee County Fruit Growers, Milwaukee; Jos. L. Morawetz, West Bend; Earl R. McGilvra, Baraboo; Nieman Bros. Orchard, Cedarburg; Ozaukee County Fruit Growers, Cedarburg; Orlando J. Nieman, Cedarburg; M. B. Pennebecker, Waupaca; Aloys W. Pfeiffer, Racine; W. C. Powers, Ellison Bay; Racine County Fruit Growers, Rochester; Reynolds Brothers, Inc., Sturgeon Bay; Rosa Orchards, Bigelow Lourie, Gays Mills; Sacia Orchards, Galesville; Sheboygan County Fruit Growers, Sheboygan Falls; A. K. Bassett, Baraboo; Harold Steffen, Cedarburg; C. J. Telfer, Green Bay; Albert Ten Eyck, Brodhead; Albert Theys, Luxemburg; Thompson and Marken, Kenosha; Willard O. Wagner, Cleveland.

Waldo Orchards, Waldo; Washington County Fruit Growers, West Bend; Oscar Wiechert, Cedarburg; Martin H. Wiepking, Cedarburg; Hugo E. Wunsch and Sons, Sheboygan; James Shebel, Hales Corners.

What did you see in the country, dear?

We saw a lot of little piggy banks robbing a big piggy bank.—Ripon Weekly Press.

A Visit to One of Central Wisconsin's Oldest Ventures in Fruit Growing

Crystal River Fruit Farm

One mile south of Waupaca on U.S. 10 is an orchard with a long and interesting history. It is now operated by Mr. M. B. Pennebecker, who has named it, "Pennebecker's Crystal River Fruit Farm." It was at one time known as the "Barnes' Orchard." Mr. Pennebecker writes, "I have photographs which were published in 1898, showing a well-developed orchard, so it must have been planted about 1880, by Mr. Barnes. He must have carried on an extensive nursery business and was credited for most of the orchards in this part of the country.

From the Barnes' Orchard, first planted about 1880, the Pennebeckers have developed a successful retail and wholesale fruit business at Waupaca. Shown in front of their roadside stand are Mr. and Mrs. Mearl Pennebecker.

Varieties Grown

"Very often someone stops at the roadside stand and mentions having worked in the orchard or picking berries here when they were kids. There were enormous numbers of varieties, and as was usual in the early days, most of them were early, soft, cooking apples. Wealthy was the best variety of the earlier planted trees. There were only a few McIntosh, Snows and Greenings but acres of McMahon, Patten's Greening and Maiden's Blush. We still have a few McMahon but have taken out most of the other kinds and have been planting a wide variety too as we have to have them in a place like this with a roadside stand. Today McIntosh, Cortland, Snow, Haralson, Milton, Melba, Early McIntosh, Macoun and Prairie Spy sell well. We also planted a few Beacons this year, which sell because of their over-all red color.

"The early varieties sell well as people are hungry for fresh fruit early in the season and we are about 2 weeks earlier than some of the other sections. We have about 15 acres of bearing trees and 10 acres of new planting."

Buildings

Mr. Pennebecker has remodeled the old Barnes residence by taking out the entire front wall and basement and building on an addition of 26 by 50 block building, extending down to the roadside stand, which is used in connection with the old house as storage, packing and grading house. They use a brusher and two sizing sections for grading and lower the apples into the basement with a type of dumb waiter, which is satisfactory in cool weather. Mr. Pennebecker writes: "We can't keep the temperature down low enough in a prolonged warm spell. We're going to have to get some type of cold storage soon to carry over the early varieties such as Whitney, Melba, Early McIntosh and Milton.

Roadside Selling

"We have sold fruit at the roadside since we moved here in 1919 and we're probably one of the first to do so. We started with a table, then a tent, and then a small wooden building. Still later, a larger building, and now, we have practically all of it under one roof which is very handy. Many of our customers say that they have been stopping here for apples as long as 25 years. I think we get a better price on some things than we could have gotten in the stores, because we have a large variety, having almost all vegetables, melons, sweet corn, honey, practically all of it grown by us.

"One thing is sure—you can't move to a new location if you own a farm. So if you don't sell good produce, your customers know where not to stop next time. We have a few signs near our stand, but should have a few more at some distance back along the highway. We are on the outside of a curve and it gives the driver a good view of the place at some distance back. Until this year we always had our paper bags printed with our name and address."

CROSS-POLLINATION IMPORTANT FOR McINTOSH

Yields from McIntosh apple trees are satisfactory if other varieties grow beside them, according to counts made by B. Esther Struckmeyer and R. H. Roberts.

This bears out the findings of counts in other years which have shown the effects of cross-pollination of apples.

On the McIntosh trees, more than 50% of the blossoming spurs bore fruit when Delicious, Wealthy, Northwestern Greening and Dudley were grown in the next row. As the distance between these varieties and McIntosh became greater, less spurs bore fruit.

Can You Identify *Injury By Apple Pests*

Economical Control is Only Possible If Correct Methods are Used for Each Pest

Figure 1. INJURY BY THE PLUM CURCULIO. According to Dr. C. L. Fluke, it is often mistaken for the apple curculio which is not serious in this state. Methods of control are different so be sure you know which one causes your trouble.

Figure 2. INJURY BY THE RED BANDED LEAF ROLLER. Note that the insect worked late in the season and ruined apples on which it fed.

Figure 3. LEFT, the work of the rosy apple aphid. It is not the same as the earlier grain aphid which leaves the trees after 2 or 3 broods and goes to the small grains in the field.

RIGHT, HAIL INJURY. This may be confused with insect injury, so look carefully.

Figure 4. EARLY AND LATE SCAB. Early scab may ruin the apple completely. Late scab causes the spotting which reduces the market value.

Figure 5. CODLING MOTH. Easily distinguished from apple maggot because of the size of the cavity.

Figure 6. APPLE MAGGOT (sometimes called the railroad worm). Note the little egglaying spots in the skin of the apple on the right and the dark lines indicating tunneling under the skin. In the cut apple on the left, the tunneling of the insect is easily seen. Tunnels turn brown from bacterial decay a short time after they are made by the little tiny white larvae.—Photos by Wis. Hort. Soc.

In The News

MILDER FUNGICIDES GIVE MORE AND BETTER APPLES

Use of some of the milder fungicides for apple scab seems to be resulting in more trees bearing every year and higher yields in apple orchards on the Door peninsula, according to J. D. Moore, G. W. Keitt and H. E. Smith.

In addition, use of these milder fungicides results in apples with better finish than those sprayed with stronger materials, such as liquid lime sulfur.

Yields were high and scab infection was slight in the Horseshoe Bay farm experimental orchards in 1950. Fruit and leaf injury data for different spray programs were collected in a two acre plot of McIntosh apples.

Spray programs included complete schedules of liquid lime sulphur, wettable sulfurs and certain organic fungicides. There were mixed schedules of liquid lime sulfur before bloom and wettable sulfur after bloom. The organic fungicides were a dithiocarbamate (ferbam), a glyoxalidine (341SC), a quarternary ammonium bromide (Stanofide), and two mercuric acetates (Tag and Puratized Apple Spray).

Fruit injury was limited almost entirely to russet in 1950. The usual russet on the cheeks of the apple believed to be caused primarily by liquid lime sulfur combined with lead arsenate was present, but in addition to this type of russet, another type attacked the blossom end of the fruit. This russet was found in all plots that received ferbam. It was most severe on plots that received only ferbam as the fungicide, but it appeared also on plots that had been sprayed with ferbam following earlier applications of the mercuric acetates or liquid lime sulfur.

This was the first time in the nine years of testing that ferbam was blamed for fruit injury.

The least leaf injury due to spray occurred on trees sprayed with an organic mercury-ferbam schedule, with ferbam only, or with part sulfur sprays.

The most leaf injury was found on trees that had received only liquid lime sulfur as the fungicide. Lime sulfur applications before bloom followed by ferbam after bloom, did not result in serious leaf injury.

From **What's New In Farm Science, 1951.**

HOW TO FREEZE CRANBERRY SAUCE

To Quick-Freeze 10 Minute Cranberry Sauce (Whole Berry Sauce)

Rinse berries in cold water. Combine 2 cups sugar and 2 cups water in saucepan. Boil rapidly for 5 minutes. Add 4 cups cranberries and cook, without stirring, until all the skins pop open, about 5 - 6 minutes. For softer, more broken berry, cook 10 minutes. Cool. Pour into freezing containers. Press down lightly with spoon to make sure fruit is covered with syrup and expel air bubbles. If glass jars, cans or unlined cartons are used, place a crumbled piece of waxed paper under cover. This will help keep fruits from floating above level syrup. Seal, label, and freeze according to manufacturers directions for type of container used. Makes 2 pints. Enter information in freezer record or file.—From Fresh Cranberry Institute.

PER CAPITA CONSUMPTION OF FRUITS DECLINES IN THE UNITED STATES

The consumption per person of fruit in fresh form in 1950 was 18% below the 1935-39 average (all fruits). Consumption of fresh apples was 15% below average. However, the consumption of canned and frozen fruits and also canned fruit juices was considerably above the 1935-39 average.

In 1935-39, the per capita consumption of commercial apples was 30.4 pounds per person, while in 1950 it was 25.9 pounds.

Consumption of canned fruit was 14.9 pounds in the earlier period and 19.4 pounds per person last year. Of canned fruit juices, it was 3.9 pounds as compared to 13.6 last year.

From these figures it can readily be seen that we are not producing too many apples, but that folks are not eating as many as they used to do.

IMMATURE SQUASH GOOD SUBSTITUTE FOR SUMMER SQUASH

Experiments by James G. Moore may give housewives a new type of squash for summer use that's better than the kinds that are sold now.

Moore found that if they were picked before they were ripe, certain varieties of true squash (Curcurbita maxima) have better eating qualities than the common variety of summer squash (Curcurbita pepo). He says these squash can be picked any time after they get about three inches across until the rind starts to get hard. The same test for maturity is used as for summer squash—if the skin can be punctured easily by the thumbnail, the squash is in good condition to eat.

Sweet Meat, Buttercup, Green Gold, and Rainbow were planted the first year. Because of its poor eating qualities, Rainbow was replaced by Red Banana in the 1950 tests. Members of the Department of Home Economics tested these squash and considered Buttercup and Green Gold about equal in quality. Sweet Meat was less desirable and Red Banana was the poorest of the varieties tested.

To meet requirements of commercial production, these squash would have to give high yields, be readily accepted by consumers, and compete in price with ordinary summer squash.

To date, Green Gold has yielded more per plant than any of the others, but all have produced satisfactorily.

Price has proved to be no problem, as the only competition comes from summer squash. In 1950, Green Gold was sold through a Madison chain store, priced the same as summer squash and Acorn or Table Queen squash. Sales were good, although the product was not "pushed." The manager reported many favorable comments and frequent repeat orders.

Ruth S. Dickie, chief dietitian at the Wisconsin General hospital, has used this squash for three years.

Moore believes that good methods of promotion and selling could acquaint many people with the desirable qualities of this squash and bring about its wide use.—**From What's New in Farm Science. 1951**

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

TWO SERIOUS DISEASES OF RASPBERRIES

By H. E. Halliday

Question: What diseases of raspberries are apt to be more prevalent in a wet year such as 1951?

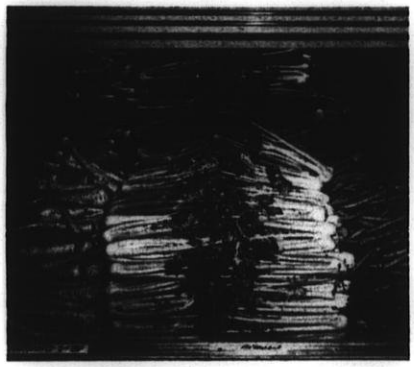
Answer: Anthracnose and spurblight.

Question: What do these diseases look like; what damage do they do and how may they be controlled?

Answer: Anthracnose, a fungus disease, is seen on the canes as small grey-centered spots. These may be separate or so numerous as to coalesce, giving large areas of the bark a grey color. The disease kills each area of the plant which it attacks. This is particularly important when the infection is heavy enough to affect the new growing tips and fruit pedicles. The fruit is also attached and spotted at times. The fungus over-winters on the old canes. In the spring, spores are liberated which attack the new growth. The grey centered spots soon appear and from them more spores are liberated, rapidly increasing the spread of the disease.

Spurblight is primarily a disease of red raspberries. It becomes evident in July or August as brown or violet-brown discolored areas, mostly on the lower halves of the new canes. These areas are usually at the nodes, and the bud is killed or seriously weakened. The following spring these areas are grey and the outer bark is cracked and loosened. This can be very important if severe winter injury is experienced and we are depending on the buds on the lower half of the canes to produce the fruit.

Control: Good aeration of the patch is important in control of both these diseases. This means planting where there is good air movement through the patch. Planting the rows far enough apart, and sufficient thinning of the plants in the rows. For a spray schedule to control these diseases, please refer to the March, 1951, issue of the Wisconsin Horticulture magazine. Further recommendations will be given next March.



A display of vegetables in a modern grocery store. Vegetables are kept cool and displayed to advantage. How can the housewife resist such a tempting display.

HOW WE COVER OUR STRAWBERRIES

Mr. John F. Swartz of Swartz Nurseries, Kenosha, writes as follows in regard to their method of covering strawberries in fall.

"We put on the straw after a few light frosts, but before the temperature drops to 20 degrees F. In a year when snow comes early and stays on all winter, the cover is important only for spring thaws and of course to have the ground covered when picking to keep the fruit from becoming dirty.

"We use roll-baled straw. This is easier to shake loose than square bales and gives an evener cover than hauling bulk straw into the field. We spread a row of bales along the edge of a field, one bale to each 2 rows. These are unrolled to cover about 30 feet. Then another row of bales is scattered at the end of the space covered. In this way, the whole field gets an even cover without hauling away surplus.

"We apply about four inches of straw while still loose. This thickness leaves an occasional leaf showing through.

"Many growers have different opinions about covering. We've seen beds of good berries that were not covered, and many growers cover heavier than we do. Marsh hay is probably cleaner than straw if only a small amount is needed."

WEEDS AND STRAWBERRIES CONTROLLED BY CHEMICAL WEED KILLERS USED IN FALL

Results of fall use of chemical weed killers on Strawberry plants have been very encouraging, according to D. D. Hemphill, writing in Horticultural News of the Missouri Horticultural Society in October. He writes that 2, 4-D and Craig Herbicide 1, applied in late October, kills chickweeds, wild beet and other over-wintering weeds, and appears to supppress grass seed germination the following spring. 2, 4-D must not be applied during the period when fruit buds are forming for next year's crop, which in Missouri is from late August to late October (approximately the same in Wisconsin) as yields may be reduced and deformed berries produced. Little or no damage results from 2, 4-D applied after October 20.

2, 4-D is used at the rate of 1½ pounds of amine salt (3 pints of 40 percent material per acre) and gives good control of over-wintered weeds and no reduction in yields. Approximately six pounds of Crag Herbicide 1 are necessary to obtain satisfactory weed control.

A small boy, with a penny clutched tightly in his hand, entered a toy shop.

After a few minutes the proprietor, driven to distraction after showing him most of the stock said:

Shopkeeper—"Look here, my boy, what do you want to buy for a penny, the world with a fence around it?"

Boy—"Let's see it."

APHIDS MAY SPREAD DISEASE FROM GLADS TO VEGETABLES

Growing gladiolus near some vegetable crops may be dangerous.

J. C. Walker and George Bridgmon recovered three types of virus from gladiolus stocks that showed mottle and flower break—the virus symptoms in gladiolus. They found the cucumber mosaic virus, the tobacco ring spot virus, and a strain of yellow bean mosaic virus in the glads.

The tobacco and bean mosaic viruses injure bean crops, but the cucumber virus does not. The cucumber and bean viruses are carried by aphids. The tobacco ring spot virus can be transmitted by rubbing healthy plants with an infected plant, but there is no known aphid carrier.

From **What's New In Farm Science,** 1951.

CUCUMBER SCAB

Scab, or spot rot, is the most important disease of cucumbers in Wisconsin, so for three years, J. C. Walker and A. B. Wiles have tried to breed a resistant pickling cucumber.

Maine No. 2 is a resistant variety It has vines somewhat like National or Chicago, is slightly later in the season, but yields fruit that isn't suited for pickling because of its long spindly shape and large warts. Otherwise, it seems to be satisfactory.

A new variety is being developed by backcrossing and selection to combine the scab resistant qualities of the Main cucumbers and the desirable shape and pickling qualities of the National Pickling variety.

Main No. 2 was bred to National for three generations, then the rest of the generations bred back to National. After each seed harvest, the seeds were planted and the seedlings exposed to scab. Plants that became infected were discarded.

It would normally take a long time to fix scab resistance, but by growing three generations each year in the greenhouse, the workers were able to speed-up the process. The cucumbers in the sixth generation looked much better than Maine. Improved seed from these plants will probably be available for use in the worst scab areas in 1952. This isn't the final answer, however. Several more generations will be necessary to fix the quality and resistance of the new variety.

From **What's New In Farm Science,** 1951.

MARSH HAY BEST MULCH FOR EVERBEARING BERRIES

Marsh hay seems to be the best material for mulching everbearing strawberries, according to the results of trials at the Experiment Station in 1950.

James G. Moore tested four different mulching materials—sphagnum moss, marsh hay, fine shavings and burlap—on six varieties of everbearing strawberries.

Mulching strawberries the year they are planted isn't common practice, but with the everbearing varieties which produce in the fall of the planting year, mulching is necessary for the production of a clean crop. Unmulched strawberries are sometimes so dirty and sandy that they are not usable.

Each of the mulching materials was spread 1½ to two inches deep and about 18 to 20 inches wide.

It was necessary to replace some of the materials due to loss in heavy wind and rain. The burlap was anchored with "staples" of baling wire.

Although the sphagnum moss and shavings kept the dirt from the strawberries, some of these materials were on the berries at harvest. The berries mulched with burlap became the dirtiest—probably due to rain beating the dirt through the meshes of the cloth. The shavings washed away badly in the heavy rains.

Weeding was much more difficult with a burlap mulch, but it was the easiest material to apply. Sphagnum moss is the least available of all materials tested.

The plants mulched with burlap gave the poorest yields. Those mulched with marsh hay gave the best yields. However, part of the high production in the marsh hay plots may have been due to slight soil differences.

From **What's New In Farm Science,** 1951.

SQUASH AND PUMPKIN

By Paul Work, New York College of Agriculture

NO VEGETABLE excells the squash in its variety of form and color. Among commonly grown forms, they range in size from the little Butternut, Table Queen and Buttercup to the great Blue Hubbards which may weigh 60 pounds—or more. That is leaving out the mammoth Chili which may be even larger.

What is a squash and what is a pumpkin? These two terms are loosely used and probably always will be. One of our great seed houses tried several years ago to correct our usage by cataloging summer squash as summer pumpkin, which it really is, but the name wouldn't stick.

In the United States, three species, all of the genus **Cucurbita,** are common. Two of them, C. maxima and C. pepo, are easily separated. While botanists make use of several characters, the simplest for the layman is the difference in the peduncle or fruit-stem: In C. maxima it is round, fleshy and somewhat spongy, sometimes an inch and a half or two inches in diameter. In C. pepo the fruit-stem is more slender, hard and definitely ridged.

Summer Squash

Summer squash is very mild in flavor and rather watery, the latter character being shared with the pumpkins which are also somewhat granular in texture.

Table queen, often called Acorn, is notable for the variation in flavor, texture and thickness of flesh, even among plants in the same row, some being excellent, others inferior. A few seed houses have undertaken to "Pure up" their strains in these quality characters. Some Table Queens possess a distinct acid tang that some like and some do not. The cushaws or **moschatas** vary widely in table quality, but most of them are considered inferior to the better hubbards or to Quality or Delicious.

One notable exception is the Butternut, the little dumb-bell shaped, buff-colored, thick-fleshed variety that was long hidden away in New England as more or less of an heirloom variety until it broke into the trade some years ago

and achieved considerable well-deserved popularity. Some strains have the fault of cracking rather badly. The blocky, thick-necked type is preferred, but there seems to be a good deal of variation in length and thickness of neck, even on the same plant, where the genetic constitution is identical.

Nutritional values among the squash vary widely. Summer squash, including Yankee Hybrid, the straightnecks, the cocozelles and the zucchinis are to be eaten because we like them, not because their contribution is important. On the other hand the members of the maxima group are good sources of energy, minerals, vitamins, especially vitamin A of the carotin, associated with yellow color.

From Horticulture (Mass.) Condensed.

CHLORDANE EXCELLENT AGAINST STRAWBERRY WEEVIL

From Kentucky comes the information that chlordane dust is much better than DDT against the strawberry weevil. Large quantities of a dust mixture of 5% chlordane and 5% DDT are being used by growers at the rate of 20 to 30 pounds of dust per acre. The chlordane controls the weevil and the DDT a lot of other pests, including tarnished plant bug, which causes cat-facing of berries, the strawberry crown borer, cut worms, etc. This dust should not be used closer than 3 weeks ahead of harvest.

NURSERYMEN OFFER AWARD FOR HORTICULTURAL RESEARCH

The American Association of Nurserymen, Inc., 635 Southern Building, Washington 5, D. C., announces that the Norman Jay Colman award for Horticultural Research will be awarded at its annual meeting in Detroit during the week of July 13, 1952. The purpose of the award is to stimulate research on the basic problems of horticulture, as they pertain to the nursery industry.

In 1949 the winner was Dr. Donald Wyman of the Arnold Arboretum for his book, "Shrubs and Vines for American Gardens." In 1950 the award was made to Dr. L. C. Chadwick, of Ohio State University for his paper, "The Best in Taxus."

Garden Gleanings

ACORNS should be planted very soon after they are ripe or they will lose their vitality. In nature they fall to the ground and are often buried by squirrels, who forget them, leaving them to grow the next year. If they are to be stored they must be kept in a damp place.

COOL NIGHT TEMPERATURES are necessary for best plant growth. Plants produce food during the daytime, and store it in different parts of the plant. This action is slowed down by a cooler night temperature. If house plants, for example, are grown at high night temperatures, they become spindly and frail.

WHITE CLOVER seeds may survive for 10 to 15 years in the soil and up to 22% of such seeds may finally germinate when conditions are right. These seeds have a hard covering which resists the action of soil, moisture and frost and it's nature's way of preserving the species. So if you find white clover growing in your lawn when you didn't sow any, that may be the reason.

STORING TUBEROUS BEGONIA BULBS. If you are an average home owner and do not have a root cellar in which the humidity is high so that bulbs will keep without dehydrating, it will be necessary to protect the tuberous begonia bulbs as well as dahlias and other soft bulbs from drying out.

After digging the bulbs should be cured. This may take several weeks. Put them in the basement where it is warm and dry. The bulbs will "sweat" until cured. If stored before sweating is over, they may become damp and turn moldy. After they are thoroughly dried, place them in a container that can be closed air tight, such as a wide mason jar, a coffee can with tight tin cover, etc.

About a month later, examine them, and if they are still damp, dry them out some more. Best temperatures are from 40 to 50 degrees.

DAHLIA STORAGE. Dahlias can be stored successfully in a good bulb or root cellar where the humidity is high and temperatures are from 40 to 45 degrees. Under these conditions, it is not necessary to pack the plant. If such a root cellar is not available, then it will be necessary to pack in dry peat moss, sawdust, etc., and preferably kept in an air tight jar or crock. Here again, curing is important, but the packing material may absorb moisture coming from the tubers. Examine them for moldiness and dry them more if moisture is present.

PROTECT TREES FROM MOUSE AND RABBIT INJURY

An easy way to protect trees from rabbit injury is to wrap the trunks and lower branches with common newspapers. Take as many sheets as can be wrapped conveniently. Rabbits will not chew through the paper. In spring the paper can easily be removed.

To protect trees against mouse injury is a different problem. Mice feed in runways in the grass under the trees. If they reach a tree and there is a scarcity of food, they may eat off the bark entirely around the trunk.

It's best to reduce the mouse population with poison bait. You may be able to purchase poison oats or wheat in stores. Place it in runways and throw over the runway a protection such as a piece of board, a small forkful of hay, etc., to prevent animals from eating the wheat. The mice like to feed under protection out of sight of their enemies. The trunks of trees can also be protected with ¼ inch wire mesh screens.

Repellent paints, such as a resin, and alcohol solution are effective if the food supply is plentiful; they repel from the treated plant to the uncovered. However, they have not been found effective when ground is covered with snow over which there is a crust and rabbits find it difficult to find natural food.

Don't forget that in Wisconsin you may hunt rabbits on your own property at any time of year, though if you live in the city it will be necessary to check the city ordinance on firearms.

Success is getting what you want; happiness is liking what you get.

—Milwaukee Milk Producer.

Do You Grow Plants Indoors? Here Are Some Answers to

Questions About Growing Houseplants

By G. E. Beck, Dept. of Hort., U. W.

QUESTION: I have grown **African Violets** for several years. Now I find a few plants are developing brown leaves in the center. These leaves also seem to be wrinkled and quite hairy. Can you tell me what causes the trouble and how to correct it?

ANSWER: The symptons that you describe indicate that your African Violets are infested with **cyclamen mite.** This tiny pest is too small to be seen by the naked eye. Dimite, which is manufactured by the Sherwin-Williams Paint Co., is an excellent material to use for the control of mite. Many garden supply stores, dealers which handle pest control materials, florists and Sherwin-Williams paint stores stock Dimite. Only ¼ to ½ the strength recommended by the manufacturer should be used however. Spray the plants at weekly intervals for three weeks, then three more applications at two week intervals after which an application every month or six weeks will be sufficient to control any remaining mite.

Poinsettia Bloom

QUESTION: We planted our gift poinsettia plant in the garden and it did very nicely all summer. We then brought it into the house, but it doesn't start to bloom. What can we do?

ANSWER: Under normal conditions poinsettias start to initiate their flowers about the middle of October, of course they aren't visible for several weeks after that. For good flower bud set and development grow your plant where it receives full sunlight during the day but it must not receive any artificial light after sundown—poinsettias need short days to induce them to flower. The natural day-length which occurs during mid-October is short enough to cause poinsettias to start flower initiation. Artificial light at night increases the length of day and would prevent flower formation. During the time that the flower buds are developing a night temperature of 60° F. is best. The day temperature should be warmer than this of course.

Fertilizer For House Plants

QUESTION: We have been giving our house plants some liquid fertilizer during the spring and summer. Shall we continue to feed them from now on and through the winter?

ANSWER: The average house plant will require less fertilizer during the fall and winter than it did in spring and summer because conditions will generally be less favorable for growth. The exact fertilizer requirements of your various plants will vary much with the kind and size of plant, but much less will usually be required from now until spring.

Good Foliage Plants

Question: Can you give me the names of some good foliage plants which will do well in average conditions in our home? Also, will you tell us how much light they require in the winter?

ANSWER: **Philodendron cordatum, Pothos** (Scindapus) **aureus,** Nephthytis, Chinese Evergreen **(Aglaonema simplex),** English Ivies, Grape Ivy **(Cissus rhombifolia), Peperomia sandersi** and **obtusifolia,** Sansevierias, and the Rubber Plants will all do well under average home conditions. They will all do best in shade. These tropical plants require a good moisture supply (Sansevierias are an exception) but they also demand a soil that drains well. Sansevierias should be grown in a soil that is kept slightly on the dry side. If these other foliage plants are allowed to dry out, their growth will be checked. They are never as satisfactory after this has happened.

Mealy Bugs

QUESTION: Little white, wooly spots are developing on several of our house plants. I think it is an insect. How can it be controlled?

ANSWER: Mealy bugs are the insects which you describe. I'd suggest that you place the infested plants on the basement floor, in a laundry tub or in the bath tub and syringe them with a forceful stream of water to dislodge the cottony masses of this sucking insect. After this is done spray the plants with a nicotine sulfate (Black Leaf 40) and soap solution.

Use two teaspoonfuls in a gallon of warm water which has been made soapy with one of the old-fashioned true soaps such as Fels Naptha, P & G, etc. or Dimite as recommended for cyclamen mite control could also be used. Use either of these materials regularly as recommended for cyclamen mite control.

Geranium Fail to Bloom

QUESTION: Last May we set out quite a large number of geranium plants in our garden. Some are growing in the shade and some are in almost continuous sunshine. The soil is quite heavy and fairly fertile. The plants have made a vigorous growth but do not have many blossoms. What is the trouble?

ANSWER: On the common geranium, **Pelargonium hortorum,** vigorous growth usually means good flowering. Perhaps the plants flowered heavy while you were on vacation. In a more serious vein, an excessively high nitrogen level in the soil or poor varieties may, at least in part, be the cause of the trouble.

Today's trying times are tomorrow's good old days.—The Ripon Weekly Press.

From the Editor's Desk

REPORT OF THE NOMINATING COMMITTEE

The nominating committee to nominate officers and members of the board of directors of the Wisconsin State Horticultural Society, consisting of Mr. Arthur Brunn, West Allis; Mr. Walter Thenell, Sturgeon Bay and Mr. M. H. Ward of Durand, have nominated the following:

For president, Mr. Arnold Nieman, Cedarburg.

For vice president, Mr. Marshall of Casco.

To succeed Mr. Arthur Brunn, Mr. Le Roy Meyer, Milwaukee; Mr. Henry Mahr, Caledonia; Mr. Frank W. Meyer, Milwaukee.

To succeed Mr. W. Thenell, Sturgeon Bay, Mr. Ransome A. Severson, Sturgeon; Mr. Joseph R. Writt, Ellison Bay.

To succeed Mr. M. H. Ward, Mr. William Connell, Menomonie, and Mr. John McIlquham, Chippewa Falls.

WE APPRECIATE THIS

Time for another Garden Writer's conference. It will be on November 7 at Williamsburg, Va. . . Want to compliment you on the splendid publication, Wisconsin Horticulture, which is tops in horticultural literature. Signed, Bess Hardy, secretary, Garden Writers Association of America, Dayton, Ohio.

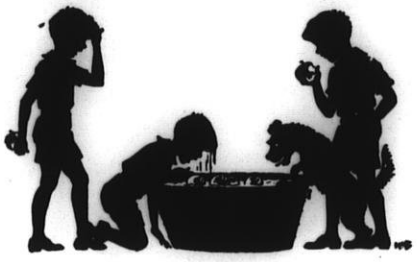
GEORGE W. SCOTT

George W. Scott, founder of Scott's Rose Gardens, Inc., Cudahy, Wis., died October 10. Mr. Scott had earned an enviable reputation as a rose grower and sold cut flowers on the Milwaukee wholesale market for two score years. He founded the gardens in 1926.

JENS JENSEN

At 91, Jens Jensen, the Dean of the world's landscape architects and father of the Chicago park system, passed away at his home at Ellison Bay, Wis., on October 1. He had been ill for about 2 years.

Mr. Jensen was born in Denmark and came to the United States in 1924. His first job in Chicago was scraping mud off the boulevards of the city



park system. Later, he planned some of the city's largest parks and was instrumental in establishing the Cook County Forest Reserve System,

IN APPRECIATION

To all our garden club members, for having made possible our Flower Show, held at the Y. W. C. A. in Milwaukee, September 26 and 27, please accept my sincere thanks.

Your interests and efforts as committee workers and exhibitors created a show which was truly beautiful and acclaimed by the many visitors as artistically outstanding.

It was a really successful venture and a pleasant satisfaction to all of us.—By Mrs. Chester Thomas, show chairman.

Abe Lincoln said:

1. You cannot bring about prosperity by discouraging thrift.
2. You cannot strengthen the weak by weakening the strong.
3. You cannot help small men by tearing down big men.
4. You cannot help the poor by destroying the rich.
5. You cannot life the wage earner by pulling down the wage-payer.
6. You cannot keep out of trouble by spending more than your income.
7. You cannot further the brotherhood of man by inciting hatred.
8. You cannot establish sound security on borrowed money.
9. You cannot build character and courage by taking away a man's initiative and independence.

SEE YOU IN JANUARY

As has been our custom, Wisconsin Horticulture will not be published in December. Convention programs will therefore appear in the January issue. Sorry we can't include more of them this time.

WISCONSIN NURSERYMEN'S CONVENTION

Milwaukee, Schroeder Hotel
December 5-6

The Wisconsin Nurserymen's Association will hold its annual convention in the Schroeder Hotel, Milwaukee, on December 5-6. An interesting program with out-of-state speakers is being planned by the Board of Directors.

Mr. Paul Reynolds of the Wisconsin Taxpayers' Alliance will speak at the Wednesday noon luncheon. There will be an address by H. P. Nutley of the Parker Pen Co. on merchandising, and on the morning of the second day, Dr. Chadwick of the Ohio Experiment Station will talk on new varieties.

Officers of the Wisconsin Nurserymen's Association are; L. L. Kumlien, Janesville, pres.; Howard W. Anderson, Wisconsin Rapids, vice pres.; Thomas Pinney, Sturgeon Bay, sec.-treas.

NEW BOOK ON LILIES

If you are a lily enthusiast, the book, "The New Book of Lilies," by Jan De Graaff, internationally known lily expert, is highly recommended. It contains 176 pages and is published by M. Barrows and Co. Inc., New York, N. Y., and price is $3.50.

The book covers many recent developments which have added to our knowledge of lilies. It is well illustrated, including 17 natural color photographs.

GARDEN TALKS PROMOTED BY MILWAUKEE CIVIC GARDEN CENTER

Interested gardeners were invited to attend a series of 9 garden talks being conducted by the Milwaukee Civic Garden Center in cooperation with the Wisconsin College of Agriculture.

The meetings began on Friday, October 12, in the conference room of the Milwaukee Public Museum building and continued for 9 consecutive Friday evenings. The talks cover all phases of horticulture. Dr. Carl Schwenvener is president of the Center and Ronald Padway is secretary.

OUR COVER PICTURE

Kraut

Our cover picture is a photograph of a painting by Mr. Chris Olson of Berlin, Wis. Its title is "Kraut." Of the picture, Mr. Olson wrote, "Fresh, crisp cabbage reminds us of late fall days and kraut making time. The fresh cut cabbage is tamped into the big jar and salt sprinkled on. How good it tastes during the winter months to come."

Have you ever made sauerkraut? If not, you've missed something. Those of us who have had that interesting experience remember it with pleasure. How much less romantic to just go to the grocery store and buy a tin can of sauerkraut. There is something fascinating about growing the crop, bringing it in, and preparing it for the table.

May we introduce Mr. Chris Olson. He is a member of the Board of Directors of the Wisconsin Berry and Vegetable Growers. He lives on a farm north of Berlin and grows Everbearing strawberries very successfully. He loves to paint pictures and has painted a series on berries, vegetables and the farm, which, in our opinion, show he is a real artist, and has a love of rural life. A number of his paintings have been hung in museums and art galleries. He likes to show them at our meetings and we love to see them. Hort. Soc. Photo.

WHICH SHALL IT BE— GLADIOLUS OR GLADIOLA

Many years ago, the American Gladiolus Society conducted a poll to settle the question of whether our favorite flower should be called "gladiolus" both singular and plural, or if the name "gladiola" should be used.

By an overwhelming majority, gladiolus growers throughout the nation voted that the flower should be called the "gladiolus" both singular and plural. Now, however, we again see the word "gladiola" in print and even hear it over the radio. Shall we stick to the spelling and pronunciation agreed upon years ago or shall we also use "gladiola?"

The members of the Wisconsin Gladiolus Society should discuss the question and make recommendations.

Sign observed on a honeymoon car: "Until draft do us part."—Burnett County Leader.

Women's Auxiliary Program

Annual Convention
Wisconsin State Horticultural Society

Retlaw Hotel, Fond du Lac
Tuesday, November 27

10:00 a.m. Call to order by the President, Mrs. G. J. Hipke, New Holstein. Announcements.

Freezing Fruits and Vegetables; Varieties and Handling Methods. By Prof. O. B. Combs, chairman, Department of Horticulture, U. W.

11:00 a.m. Varieties of House Plants You Can Grow. Exhibit of foliage and blooming plants. By Prof. G. E. Beck, Department of Horticulture, U. W.

11:30 a.m. Annual business meeting. Election of officers. Report from committees.

12 M. Luncheon for Auxiliary members, husbands and guests.
Luncheon speaker: Prof. G. E. Beck on "You, Too, Can Grow House Plants."

AFTERNOON PROGRAM

1:45 p.m. How the exhibits were judged. Comments on recipes and apple cookery. By Mrs. Lillian Moehrke, Home Economist, Wisconsin Power and Light Co., Fond du Lac.

2:30 p.m. Fun With Flowers, Fruits and Vegetables. How to use the materials you have for holiday decorations. By Mrs. Forest Middleton, Madison.

4:00 p.m. Tea for members and guests. Prize winning samples of apple cookery will be served at the tea.

6:30 p.m. Annual banquet, Crystal Ballroom. See Horticultural Society program for details.

PREMIUM LIST

Womens' Auxiliary Exhibits

Apple dishes: Bring a pie or apple dessert made from the new Wisconsin Apple Institute recipe bulletin, "Wisconsin Apples—44 New Ways to Use Them."

Recipe must be shown—either copied or in marked copy of bulletin. If you have not received a copy of the bulletin, write Wisconsin Horticultural Society, 424 University Farm Place, Madison 6, Wis., for one.

Arrangement: Fruit and/or vegetables with or without other accessories for holiday season.

Premiums: Judging will be by the Merit System. Awards: Excellent, $1.00; very good, $.75; good, $.50.

Notice: **All entries will be served at the tea at 4 p.m.** Copies of new recipe bulletin by Wisconsin Apple Institute will be sent on request.

Committees

EXHIBITS AND BANQUET. Mrs. Charles Braman, Waupaca, Chm.; Mrs. Oscar Conrad, Hales Corners; Mrs. Henry Dorn, New Holstein; Mrs. Waldemar Vollstedt, New Holstein; Mrs. LeRoy Meyer, Hales Corners; Mrs. Roy Sewell, Milwaukee.

TEA. Mrs. Marshall Hall, Casco; Mrs. Fred Schildauer, New Holstein; Mrs. Fred Magnus, Appleton; Mrs. Arnold Nieman, Cedarburg; Mrs. Irwin Lorenz, Milwaukee.

WELCOME. Mrs. R. L. Marken, Kenosha; Mrs. Don Reynolds, Sturgeon Bay; Mrs. William Connell, Menomonie; Mrs. N. A. Rasmussen, Oshkosh; Mrs. Arnold Nieman.

RESOLUTIONS. Mrs. Dawson Hauser, Bayfield; Mrs. Arno Meyer, Waldo.

NOMINATIONS. Miss Bessie Pease, Oshkosh; Mrs. R. L. Marken.

LUNCHEON ARRANGEMENTS AND TICKETS. Mrs. Arthur Bassett, Jr., Baraboo; Mrs. John McIlquham, Chippewa Falls; Mrs. Conrad Kuehner, Madison; Mrs. Grace Pfeiffer, Racine.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

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WALTER A. KURTZ
Chilton

Vice President
GORDON SHEPECK
Green Bay

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

Treasurer
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Gordon Shepeck, Green Bay
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Dewey Sleezer, Lake Geneva
Cecil McAdams, Mosinee
Walter Axel, Sheboygan
Dr. R. H. Juers, Wausau
Dave Puerner, Milwaukee
Paul Ravet, Marinette
Leland Shaw, Milton

Winter Care of Gladiolus Bulbs

By John W. Perkins, Neillsville

The quality of next year's spikes depends to a large extent on the care gladiolus bulbs receive between digging time and planting time. Fertilization, watering, cultivation, and enthusiasm cannot produce good spikes from bulbs weakened by improper winter storage.

As a small grower, I shall discuss this problem from my own experiences in the hope that it may be of interest to other amateurs. Many of the suggestions I shall make would not be practical for large-acreage, commercial growers.

Proper Digging

Winter care of glad bulbs should start with proper digging. Since the new bulb makes most of its growth after the plant has bloomed, digging must be delayed long enough to produce a mature bulb. I used to plan on digging eight weeks after the plants had blossomed, but I am now convinced that five to six weeks is enough time to mature the bulbs and will give a healthier crop of corms. There is definitely more danger of disease if the operation is delayed.

An easy method of digging for the small grower is to loosen the plants by using a spading fork on both sides of the row. Then grasp the leaves and pull the plant from the row. Shake off the soil and cut off the stem close to the bulb. A pair of small pruning shears will be helpful in removing the tops. Any plants that show signs of disease should be discarded. Bulbs should be handled with care so that they are not bruised or cut, as disease can be easily introduced in that way. Since thrips often move from the tops to the exposed bulbs, I like to remove the corms from the patch immediately after digging.

John W. Perkins, instructor in agriculture, Neillsville High School, digging his gladiolus bulbs.

Dry Rapidly

It is important that the corms be dried as rapidly as possible, because slow curing tends to increase losses from disease. I try to dry my bulbs in the sun for a period not exceeding one day, then move them to the garage, where they are allowed to cure for several days before being transferred to the basement for more drying. I keep the doors and windows open in the garage to provide good drying conditions.

Cleaning

Three or four weeks after digging, or when the new bulb will break clean from the old corm, the cleaning operation is started. The bulbs are culled carefully for disease at this time. Any that do not break clean from the old part or that show abnormally dry and black colored connecting tissue are discarded as suspicious bulbs. The fresh basal scar is then dusted with Spergon to prevent new disease infection. Each variety is then placed in a labeled paper bag and a small quantity of 5% of 10% D.D.T. dust added. The bag is closed and rolled in the hands for a few seconds to coat each corm with the dust. This will give complete control of thrips during storage and can be left on all winter without danger of injury to the corms.

Storing

I store my bulbs in cloth sacks made of muslin. Variety names are printed on small wood labels of the type used by nurserymen on shrubs and fruit trees. These are easily wired to the cloth sacks. The sacks are suspended from the ceiling of a small unheated room in one corner of my basement. I keep a thermometer in the storage space and find it quite easy to maintain a temperature of 45 to 50 degrees during the storage period. The room has an outside opening that is used to regulate the temperature and provide ventilation.

I always peel all bulbs before planting. While this takes extra time, I feel it is a great help in detecting

diseased bulbs at planting time. Peeling can be done early enough in the spring so that it need not interfere with the garden work.

I also remove all of the buds except the strongest. I have found that a better show spike is produced when this is done. Also bulbs won't run out so quickly if they are kept from dividing. A vegetable peeler with a de-eying point is a handy device for cutting out the eyes. I always dust the gouged areas with sulphur after the operation.

It is a thrill to any glad raiser to handle plump, heavy disease free, and thrip-free bulbs at planting time. Let us all resolve now that we will observe the few basic principles of winter care that will give us that kind of bulbs next spring.

DRY GLAD BULBS FAST

Forced air drying, at a temperature of from 83 to 85 degrees F. is very beneficial for good storage of gladiolus bulbs, according to Mr. Roger Russell of Madison.

During a season of high moisture and somewhat sub-normal temperatures, as we have had again in 1951, bulb diseases are likely to become a serious problem. Last year, Roger reports, bulbs which were dried slowly developed trouble and many were discarded. Those dried rapidly kept much better.

Consequently, he has built a small drying room, about 12 by 14 feet, equipped with racks, which will hold about 200 trays. The bulbs are spread out in the trays about 2 or 3 layers deep. A hot water heating system was piped into the drying room so the temperature can be raised to from 83 to 85 degrees F. A large 18 inch fan is used to stir up the air and with good ventilation in the room, the moisture leaves rapidly.

The bulbs are washed immediately after being dug, then dipped in a fungicide such as Spergon or Arasan plus DDT for thrip control.

Mr. Russel reports that with this system the bulbs are usually quite dry in from 4 to 5 days.

A good way to widen out the straight and narrow path is to have more people walk on it.—Wisconsin Farmers Union News.

PRESIDENT'S MESSAGE

We have had a very good year despite unfavorable weather. Gladiolus spikes shown at all shows I attended were excellent, from the seedling show at Jefferson to the regional at Wausau. Our state show at Two Rivers was one of the best we have held. The location in the Hamilton Community Building was very good and the committee reports a balance of over $500, which is great.

I want to officially thank John Gates and his able management of the show and all his committee members for a swell job. Also, I want to thank the committee members and officers of the various chapters of the State Society for their splendid work and cooperation. The committees we appointed all pitched in to make the 1951 gladiolus year a successful one for the Wisconsin Gladiolus Society. Thank you all.

May I also suggest that we stand a moment in silence for the passing of our very good friend and bulb auctioneer, Walter Spranger of Waldo, and also our good co-worker, Mrs. Peter de Pagter of Cedar Grove. All were good workers and loyal members of the Society. By Walter Kurtz, president.

GLADIOLUS CORM CARE IMPORTANT NOW

By G. E. Beck, Madison

Are you worrying about how your gladiolus corms are going to store this year? Alert growers may well have some concern because with the good moisture supply which is present in the soil and with the generally favorable growing conditions which prevailed, corms are somewhat soft and they have a high moisture content.

What can small growers do to help reduce potential storage losses? Here's a few suggestions. Cut tops off at the top of the corms. Place the corms in a single layer in flat containers. This allows for maximum air circulation around the corms. Place the corms in a warm, dry location. A dry attic would be ideal if a warm temperature, (about 80° F. is fine) could be maintained. An electric fan directed on the corms will help to hasten the drying. Rapid drying is one of the main keys of success for good gladiolus storage. As soon as the corms are dried they can be separated and the mother corms removed. As this is done dust the corms with a fungicide to control the fungi before they can grow up into the moist, fresh scar at the base of the corms. Spergon is a good fungicide for this purpose. Thrip control is important too. 5% D.D.T. dust can be mixed 50-50 with the fungicide so that both storage diseases and thrips will be taken care of with a single application.

Rapid drying plus fungicide and insecticide applications are essentials in preparing corms for storage.

The storage after rapid drying, should be dry, ventilated, and cool. A temperature of 35° to 40° F. is best for the storage.

HAS YOUR MEMBERSHIP EXPIRED

Membership dues in the Wisconsin Gladiolus Society can be paid now by sending a check or money order, payable to the Wisconsin Gladiolus Society, and mailed to Mrs. Leonard Wightman, Route 3, Plymouth, Wis., treasurer. Dues in the various organizations with which the Society affiliated are as follows:

Member for 1 year in the:

Wisconsin Gladiolus Society, including affiliation with the Wis. State Hort. Soc. $1.25

For wives of Wis. Glad Soc. or those already members of the Wis. State Hort. Soc. ..... $ .50

Wis. Glad Soc. and New England Glad Soc. $3.50

Wis. Glad Soc. and two year membership in the New England Glad. Soc. $5.00

Wis. Glad. Soc. and the North American Gladiolus Council $2.25

Wis. Glad. Soc. and New England Glad. Soc. and the North American Gladiolus Council $4.50

ANNUAL CONVENTION

North American Gladiolus Society, Hotel Schroeder, Milwaukee

January 17 - 20

Feature Entertainment, Friday evening, January 18, at Blatz Auditorium, Milwaukee.

A talk on soils by Prof. G. E. Beck, U. W., Madison; Canadian Activities by J. C. Taylor, Guelph, Ontario; Scoring Seedlings, by Tom

(Continued on Bottom of Next Page)

How Landscape Architecture Can
Improve Outdoor Living At Home

By G. Wm. Longnecker,
Dept. of Horticulture, U. W.

Provision for outdoor living in a home grounds area mean a complete use of the grounds about a home. It means having facilities to enable one to enjoy the sun, shade and fresh air of the out-of-doors in ones own yard. Outdoor living at home is fun and it may mean a more healthy family.

This brings to mind the fellow who grew to a ripe old age. Someone asked him the reason for his being healthy and he said when he was first married he made up his mind he would get along happier with his wife if he didn't argue with her; so he decided to take a walk whenever it looked as though there might be difficulties. As a result he said he had spent a healthy, outdoor life.

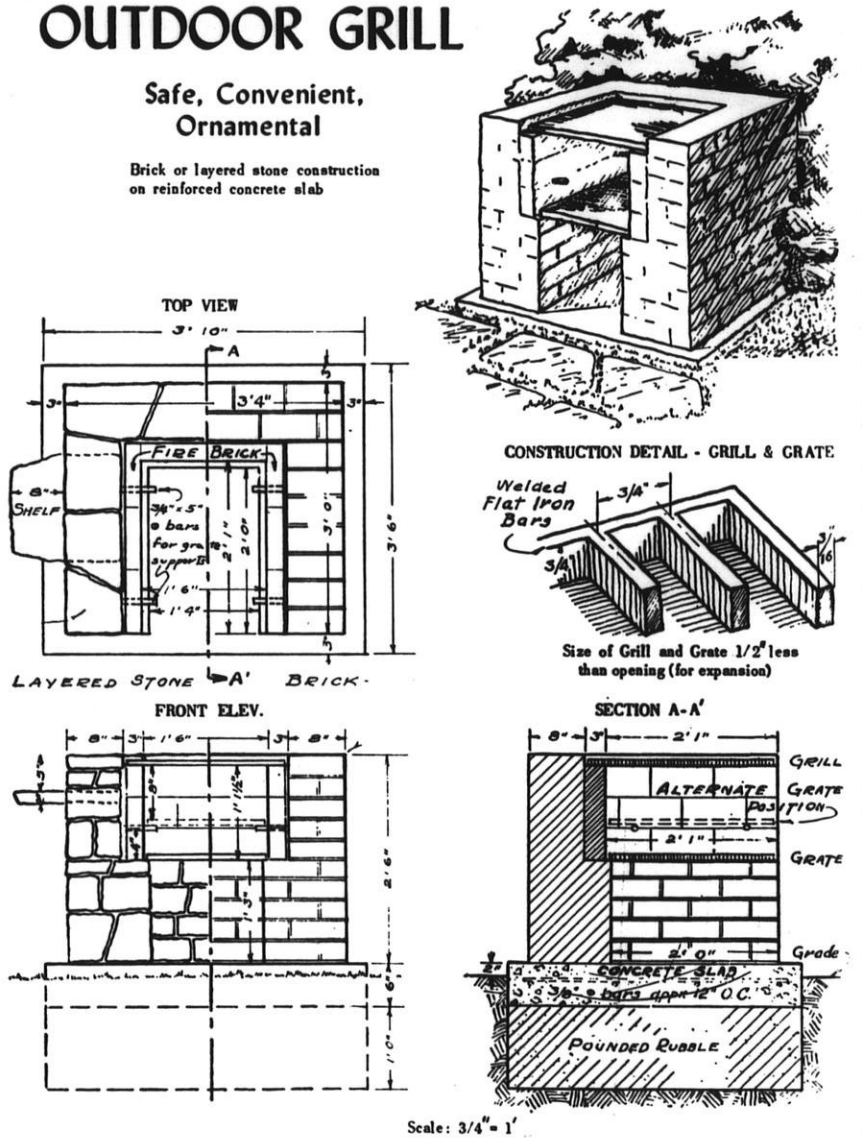
But seriously, a well planned home grounds will furnish proper facilities for privacy and outdoor enjoyment. This may mean an enclosed private lawn, a place to play croquet or badminton, and a place to grow flowers or perhaps some vegetables. It may mean a paved terrace on which to loaf or entertain friends.

Outdoor terraces will be used more frequently if they are convenient to indoor living areas and are furnished with comfortable, all-weather furniture. Sometimes very usable living terraces can be made by combining them with a garden, a shady place near or off of an enclosed lawn, or by so locating them that the most can be made of good views.

Facilities for a fire or for out-of-door cooking will often increase the livability of outdoor areas. A fireplace with a chimney in common with an indoor fireplace or a fireplace near a terrace can make these outdoor rooms enjoyable even on cool evenings.

A grill for cooking will provide a setting for outdoor meals or for informal entertaining. Cooking areas can be near or on a terrace or if an informal picnic atmosphere is wanted, a grill or a few stones put together to provide a bed for some coals can transform an unused corner of a yard into a delightful picnic spot.

Good landscape planning will provide dividends in pleasant outdoor living.



NATIONAL GLADIOLUS CONFERENCE

(Continued from Page 73)

Manley, Cleveland, Ohio; Disease Resistance, by Dr. R. O. Magie, Bradenton, Florida; How to Popularize Gladiolus, by Paul Frese, editor, Popular Gardening; An old time review, by growers.

There will be a good womens' program with a demonstration on flower arrangement by Miss Adeline Lyster of DeForest, Wis.

Growers from all over the world will attend.

"Why did you stop singing in the choir, Thomas?"

"Well, one Sunday I was sick and didn't sing and a lot of people asked if the organ had been fixed."—The Argyle Atlas.

Garden Club News

OUR SECOND ANNUAL CONVENTION

By Mrs. Martha Getzlaff Koch, Wauwautosa

About 150 Garden Club members met at the YWCA in Milwaukee, which offered fine surroundings for the success of our 2nd annual convention. Huge spruces graced the corners of the auditorium and beautifully arranged flowers and greens were all along the stage. There was a table with 40 varieties of chrysanthemums, courtesy of John Hauser of Bayfield; and the many tables of specimen blooms and displays seemed to speak, saying: "The world is so full of such wonderful things, I'm sure we should all be happy as kings."

The gorgeous dahlias used individually on the luncheon tables were furnished by courtesy of Mrs. Delaporte, dahlia grower, West Forest Drive, West Allis. Mrs. R. La Philliph gathered all the makings and with a committee from the Wauwatosa Garden Club made the distinctive place cards.

Horticultural specimens included flowers, shrubs, house plants, vegetables and gourds. Artistic arrangements and creations and horticultural specimens were placed in various groups of classifications and judged by the merit system.

Dried Materials

At this time of year much attention is given to plant life in its dried state —rich yellows, reds and browns. Panel murals and pictures were made with the following materials: straw flowers, branches of leaves, bittersweet, yarrow, dried corn tassels, waxed leaves, berries, simple weeds, seed pods, grasses, driftwood, milkweed, tips of juniper trees, dried sumac, quack grass, split willow branches, cones, fern seeds, spores, oleander pods, magnolia leaves and others.

There were miniture displays ranging from a silver teapot as a container for five red roses to a small copper ash tray holding burnt orange mums and brown leaves in crescent form.

Winter corsages of various shapes and sizes were made of straw flowers, tinted pine cones, bittersweet, pine sprays, etc., fastened with metal or two toned ribbons.

For different occasions and seasons the table settings were a delight to see. Come Christmas, one of the blue ribbon tables will be in the minds of many who will be entertaining because of its simplicity. The cloth was red with white fringe, napkins were red with homemade favor on each. Milk-glass dishes were used including a footed one in the center filled with red gladiolus. (May the writer suggest sprigs of holly for favors and centerpieces?)

Program: You Too Can Grow Roses

The program was officially opened when Mrs. R. La Philliph, president of the Milwaukee Region Garden Clubs, read a charming poem written by the lady who was introduced: Mrs. R. H. Sewell, chm. of the State Garden Club Advisory Board who in turn presented Mr. Arthur Boerner, Milwaukee, whose subject was, "You, Too, Can Grow Roses."

Mr. Boerner said roses are easy to grow—just give them any good soil, sunlight, and, like chrysanthemums, good drainage.

When planting, prune by cutting back to 3-4 eyes to the cane. Use bone meal and milorganite, then top soil. Or, ⅓ aged cow manure, peat moss, then top soil. Avoid nearby trees as they compete with roses.

Never sprinkle rose bushes but water by soaking once a week. Water them during a dry day. Also feed in

At the Garden Club of Wisconsin flower show in September, admiring some of the beautiful arrangements of fruits and vegetables, are, from left, Mrs. Charles Braman, Waupaca and Mrs. E. A. St. Clair, committee members; Mrs. R. H. Sewell, chairman, State Garden Club Advisory Board, Milwaukee; and Mrs. Chester Thomas, Milwaukee, show chairman.

spring and again in July—no later. Rose diseases such as black spot are serious when there is much moisture and are transmitted by wind. Keep the leaves covered with dusting sulphur. If there are black spots on the leaves take the leaves off and burn them. Insects apparently like roses too. For chewing insects use lead arsenate or DDT. A dusting of rotenone for several days will kill aphids. In fall do not water excessively. Tie bushes in bundles with soft cord and mound with soil as high as possible.

Winning The Battle of Bugs

Mr. E. L. Chambers, state entomologist, spoke on "Winning The Battle of Bugs." He cited instances of what is being done in the state in the way of preservation by constantly being on the watch for pests invading our forests and how the modern method of dusting and spraying from the air plays an important part in prevention and damage to our countrysides. For the gardener, prevention is best. Undoubtedly weather conditions favorable to insect pests sometimes enter into the picture. For gladiolus thrips dust with 5% DDT before blooming period. Use it, too, for leaf hoppers when storing.

Officers and committee members at the Garden Club of Wisconsin Flower Show at the Y.W.C.A. in Milwaukee, September 26-27.

UPPER PICTURE. Studying a table arrangement are, from left, Miss Bessie Pease, Oshkosh, chm. Winnebagoland Region; Mrs. R. La Philliph, chm., Milwaukee Region; and Mrs. Roy Schmidt, Jefferson, Chm., Region 1.

CENTER PICTURE. Studying some of the arrangements of unusual design are show committee members Mrs. Val Suttinger, West Allis; Mrs. Victor Schmitt, West Allis; Mrs. O. H. Burgermeister, West Allis; Mrs. Edgar Bergman, Wauwatosa; and Mrs. O. J. Dooley, West Allis.

LOWER PICTURE. Admiring the beautiful table, Jewels of Autumn in ameythest by Mrs. L. G. Stewart of West Allis are, from left, Mrs. Martha Koch, Wauwatosa; Mrs. Stewart; Mrs. Ray Luckow, West Allis; Mrs. Victor Schmitt; and Mrs. D. B. Gill, Wauwatosa, all show committee members.

Begonias

Mrs. R. A. Kartack of Baraboo began raising begonias when she was looking for something to place in front of flower pots in which she had amaryllis. Begonias were it. She now enjoys 75 varieties, some of which have come from other countries.

Begonias originated in the belt above and below the equator. Mrs. Kartack says it is a challenge to grow begonias from cuttings. The best time to start them is in the spring by placing cuttings in water until roots show; then planting in ⅓ peat moss and sand. When plants are again planted into larger pots use 1 part leaf mold, 1 part sandy loam from garden and 1 part sand and well rotted manure plus charcoal. Always feed before coming into bloom. Water with warm water but never leave any stand around roots.

Flower Arrangement Demonstration

Mr. E. L. Chambers' demonstration of how to create centerpieces with a minimum amount of time and effort was instructive and humorous. He showed how simple it was to take a tin can with holes punched around the top. Fill holes and can with colored chysanthemums, cover with tinfoil and, Presto! Or, take a white button squash and fill it with mums of preferred color. Green squash with small gladiolus proved pretty. Another flower holder was a foot of birch trunk with several holes drilled in top, deep enough to hold test tubes or flowers. And, again, a large slice of tree trunk filled with many test tubes filled with all colors of mums to be used on large tables was unusually attractive and different.

The Professional Look

Mr. Joseph Hanke, of Hanke's Floral Shop, Milwaukee, created several neat arrangements with the professional look. Mr. Hanke especially stressed not to over-crowd. He could make a dish with one large dahlia and a few hemlock leaves or six carnations and greens or a few tritoma and magnolia leaves look exquisite. He said that the leaves and greens are also beautiful and are necessary in artistic beauty. Mr. Hanke also gave a few do's and don't's such as: chrysanthemum stems must always be broken, not cut; carnations, roses, and most flowers should be cut at an angle so as to give larger areas for water absorption.

REGION 1 HOLDS FALL MEETING

"A Good Time Was Had By All"

Garden club members of Region 1 had a lot of fun at their fall meeting, held at Jefferson, on October 24. Starting with a pot luck supper with 60 present and a half hour of entertainment, the members were in excellent spirits for the program. Mr. Justus Brueckner of Jefferson gave a very fine talk on how he grows chrysanthemums and discussed one of the problems of growers—the chrysanthemum leaf nematode.

Mr. H. J. Rahmlow, secretary, told of a new set of slides, just prepared, on 45 varieties of fibrous rooted begonias, grown by Mrs. R. H. Kartack of Baraboo, which will be available to garden clubs in the near future.

Mrs. Sam Post of Madison gave a very interesting demonstration and talk on "Fun With Flowers, Fruits and Vegetables." Some of the interesting arrangements consisted of "love apples" and evergreens and high bush cranberry with pine branches.

The next meeting of the region will be held in April.

Central Region Holds Meeting

Excellent Program and Good Attendance At Meeting Sponsored by Clintonville Club

How to grow plants in the garden and how to have fun with flowers, fruit and vegetables in arrangements were the principle program topics at the annual meeting of the Central Region, Garden Club of Wisconsin, at Clintonville on October 6th.

Officers elected for the coming year are: Mrs. Marlin Steinbach, Clintonville, president; Mrs. Jack Olson, Amherst, vice president; Mrs. Harold Smith, Amherst, secretary; Mrs. F. C. Wipf, Iola, treasurer. Mrs. Vernon Rosholt of Rosholt was elected member of the State Garden Club Advisory Board to the Horticultural Society.

Feature of the program was the demonstration on flower, fruit and vegetable arrangements by Mrs. Forest Middleton of Madison. She held the attention of her audience throughout the program, and many complimentary remarks were made about her helpful suggestions for using materials we have in arrangements for various occasions.

Mr. E. A. Rosenberg of Clintonville gave an interesting talk on how he grows strawberries, while Mr. Charles Braman gave helpful suggestions on how he grows raspberries successfully.

Mrs. Marion Leer of Iola gave many helpful ideas for growing annuals. She said we need more annuals for exhibits at county fairs. Petunias are her favorite flowers because they grow in any type of soil but like sandy soil the best. Since they grow somewhat rank on heavy, fertile soil, she uses sand and sawdust to lighten it.

Annuals are especially desirable to follow tulips in a border. She urged gardeners to grow more marigolds, radiant cosmos, cleome, pansies, moss roses, annual asters, zinnias in pastel colors and some of the new sunflowers for attracting birds; calendulas because they're easy to grow; sweet peas planted very early in the spring; Nicotiana, of the dark red shades because they have wonderful fragrance in the evening.

Mrs. Leer has been in charge of the flower show at the Waupaca County Fair at Weyauwega, which has made such outstanding progress in its development.

Mrs. Earl Moldenhauer, president of the Clintonville Garden Club, ably acted as moderator for a report of the flower shows held by clubs in the Central Region and some excellent reports were given.

Officers of the Central Region, Garden Club of Wisconsin, enjoyed watching the demonstration, "Fun With Flowers. How to use the materials you have," by Mrs. Forest Middleton of Madison. From left, Mrs. Jack Olson, Amherst, vice pres.; Mrs. Marlin Steinbach, Clintonville, pres.; Mrs. Harold Smith, Amherst, sec.; Mrs. Middleton, demonstrating. Next is Mrs. F. C. Wipf, Iola, treas.; Mrs. Glen Lockery, Rosholt, past vice pres.; and Mrs. Vernon Rosholt, Rosholt, elected member, State Garden Club Advisory Board to the Society.

CHRISTMAS SHOW AND SALE WAUWATOSA WOMAN'S CLUB

1626 Wauwatosa Avenue

Friday, November 30, 11 a.m. to 9 p.m.

Once again the member garden clubs of Wauwatosa are cooperating in presenting their second spectacular Christmas Show.

The entire clubhouse will be a-twinkle and a-glitter with new and exciting designs, some traditional, some modern, to give a preview of Christmas "all through the house."

Window and door decorations, mantels, holiday table settings, screens for Christmas pictures, tree ornaments and room arrangements will give ideas for home decorating.

Sales booths will offer materials for decorations with demonstrations to show you how. By popular demand, many finished articles will be available for gifts and decorations.

This show is sponsored by the Bluemound, Ravenswood, and the Wauwatosa Garden Clubs for the benefit of Lowell Damon House.

Committees

Mrs. S. W. Price, gen, chm.; Mrs. Carl Hofstetter, Lowell Damon House chm. and schedule; Mrs. E. A. St. Clair, floor plan and publicity; Mrs. L. J. Beckwith, hostesses, Wauwatosa Woman's Club; Mrs. Mark Pfaller, finance.

Garden Club Planning Committee: Mrs. A. K. Beechler, Ravenswood; Mrs. Ralph Hantzsche, Bluemound; Miss Effie Barber, Wauwatosa.

Remember, when some man boasts that he "runs things in his own house" he may have reference to the washing machine and the vacuum cleaner.

—DePere Journal Democrat

Drive carefully, this is a one hearse town. Warning post outside a Connecticut village.

Comments on Arrangement

Accent on Wildlife

By Elizabeth Stewart, West Allis

The accompanying arrangement was entered in a class calling for "Accent on Wildlife." The pattern of the composition is particularly appropriate in that it is an "expression" of nature.

Through the centuries, architects have analyzed the structure of plant life. It was through such study that the principle of "organic order" emerged as the fundamental principle of architecture. Under this general heading are the twin principles of "expression" and "correlation." The late Eliel Saarinen, one of the world's most famous architects, had this to say about nature's form richness. "We have learned to consider nature's form expression as a specific language in itself. It is a language by means of which nature communicates with those able to feel and to understand. Thus, the more we study nature's form world, the more clearly it becomes evident how rich in inventiveness, nuances, and shiftings nature's form language is. And the more deeply we learn to realize that in nature's realm, expressiveness is "basic."

Inasmuch as nature is the source of all art principles, the element of expressiveness is the basis for the existence of all forms of art, including that of flower arrangement.

An expression of nature's form richness can readily be seen in the interesting variety of materials in the arrangement. Nature's principle of gradation is also illustrated. Forms graduate in size from the large round tray to the rock, leaves, cattails, grasses and seeds. It is typical of the dynamic quality of growing, rotating, plant life with its generating nucleus. Good balance is achieved by the placement of larger forms near the base of the arrangement.

Expression and correlation in nature go hand in hand. A plant, shrub or tree is constantly adapting itself to fit into its environment. Nature is insistent on correlation. In the realm of flower arranging we, likewise, attempt to correlate our material to create a unified design. In other words plant material, accessories and setting must give the general impression of belonging together.

Accent on Wildlife. An arrangement by Mrs. A. Dietrich, Home Gardeners, West Allis, at the Garden Club of Wisconsin Flower Show, September 26-27. It is an "expression of nature."

The plant material, rocks and wooden tray used in the arrangement, are well correlated in relation to the elements of line, form, proportion, texture, value and color.

Sometimes it's a race to see which will boil first—the coffee or the husband.—The Forest Republican.

It is claimed that history is repeating itself. According to archeologists, Europe touched America millions of years ago, too.—The Bonduel Times.

When a pretty co-ed was asked what could be worse than a man without a country she replied "a country without a man."—Burnett County Leader.

A chrysanthemum by any other name would be a lot easier to spell.
—The Viola News.

THE WINNERS AT THE STATE FLOWER SHOW, GARDEN CLUB OF WISCONSIN

There were so many entries at the State Flower Show at Milwaukee YWCA Sept. 26-27 that it took a great deal of time even to list all the winners and entries. Judging was done by the merit system so that every exhibit was given its appropriate award. It's too bad we don't have room to list all the helpful comments written on the award cards by the judges. Names are listed alphabetically. Abbreviations: Ex means Excellent, or score of 93-100; VG is Very Good, 85-92; G is Good, 75-84.

Mrs. A. O. Anderson, Wauwatosa. Ex on Fruit Arrangement with Screen.

Mrs. Edgar Bergman, Wauwatosa. G on Novice Arrangement; 1 Ex, 2 VG and 4 G awards in Horticultural classes.

Mrs. Charles Bierman, Wauwatosa. Ex on Mondern Arrangements; VG on Collector's Item, G on Autumn Reverie and G on Garden Glory.

Mrs. C. H. Braman, Waupaca. G on screen arrangement of Berries and Vegetables; Ex on Ornamental Gourds and Ex on Ornamental Corn.

Mrs. Chester Brandum, Waupaca. Ex on Wall decorations and VG on Winter corsage.

Mrs. W. Diehnelt, Menomonee Falls. VG on screen of Honey, Wax and Plant arrangement.

Mrs. A. J. Dietrich, West Allis. Ex on Small Arrangement, Autumn Reverie and Accent on Wildlife, G on Ornamental Gourds and Vegetables.

Mrs. J. W. Dooley, West Allis. Ex on Arrangements, Collector's Items (a) and Accent on Wildlife; VG on Collector's Items (b), Harvest Tables, and Arrangements on screen of Royal Jewels, His Majesty and Her Majesty.

Mrs. Wallace Freund, West Bend. Ex on Fruit and/or Vegetable Arrangment and on Accent on Wildlife. VG on Modern Arrangements and on screen of Honey Arrangement. Ex on Ornamental Gourds and Vegetables, Squash and on Pumpkin.

Mrs. Donald Kirkland, Milwaukee. Ex on Arrangement Featuring Figurines; VG on Modern Arrangement and Gems of the Orient. VG on House Plants, Cactus.

Mrs. A. Koch, Wauwatosa. Ex on Arrangement for Novices; VG on Garden Glory, G on Ornamental Gourds and Vegetables, Okra. Ex on Chrysanthemums, VG on Dahlias.

Mrs. George Koch, Milwaukee. Ex on Arrangement Featuring figurines.

Mrs. J. Kornacki, Wauwatosa. Ex on two entries Roses; VG on two entries Roses; G on one entry Roses.

Mrs. Robert La Philliph, Wauwatosa, G on Wall decorations arrangement. VG on screen arrangement of Red Apples, Tomatoes and Grapes. G on screen arrangement of Pears and Green Apples. G on Table Arrangement of Jewels of Autumn. Ex on Annuals and Biennials, Dahlias (from seed).

Mrs. A. R. Leidiger, Milwaukee. Ex on Wall Decoration and a Modern Arrangement.

Mrs. R. Luckow, West Allis. Ex on Arrangement to Interpret Poem and on Featuring Figurines. Two Ex on Tuberous Rooted Begonias.

Mrs. J. Muenzberg, Elm Grove. Ex on Arrangement to Interpret Poem.

Mrs. N. C. Nelson, West Allis. Ex and G on Gladiolus, medium. VG and G on Gladiolus, Large, 2 Ex, 1 VG and 3 G on Dahlias. VG on Perennials, Sedums.

Miss Bessie Pease, Oshkosh. Ex on Fruit and/or Vegetable Arrangement. VG on Arrangement Featuring Figurines and on Evergreen Arrangement with Accent.

Mrs. H. N. Petersen, Milwaukee. Ex on Tuberous-rooted Begonias. VG on Dahlias.

Mrs. A. Phillips, Madison. Good on Fruit and/or Vegetable Arrangements and on Arrangement to Interpret Poem.

Mrs. O. Pritchard, Milwaukee. Ex on Modern Arrangement, VG on Screen Arrangement of Jewels of the Sea.

Mrs. O. Rupnow, Milwaukee. VG on Small Arrangements.

Mrs. E. A. St. Clair, Wauwatosa. Ex on Wall decorations, Autumn Reverie, Gems of the Orient, Arrangement to Interpret Poem, Fruit and/or Vegetable Arrangement and Winter Corsage. VG on Arrangement Class for Novices, Garden Glory, Table Arrangement on Jewels of Autumn, Screen arrangement on Golden Nuggets. G on Collector's Items (a). VG Asters; G Delphinium, Annuals and Biennials, and Varieties not listed.

Mrs. V. Schmitt, West Allis. Ex on Wall decorations and Collector's Item, and on Christmas Table Arrangement.

Mrs. A. Schrader, Antigo. VG on Wall Decorations Arrangement and Winter Corsage.

Mrs. R. H. Sewell, Milwaukee. Ex on Wall decorations arrangements, Screen arrangement on Jewels of the Madonna, Featuring Figurines, and Arrangement to Interpret Poem. VG Arrangements on Collector's Items (a), Modern Arrangement, and Halloween Table Arrangement. G Arrangements of Fruit and/or Vegetables.

Mrs. H. Specht, West Allis. VG on Harvest Table ,Thanksgiving Arrangement.

Mrs. L. G. Stewart, West Allis. VG on Jewels of Autumn table arrangement, Christmas Tables, Screen Arrangement on Golden Nuggets, Accent on Wildlife, Winter Corsage, Collector's Items (b), Featuring Figurines, Autumn Reverie, Garden Glory, and Arrangement of Berries, Shrub and/or Foliage. VG on Wall Decoration Arrangement, Screen arrangement on Jewels of the Madonna, Collector's Items (a), Modern Arrangement, and Evergreen Arrangement with Accent. G on Wall Decoration Arrangement.

Mrs. A. Stoll, Nashotah. G on Modern Arrangement.

Mrs. N. J. Stratton, Wauwatosa. VG on Arrangement for Novices. VG on Chrysanthemums.

Mrs. G. Strong, West Allis. VG on Christmas Table Arrangement.

Mrs. V. Suttinger, West Allis. Ex on Small Arrangements, Arrangement to Interpret Poem, Collector's Item (a) and (b), Winter Corsage (b), Garden Glory Arrangement. VG on Wall Decorations. G on Table Arrangement of Jewels of Autumn.

Mrs. Chester Thomas, Milwaukee. VG on Roses.

There's nothing like a square dance session to convince us that our grandparents must have had plenty of energy as well as ingenuity.—The Bonduel Times.

One reason why the big apples are on top of the basket is the fact that a lot of little apples are holding them up there.—Ripon Weekly Press.

GARDEN GLEANINGS
DO YOU KNOW?

THAT

the Gas-plant or Dictamnus stores so much citrus oil that on hot, windless days enough gas is generated to show a flash of flame if touched with a lighted match?

Cannas belong to the banana family and are tropical in nature?

---

fragrant plants waft the strongest aroma at three periods during the day—in the morning after watering, at noon when the sun is at its peak, and at dusk?

---

the Philodendron Vine symbolizes long life and good health?

---

there's an interesting plant called the Shoo-Fly? Flies can't tolerate it and will not stay in the same room with it. The botanical name Nicandra Physalodes.

---

the Christmas Cactus is not a cactus at all but a succulent? The Calla Lily really isn't a lily, either, but an Arum with the name of Zantedeschia Aethiopica, but the lowly onion IS a member of the lily family.

Cannas are sometimes called Indian Shot because of their hard bullet-like seeds?

Hollyhocks were originally called Holy-hocks? Crusaders, returning from the Holy Land to England brought the flowers with them.

Cockscombs were so named because of their resemblance to the crested combs of cocks or roosters? Although the crimson and gold shades are best known, there is a new Cockscomb, or Celosia, which is a shell-pink color. Cockscombs are popular for cut flower arrangements and also may be dried for lasting winter arrangements.

---

you will find an unborn Tulip flower inside a Tulip bulb if you cut it in halves?

---

the Chinese Lantern Plant is also called Strawberry-Tomato because of the small red fruit enclosed in the lantern-shaped seed pod? Its botanical name is Physalis Alkekengi, the name Physalis coming from the Greek, meaning "bladder."

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

HIGHLIGHTS OF THE ANNUAL CONVENTION

We have time for only a brief report of the proceedings of the annual convention held at Wausau on October 30-31. Orchids to the Marathon Co. Beekeepers' Association, its officers and Auxiliary members who served two splendid luncheons and a banquet that will long be remembered. The accommodations at Marathon Co. Park proved excellent. County Agent Bill Rogan, gave excellent assistance and was toastmaster of the banquet. Local speakers provided the banquet program.

Officers Re-elected

Officers, as shown above, were re-elected. However, H. J. Rahmlow, corresponding secretary for many years, resigned that position. This, however, in no way affects the affiliation of the Wisconsin State Beekeepers' Association with the Wisconsin State Horticultural Society, and since the beekeepers belong to the Society, the services of the Secretary are available to them on request.

The Women's Auxiliary re-elected Mrs. Emerson Grebel of Beaver Dam president and Mrs. Wallace Freund vice president and elected as secretary-treasurer, Mrs. Ray Gibbons of La Valle.

Federated Wisconsin Beekeepers Organized

Mr. Glen Jones, secretary of the National Beekeepers' Federation, Atlantic, Iowa, was present and spoke on the work of the Federation and its need to the beekeeping industry. At the close of the convention, he called a meeting of all members of the Nation and a new organization, the Federated Wisconsin Beekeepers was organized. Mr. Robert Knutson, Ladysmith, was elected president; Mr. Leonard Otto of Forest Junction, vice president; and Henry Schaefer of Osseo as secretary-treasurer. Mr. Schaefer was also elected as national director and convention delegate. This national organization will be a part of the Wisconsin State Beekeepers' Association.

Exhibit Winners

Some very fine nut breads, cakes and cookies were shown by Auxiliary members. Winners were:

Honey, fruit and nut bread: First prize, Mrs. Henry Schaefer, Osseo; second prize, Mrs. Emerson Grebel, Beaver Dam; third prize, Mrs. Otto Koepsell, Mayville.

Honey cake: First prize, Mrs. E. Grebel; second prize, Mrs. L. A. Moser, Lowell, and Mrs. Otto Koepsell; third prize, Mrs. Henry Piechowski, Red Granite.

Honey cookies: First prize, Mrs. Joe Mills, Ripon; Mrs. Henry Schaefer, Osseo; third prize, Mrs. A. J. Schultz, Ripon.

Honey Exhibit

The quality of the honey shown this year was excellent. The following were the winners:

Wisconsin Fancy White Honey: First prize, Ray Gibbons, La Valle.

Wisconsin No. 1 White Honey: First prize, Bernard Gerstner, Lake Mills; second prize, E. F. Grebel, Beaver Dam; third prize, Koepsell Honey Gardens, Mayville.

Wisconsin No. 1 Golden Honey: First prize, Koepsell Honey Gardens; second prize, Ray Gibbons, La Valle.

Wisconsin Dark Honey: First prize, Koepsell Honey Gardens; second prize Ray Gibbons.

Comb Honey: First prize, Ray Gibbons; second prize, Clarence Pfluger, De Pere.

Honey Advisory Committee Reports

Mr. John Long gave his apiary inspection report, which will be published in a later issue. He reported a total of 3,179 apiaries inspected, of which A.F.B. was found in 397 yards. 113 apiaries were found with immovable frame hives. There were 1006 inactive apiaries, and 940 were taken off the list.

He reported a total of 32,993 colonies inspected and 1219 colonies with A.F.B., which were destroyed.

He also reported as secretary of the Honey Advisory Committee. The committee recommends the following, in part; full details will be published later.

1. That state funds for apiary inspection be substantially increased.
2. That an advertising program be established, bringing Wisconsin honey to the attention of the public.
3. That a honey house improvement program be established.
4. That an educational program be developed based on the proved theory that bees can solve the pollination problem in fruits, vegetables and seed production.
5. That the users of spray and dust chemicals should be educated as to the harm that will result from the careless application of poison.
6. That road commissioners and railroad companies be advised of the importance of sweet clover and other nectar plants to beekeepers.
7. That an extension specialist in beekeeping be employed to work through County Agents and groups by demonstration for the benefit of the beekeeping industry.

The Honey Advertising Committee reported on the possibility of getting honey advertised with a dairy product on the Department of Agriculture billboard for 1952. The Advertising Committee members are William Judd, Stoughton; Art Kehl, Watertown; H. Braithwait, Baraboo; Edward Ranum, Mount Horeb; William Waterman, Madison.

(To be continued)

THE NATIONAL HONEY CROP

The 1951 honey crop was estimated at 249,053,000 pounds—7 percent more than last year's crop on Oct. 1, according to the U. S. Bureau of Agricultural Economics. Honey production per colony of 44.7 pounds compares with 41.5 pounds last year and the 1945-49 average of 39.0 pounds. In mid-September producers had about 115 million pounds of honey on hand for sale—5 percent less than stocks on hand a year earlier. This year's honey crop is being produced by 5,572,000 colonies of bees, 1 percent fewer than in 1950. This estimate is based on reports from about 5,000 beekeepers including farm and nonfarm apiaries.

Honey production is above last year in all regions except the West North Central and South Central States.

The 10 leading honey producing states this year are: California, Florida, Wisconsin, Ohio, New York, Texas, Michigan, Iowa, and Idaho. These states produced 59 percent of the crop.

In Wisconsin, despite a heavy winter kill, the late spring and curtailed flying weather, bees came up with an excellent yield owing to unusually good nectar supplies.

IN MEMORIAM

Three leaders in the beekeeping world passed away during past months. Dr. E. F. Phillips died on August 21 at Ithaca, N. Y., at the age of 72. Dr. Phillips was well known to many Wisconsin beekeepers and took part in the early beekeeping Chautauquas in this state.

Elmer Carroll, editor of The Beekeepers Magazine, Lansing, Mich., passed away early in August. Elmer Carroll should inspire any beekeeper to greater efforts. Suffering from arthritis, he nevertheless created an interesting magazine and several years ago appeared on the program of our Wisconsin Beekeepers' Association summer meeting. The Beekeepers Magazine is being continued by Mrs. Carroll and daughters.

Frank Pellet of Atlantic, Ia., editor, writer, beekeeper and honey plant tester, passed away this past summer at the age of 71.

The work of these men will long be remembered.

THE FLAVOR OF HONEY IS IMPAIRED IF ALLOWED TO REMAIN ON HIVES TOO LONG

Almost every beekeeper has had this experience: When the first clover honey is taken from the hives in early July, we taste it and exclaim, "Isn't that delicious!" We give it to our friends and they say the same thing. But something seems to happen, and in August and September we no longer exclaim over this delicious flavor while extracting. What is it?

This year we had an interesting experience. Honey was extracted in July and in early August, heated, bottled and sealed immediately. The color and flavor is wonderful. One super of comb honey was not removed from the colonies until mid-September. This comb honey is definitely of poorer quality than the honey extracted in July. In fact, we have it on the table every day and don't like it too well. **It was much thinner when removed from the hive than was the** honey removed in July because during August and early September we had weather with high humidity and sometimes low temperatures. However, now while we have furnace heat, the honey is "drying out" and becoming thicker. But still we don't like the flavor. It tastes as if there has been a touch of fermentation.

Cappings Do Not Protect Honey From Moisture

There is an opinion among many beekeepers that the wax cappings seal the honey so that nothing can happen to it. This is a mistake. The cappings will allow the moisture to enter and thin the honey during damp weather, often to the extent that it will ferment and air bubbles will develop under the cappings. Also, in a warm, dry room, the honey will dry out so that it will become quite thick with as little as 15% moisture.

Remove Honey Early

Since we're all interested in putting on the market only the best flavored honey for table use, it is important that we study the conditions that injure the flavor of honey. **We must remove the honey from the hives** and extract it just as soon as it is finished. For alsike and white clover honey it will mean extracting in very early July. For sweet clover, at least by mid-July. The more quickly it can be extracted, heated, bottled and sealed, the better. If heated to 140 degrees and sealed while still hot and cooled quickly, the honey will not granulate again for about a year. HJR.

INFORMATION ABOUT BEE CULTURE

United States Department of Agriculture Publications

A limited supply of some of the following publications is available for free distribution. However, all are obtainable by purchase from the Superintendent of Documents, Government Printing Office, Washington 25, D.C., or can be consulted in libraries. Do not send money or any other kind of remittance for publications to the Division of Bee Culture.

Farmers' Bulletins: 961, Transferring Bees to Modern Hives, 5c; 1713, Treatment of American Foulbrood, 5c.

Circulars: 386, The Wax Moth and Its Control, 5c; 392, Diagnosing Bee Diseases in the Apiary, 5c; 554, Honey and Pollen Plants in the United States, 10c; 650, Factors Affecting Usefulness of Honey Bees in Pollination, 10c; 702, Productive Management of Honey Bee Colonies in the Northern States, 10c; 876, Use of Honey Bees in Alfalfa Seed Production, in press.

Technical Bulletins: 656, Cost of Producing Extracted Honey in California, 10c; 716, Investigations of the Physical and Chemical Properties of Beeswax, 5c.

Leaflet 113, Honey and Some of Its Uses, 5c.

The following publications of the Bureau of Entomology and Plant Quarantine are obtainable without cost from that Bureau, Washington 25, D. C., or from the Division of Bee Culture. E-297 List of Dealers in Beekeeping Supplies, Package Bees, and Queens; E-531, The Use of Pollen Traps and Pollen Supplements in Developing Honey Bee Colonies; E-536, The Role of Pollen in the Economy of the Hive; E-584, The Dependence of Agriculture on the Beekeeping Industry; E-693, Two-Queen Colony Management; E-749, Bee-Gathered Pollen in Various Localities on the Pacific Coast. E-763, Tests with DDT on Honey Bees in Small Cages; ET-250, A Manual for the Artificial Insemination of Queen Bees; ET-289, A Portable Field Cage; ET-291, Thresher and Separator for Red Clover Seed Samples.

COMMENTS ON USE OF QUEEN EXCLUDERS AND SWARM CONTROL METHODS

In our June issue we wrote about the danger of A.F.B. by the Demaree method of swarm control. We also mentioned the amount of labor involved and the advantages of the three brood chamber reversing method.

We were interested to note an article by Howard J. Rock of Dale, Wis., in the May issue of "Gleanings in Bee Culture," in which he says:

"I object to the use of excluders and the Demaree method of swarm control. In fact, the Demaree method is a very short-sighted remedy for an old, obsolete, restrictive method of managing the colony.

"Even where double brood combs are used the excluder aggravates swarming. The great majority of honey flows start out rather slowly. While the honey flow is in its initial stage the bees are inclined to store the nectar in the brood chamber if an excluder is used. If it were not and the bees had three bodies of dark brood combs and one extracting super, this initial slow stage of the honey flow would not cause any crowding whatsoever, therefore, no swarming.

"All I know is what I have experienced. I have worked bees all over the U. S. and one fact paramount in my mind is this: year after year, the producers who produce the biggest crops have the least swarming and **make the most money** are those who do not use excluders.

"Another fact — those beekeepers who **DO use excluders,** practice Demareeing and other laborious methods, have the most swarms, the biggest labor bills and comparatively mediocre honey crops. From talking and working with this group I have gleaned the impression that they wouldn't know what to do with a big healthy colony of bees."

AMATEUR BEEKEEPERS ASSOCIATION ORGANIZED IN MINNESOTA

The Minnesota Amateur Beekeepers' Association was organized recently at the University Farm by a group of beekeepers interested in bee culture problems. The members have voted to affiliate with the Minnesota Horticultural Society. Regular meetings are planned at the University Farm.

SOME NOTES ABOUT WINTERING

Here are some facts about wintering to be considered by all of us, especially if we have had heavy winter losses in the past.

1. The make-up of the colony is more important than the protection given the hives for successful wintering. A good colony requires about 70 pounds of well—ripened honey and several combs of pollen for good wintering.

2. A one-inch auger hole **just below** the upper hand-hold is excellent for good wintering. The lower entrance may become clogged with dead bees and prevent the bees from having a flight during warm periods in midwinter. The upper hole also allows the escape of moisture laden air.

3. Exposure to sunlight and protection from coldest winds by a windbreak is more important than wrapping the hives. Hive insulation will allow the cluster to contract gradually and organize its position in relation to stores so that fewer bees are left stranded than if unprotected.

4. The winter cluster does not heat the unoccupied portion of the hive. During a long cold spell the temperature a few inches away from the cluster will be almost as low in a packed as in an unpacked hive.

5. If a colony is given too much packing it will not be able to respond to warm periods during the day, which allow the cluster to shift its position to new stores in case they have eaten up all of the honey within reach.

6. The ability of the colony to protect itself against low temperatures will depend a good deal upon colony population. It may be possible to overwinter nuclei or small colonies successfully in our cold climate unless the weather should be quite mild.

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January, 1952

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Annual Convention Highlights

New Officers Elected; Fruit Show Highlights Beginning — Papers and Reports on the Program

OUR ANNUAL CONVENTION

Only brief reports of proceedings and program papers presented at the 83rd Annual Convention of the Wisconsin State Horticultural Society at Fond du Lac, November 27-28, will be given in this issue. Some of the important papers presented by speakers will be published when they are most timely, as for example, recommendations on spraying during spring months.

Attendance

Attendance was good in spite of slightly icy roads which kept away some members living at a distance. Total registration was 187 with no doubt a number that did not register.

The program was excellent and was highlighted with talks by Dr. H. C. Young of the Ohio Experiment Station on fruit disease control and Mrs. Forest Middleton of Madison who demonstrated flower arrangement to the Women's Auxiliary.

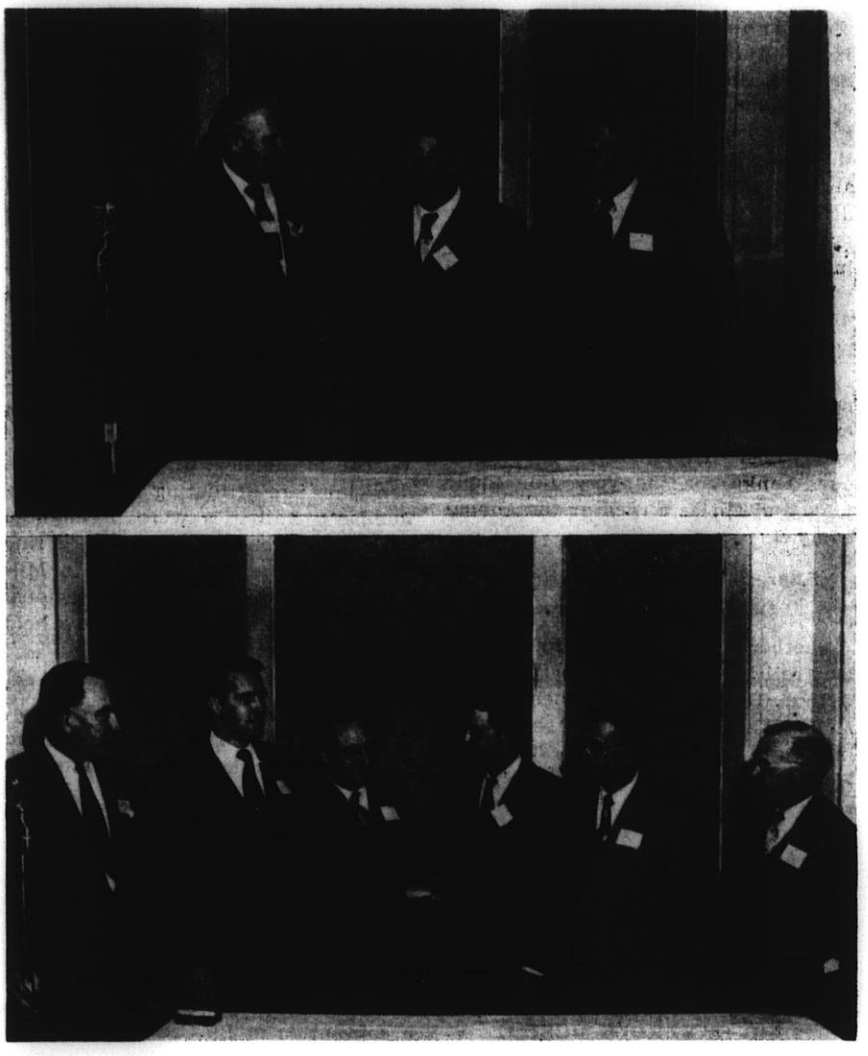
Talks by staff members of the University of Wisconsin are reported in part in the article in this issue on the joint fruit growers meeting with the Minnesota Fruit Growers. Topics by Drs. C. L. Fluke and J. Duain Moore were much the same at both meetings.

Officers Elected

Mr. Arnold Nieman, Cedarburg, was elected president, and Marshall Hall, Casco, vice president of the Society. New directors elected for 3 years were LeRoy Meyer, Milwaukee; Ransome Severson, Sturgeon Bay; and William Connell, Menomonie. H. J. Rahmlow was re-elected secretary and E. L. Chambers treasurer.

Resolutions

Resolutions adopted at the annual business meeting included: regrets that they were unable to attend the convention this year sent to Mr. N. A. Rasmussen, Oshkosh; Mrs. A. K. Bassett, Sr., Baraboo; Mr. and Mrs. R. L. Marken, Kenosha; Mr. J. C. Schubert, Gays Mills; Mr. Charles Rosa, Madison; Mr. and Mrs. John McIlquham, Chippewa Falls; Mr. and Mrs. George Gannon, Chippewa Falls; Mr. and Mrs. Henry Dvorak, Casco, and Elroy Honadel, Milwaukee.



ABOVE: NEW OFFICERS. From left, past president, Gilbert Hipke, New Holstein, congratulates Arnold Nieman, Cedarburg, newly elected president of the Wisconsin State Horticultural Society, and Marshall Hall, elected vice president.

BELOW: Speakers at our 83rd Annual Convention. From left, Prof. C. L. Kuehner, extension fruit specialist; Don Dever, entomologist; Dr. H. C. Young, Ohio Experiment Station, shaking hands with Dr. J. D. Moore, pathologist. Dr. C. L. Fluke, entomologist, and Dr. R. H. Roberts, Department of Horticulture, U.W.

Resolutions of sympathy will be found on another page in this issue.

A resolution publicly thanking E. L. Chambers and H. J. Rahmlow for their services and congratulating them

on their honorary recognition was passed.

Another resolution adopted stated: "Whereas there are a great many people in Wisconsin interested in horticulture, gardening, production of flowers, fruits and berries who are not members of the Wisconsin State Horticultural Society, and whereas membership in the Horticultural Society would be mutually advantageous to these people as well as the Society, therefore be it resolved that we in annual convention resolve that individually and correctively we will do everything in our power to contact interested people in the counties from which we come to get new members of organized groups of interested persons and individuals."

Another resolution extended to Reynolds Co., Sturgeon Bay; Arnold Nieman, Cedarburg; Marshall Hall, Casco, and Gilbert Hipke of New Holstein our thanks for the very fine apple juice and apples served at the annual banquet.

Appreciate Services of Retired Officers and Directors

Another resolution stated, "Whereas our retiring officers, Gilbert Hipke, Arthur Brunn, Walter Thenell and M. H. Ward have done an outstanding job in serving the interests of the Horticultural Society, be it therefore resolved that we the members in annual convention express our appreciation and thanks for their splendid services."

The Resolutions Committee consisted of Fred Magnus, Chairman, Walter Kurtz and Mrs. Oscar Conrad.

2, 4-D CONTROLS MOSIAC

Cornell University workers, Charles Chupp and Grover Small, have aroused widespread interest in their report in the New York State Vegetable Growers Association News to the effect that 2, 4-D should be used to control (indirectly) **plantain mosaic on tomatoes.** The disease is apparently caused by plantain strains of the tobacco mosaic virus. The fruit of infested plants is rough and the yield is lowered. The only control known is the complete destruction of plantain. Chupp and Small recommend fall spraying around greenhouse, cold frames, ditchbanks, roadways and in other nearby areas.—From Down to Earth, Winter, 1951.

Secretary Gives 25th Annual Report

The annual convention of the Wisconsin State Horticultural Society, held in the Retlaw Hotel, Fond du Lac, November 27-28, was the 25th in which H. J. Rahmlow has taken part as Secretary. In his annual report to the convention, he stated—(condensed):

Through the efforts of friends of the Society, the legislature increased our appropriation by $1500 at the last session, which enables the Society to overcome an annual deficit of $600 to $800 per year and to maintain the quality of its work.

Membership is on the increase. With the formation of a new statewide organization called the Garden Club of Wisconsin, affiliated with the Wisconsin Horticultural Society, garden clubs are affiliating in increasing numbers. Activities were highlighted by a state convention and very fine flower show at the Y.W.C.A. in Milwaukee, September 26-27. Regional groups were organized and have held excellent meetings.

Work with state-wide affiliated organizations has continued. The secretary was able to supervise a program of apple promotion for the Wisconsin Apple Institute, employing a radio specialist and a newspaper promotion specialist who did excellent work during the past apple harvest season. 10,000 copies of the recipe booklet, "Wisconsin Apples, 44 New Ways to Use Them," were printed and distributed. A most successful joint orchard tour at Menomonie in September and a convention at La Crosse in November with the Minnesota Fruit Growers Association were held.

The Wisconsin Berry and Vegetable Growers' Association continues to expand and held a very successful field tour in Green Bay in June and an annual meeting with excellent program at Oshkosh on November 14. The Wisconsin Gladiolus Society and the Wisconsin Beekeepers' Association continue their affiliation and the Secretary has been able to help them with their meetings and progress.

We have been able to maintain the size of our magazine, Wisconsin Horticulture, in spite of increasing costs. The magazine has two functions: first, to promote the success of organizations affiliated with us, reporting their programs, meetings and business affairs. Secondly, to give to the members of these horticultural groups the latest in scientific information in their fields of endeavor.

During the year, the Secretary attended or spoke at the following meetings: 17 fruit growers meetings, 41 garden club meetings, 15 beekeepers' meetings, 6 Apple Institute meetings, 2 nurserymens' meetings, 4 of the Gladiolus Society, 4 of the Wisconsin Berry and Vegetable Growers' Association. He also gave 14 radio talks on horticultural subjects, a total of 105 meetings and radio talks.

The Secretary expressed appreciation to Prof. O. B. Combs and his staff for their cooperation in helping to carry out the society's program. He also expressed appreciation for the good-will and help of the officers of the Society and officers and committees of the various affiliated organizations. With their further help he promised to make every effort to continue the kind of service to our membership that has made the work of Wisconsin Horticultural Society outstanding in the history of the state since 1865.

THE FRUIT SHOW

There was a nice exhibit of plates of new and standard varieties of apples at the fruit show held in connection with the annual convention in the Retlaw Hotel, Fond du Lac, November 27-28. The packed bushels of apples were conspicuous by their absence. Only a one-half bushel appeared—a very nice seedling—packed by William Connell of Menomonie, who won the prize on the best seedling exhibited.

The Winners

Plate of Five Apples

MACOUN. 2nd prize, John Kopp, West Bend; 3rd, Francis Costello, Fond du Lac.

HARALSON. 2nd prize, Connell's Sunridge Orchards, Menomonie.

SECOR. 1st prize, Emil Beyer's, Malone.

FIRESIDE. 1st prize, Connell's

Sunridge Orchard, Menomonie; 2nd, Emil Beyer's, Malone.

PRAIRIE SPY. 1st prize, Emil Beyer's, Malone; Herbert Hasslinger, Nashotah.

KENDALL. 1st prize, William Meyer, Waldo; 3rd, John Kopp, West Bend.

SPARTAN. 2nd prize, William Meyer, Waldo.

REDWELL. 2nd prize, Emil Beyer's Malone.

NEWFANE. 2nd prize, John Kopp, West Bend.

GOLDEN DELICIOUS. 2nd prize, Emil Beyer's, Malone; 3rd, William Meyer, Waldo.

N. W. GREENING. 1st prize, E. R. McGilvra, Baraboo; 2nd, Emil Beyer's, Malone; 3rd, Philip Dell, Waldo; William Meyer, Waldo.

WEALTHY. 3rd prize, John Kopp, West Bend.

MCINTOSH. 1st prize, Emil Beyer's, Malone; John Kopp, West Bend; 2nd, Philip Dell, Waldo; Francis Costello, Fond du Lac; 3rd, Lenore Zinn, Hartford; E. R. McGilvra, Baraboo; Herbert Hasslinger, Nashotah.

CORTLAND. 1st prize, William Meyer, Waldo; Emil Beyer's, Malone; 2nd, Francis Costello, Fond du Lac; E. R. McGilvra, Baraboo; 3rd, Pieper Fruit Farm, Oakfield; John Kopp, West Bend.

RED DELICIOUS. 2nd prize, Lenore Zinn, Hartford; Emil Beyer's, Malone; 3rd, John Kopp, West Bend; E. R. McGilvra, Baraboo.

Hardy Carpathian
English Walnut Exhibit

First prize, N. C. Jacobs, Sturgeon Bay; second, Royal Oaks, Bluffs, Ill. Three named lake. Third prize, N. C. Jacobs, Sturgeon Bay. Fourth prize, N. C. Jacobs, Sturgeon Bay.

DEER, RABBITS AND TREES

It is unfortunate that young apple trees have such tasty bark and luscious buds, because therein lies winter trouble for the orchardist. Rabbits are attracted to the bark, deer to the twigs. Where rabbit populations are heavy the most effective control is to protect the individual trees with some sort of a winter coat. This can be a wrapping of newspaper, aluminum foil, or burlap, an individual cylindrical fence of wire mesh, or a repellent paint. In the latter group, the U.S. Fish & Wildlife Service recommends a formulation known as Rabbit Repellent 96A which can be obtained from the Rodent Control Fund, A.E.S. Annex, W. Lafayette, Indiana. A simpler formula recommended by Michigan State College consists of rosin dissolved in ethyl alcohol at the rate of 7 pounds per gallon.

Deer damage is somewhat more difficult to control. Herd reduction is generally necessary in highly productive apple regions. Spraying repellents onto the dormant trees does offer some relief, however. The most successful chemicals to date have been: GOODRITE Z.I.P.—Goodrich Chemical Co., Rose Building, Cleveland, Ohio; DIAMOND L BRAND—Leckenby Co., 1634-15th Ave. W., Seattle 99, Wash.

William D. Fitzwater, Jr.
U.S. Fish & Wildlife Service

In some wive's opinions a fishing rod has a worm at both ends.—Iron County Miner.

REPORT OF TOPICS DISCUSSED AT THE

Joint Fruit Growers Meeting

Minnesota and Wisconsin Growers Join In Program On Fruit Growing

The fifth annual joint fruit growers meeting with the Minnesota Fruit Growers Association at La Crosse on November 5-6 will go down in history as one of the most interesting and beneficial meetings ever held by this group. This two day convention initiated by the Wisconsin State Horticultural Society five years ago, has really become an important factor for improving fruit growing. There were 70 registrations and 68 attended the banquet, which Mr. Ben Rusy, acting as toastmaster, made one of the most entertaining we have ever held.

In Appreciation

We appreciate the help of the fruit growers who spoke on the program—Mr. Victor Lydell, La Crescent; Robert Sacia, Galesville; Harold Schubert, Gays Mills; William Connell, Menomonie and staff members of the University of Wisconsin, Dr. C. L. Fluke, Dr. J. D. Moore, Prof. C. L. Kuehner, Dr. R. H. Roberts for excellent presentation. Also to the staff members of the University of Minnesota and Department of Agriculture, C. L. Aamodt, Harold Peterson, T. S. Weir, Dr. W. G. Brierly, Prof. W. H. Alderman, E. M. Hunt, Minnesota Secretary, and Prof. J. D. Winter, Fruit Growers' Association secretary. We appreciate the cooperation of County Agent Al Francour of La Crosse and assistants, and banquet speaker, Wisconsin County Boards Ass'n. secretary, Mr. A. J. Thelen.

THE PROGRAM

Insect Control in the Orchard and Concentrate Spraying

We wish to report the principal features of the program at this convention in this and coming issues, but some topics will be enlarged upon when they are more timely, as for example, spraying in the early spring months.

The subject of concentrate spraying created a great deal of interest. The topic was opened by Mr. Victor Lydell of La Crescent, Minn. He is greatly in favor of this type of spraying and thinks it's the coming thing. His machine delivers an air blast at 90 miles per hour and the spray comes through five or six nozzles on one side. It requires filling only ½ as many times as a regular sprayer, and getting water is a problem as their well is 600 feet deep. There is a great deal of saving on wear of equipment. Less costly equipment is required to pull a smaller load. The air is directed into the tops of the trees. Lydell uses a double strength spray from the prebloom and through the calyx spray. Then three times the regular concentration after the petal fall spray. This later concentration is not as much saving, however, as is cutting in half the first sprays.

He told of some burning effect when drying conditions are poor, as when spraying is done during a very humid night. This, however, is from lime sulfur only; none with milder sulfur. After the calyx spray he used mic sulfur. Some insects were controlled with parathion; he wore a mask and gloves when using it and felt no ill effects.

Robert Sacia, Galesville, on Concentrate Spraying

Mr. Robert Sacia of Galesville stated his machine is really a combination of an air blast and hydraulic sprayer. He is very well satisfied with it and had clean fruit last year. When using concentrated spray materials, a screen must be used behind the nozzle to prevent clogging. Nozzle size must be determined by the capacity of the pump. He finds that a speed of about 2½ miles per hour is a maximum in order to work the air through the trees.

Mr. Sacia said that it used to take 200 man hours to complete one spraying of the orchard with the old type of sprayer. He now sprays the orchard with only 50 man hours when they are rushed in the spring and are using two men. Later in the season, when they're not rushed, one man can do the work in 36 hours. For 10 sprays during the season, it therefore takes about 1500 to 1700 man hours less, which he estimated would save enough to pay for the new type sprayer in two years.

Mr. Sacia feels many growers pay too much attention to the materials they use and not enough to proper timing—to get it on before and during a rain. He praised paste sulfur for concentrate spraying and used it during humid or misty weather to prevent burning. He felt that parathion gave poorer results during cool weather than during hot weather. He has a supplementary duster and has saved crops during periods of rainy weather by "in-between dusting." Paste sulfur goes into solution very quickly and doesn't clog the nozzles.

Fruit Insect Control

By Dr. C. L. Fluke

Dr. C. L. Fluke gave his usual interesting and instructive talk on insect control in the orchard. For next year's spray program, the calyx of petal fall time is very important, because then we must spray to control codling moths, plum curculio and oyster shell scale. What shall we use? For plum curculio he feels we should use something better than arsenate of lead. Some of the materials in the picture are aldrin, dieldrin, E. P. M. and parathion. E. P. M. takes care of codling moths, aphids, leaf roller and several other insects, but it is just as dangerous to use as parathion. Dieldrin will not control codling moths, but is excellent for curculio.

Tests on Curculio Control

In checking various materials for control of curculio, he found on unsprayed trees, **48 fall curculio feeding holes on August 15th.** Trees sprayed with parathion had 3 feeding holes, with E.P.M. one, with aldrin, 3, and with lead arsenate, 9 feeding holes per 100 apples.

Dr. Fluke also reported briefly preliminary tests on the use of new chemicals on the soil to control insects. The work looks very promising, but needs further testing before recommendations can be made. Dr. Fluke's spray

program for insect control will be published in our March issue.

Apple Disease Control

Mr. T. L. Aamodt, Minnesota State Entomologist, gave a report, with further details by two assistants, on the Minnesota Orchard Spray Warning Service. Studies are made of insect injury and recommendations are given growers as to proper time and material for spraying.

Ground Spray for Scab Control Recommended

Report by Dr. J. D. Moore

Dr. J. Duain Moore, pathologist, has conducted research on disease control of fruits in Door County for a number of years and gave an excellent report on work done and recommendations for scab control. He said they cannot test all materials on the market, but do test representative types of materials.

Ground Spray Recommended. If you have had poor control of scab during the past season, you should apply the ground spray, Dr. Moore said. This will be his recommendation for 1952. By the use of a ground spray of Elgetol, it is possible to change the spray program and it will be less difficult to control scab. Some growers in Door County found it impossible to control scab until they used the ground spray.

It is well to remember that leaves heavily infected with scab may have as many as 50,000 scab spores per square inch to be released in spring. There are quite a number of growers, especially along the eastern lakeshore, who had a serious scab problem last year due to high moisture conditions. From May 16 to October 16 there were 22 inches of rain in the Door County area.

Dr. Moore gave the following report of results with the materials tested:

A Test of Spray Materials

Material	Amount Before Bloom	Amount After Petal Fall	% Scab
1. Lime Sulphur	2 gal. to 100 gal.	1⅓ to 100	6%
2. Tag	½ pt. to 100	2nd cover — Fermate, 1 to 100	3%
3. Lime Sulphur	2 to 100	Mike S., 2½ to 100 and Fermate, ½ to 100	10%
4. Puratized A.S.	½ pt. to 100	Fermate, 1 - 100	3%
5. Lime Sulphur	2 to 100	1⅔ to 100	3%
6. Lime Sulphur	2 to 100	Mike S, 5 - 100	3%
7. Fermate	1½ lbs.	Fermate, 1 - 100	14%
8. Lime Sulphur	2 to 100	Fermate, 1 - 100	3%
9. Lime Sulphur	2 to 100	Micro dritomic, 5 - 100	11%
10. Mag. 70	8 to 100	5 to 100	No Fruit
11. 341 SC	3 pts. per 100	3 to 100	3%
12. Lime Sulphur	2 - 100	341 SC, 3 pt. - 100	3%
13. Stanofide	½ to 100	½ to 100	26%

(To Be Continued)

New Fruit Fungicides

Their Adaptability For Better Timing Of Sprays

By H. C. Young, Ohio Experiment Station

(Annual Convention Paper)

Ohio Agricultural Experiment Station

This title has been discussed and emphasized ever since apple scab has been a problem. The emphasis, however, has been placed on the importance of covering the foliage and fruit of the trees before the apple scab spores shoot and just ahead of the infection period. This talk has to deal with almost the opposite principle in that sprays are called for just after the rain period and at the beginning of possible infection. Perhaps a word of explanation should be given as to what we mean by following the rain periods of infection. It is a period in each spring in which the scab spores leave their fruiting body and cause the initial infection. The reason for initiating this type of study was to determine why the regularly recommended sprays and timings frequently failed and to formulate, if possible, a more effective program.

Our standard spray program at the present time calls for a finely divided sulfur. This material has been standard for several years and every year there are a number of growers who call up and tell us that they sprayed exactly according to our recommendations, both as to the amount of material and timing, and have failed to control scab. We formerly considered such failures as resulting from wrong interpretations of our recommendations. This was our conclusion until two years ago when with as near perfect timing as we were able to follow, we obtained from 25 to 30 percent scab on our most susceptible varieties. We passed this off as a mistake in timing and thought perhaps it wouldn't happen again. This season the same thing happened. During both these seasons, fortunately, we had several other materials in the test plots and many of these new materials did not fail and gave excellent control of scab. It was because of these varying results that we decided perhaps our spraying program was not perfect. Last year we began a series using several different fungicides to determine their effectiveness when sprayed after the rain period for infection. The results are given in the table.

APPLE SCAB TEST
Before Versus After Infection Sprays
CORTLAND

Materials in 100 gallons	No. applications	Percent scab
1. Crag 341 3, 2 pts (before rains)	9	1.4
2. Crag 341 3, 2 pts (after rains)	8	2.0
3. Puratized Agr. Spray 1 pt (before rains)	9	0.3
4. Puratized Agr. Spray 1 pt (after rains)	8	1.1
5. MnEBD 2 lbs (before rains)	9	1.7
6. MnEBD 2 lbs (after rains)	9	1.9
7. M. sulfur 6, 5 lbs (before rains)	9	11.7
8. M. sulfur 6, 5 lbs (after rains)	8	20.8
Check (no spray)	0	100.0

It has been found that such materials as the Puratized group, Tag, manganese ethlene bis dithiocarbamate, and Crag Fruit Fungicide were all quite efficient when applied at that time. It will be noted further that sulfur did not control adequately in either case. While only one table is shown, several other varieties were included and similar results obtained. One surprising point was the amount of control given by sulfur when applied after rain periods.

The results given above were obtained from sprays applied as soon as convenient after rain ceased, certainly within 12 and not later than 36 to 48 hours. With a concentrate spray rig, it is possible to cover an orchard before the scab spores have penetrated and are out of reach of spray. Likewise, there must be a tremendous wash-off of sprays when applied ahead of certain rain periods which may cause some failures to control.

A certain amount of savings may be had by practicing this procedure. If a grower waits until after a rain period which is predicted and the rain period does not come, he can save that spray. Likewise, if a rain period is predicted and he puts on his spray and it doesn't come for 36 to 48 hours, new growth makes the coverage that much less effective. One feature in this method of procedure is still objectionable and that is the cost of the type of sprays that we would like to recommend. However, if one or two sprays can be saved and better control can be obtained, the cost would be no greater or perhaps even less than applying the old sprays of rain periods.

In conclusion, it must be emphasized that these results I am giving you have been obtained only over two seasons and must be considered preliminary.

COUNTY FRUIT GROWERS ASSN. MEETINGS SCHEDULED

County Fruit Growers Association annual meetings have been scheduled as follows:

February 26, Racine County Fruit Growers Association.

February 27, Milwaukee County FGA.

February 28, Waukesha County FGA.

March 3, Jefferson County FGA.

March 4, Washington County FGA.

March 5, Ozaukee County FGA.

March 6, Manitowoc County FGA.

March 7, Sheboygan County FGA.

KEEP SCAB OUT WITH DU PONT "FERMATE"

TOUGH ON DISEASE. "Fermate" fungicide gives foliage and fruit of apples and pears sure protection against scab. It also controls cedar-apple rust, black rot, sooty blotch and bitter rot.

EASY ON BLOSSOMS, LEAVES AND FRUIT. "Fermate" is safe to use through the scab season, provides disease control without burning or stunting even tender young growth. Safe in hot weather, too.

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See your dealer now *for Du Pont "Fermate" fungicide and other proved Du Pont pest-control products. Ask him for free booklets, or write to Du Pont, Grasselli Chemicals Department, Wilmington, Delaware.*

DU PONT CHEMICALS FOR THE FARM INCLUDE:

Fungicides: PARZATE® (Liquid and Dry), FERMATE,® ZERLATE,® Copper-A (Fixed Copper), SULFORON® and SULFORON®-X Wettable Sulfurs . . . *Insecticides:* DEENATE® DDT, MARLATE® Methoxychlor, LEXONE® Benzene Hexachloride, KRENITE® Dinitro Spray, EPN 300 Insecticide, Calcium Arsenate, Lead Arsenate *Weed and Brush Killers:* AMMATE,® 2,4-D, TCA and 2,4,5-T . . . *Also:* Du Pont Cotton Dusts, Du Pont Spreader Sticker, PARMONE® Fruit Drop Inhibitor, and many others. ®REG. U. S. PAT. OFF.

On all chemicals always follow directions for application. Where warning or caution statements on use of the product are given, read them carefully.

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BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

How We Prune Apple Trees For Better Production

By Fred Sacia, Galesville

Our orchard friends in Wisconsin and Minnesota are not aware of the extent to which ladder-way pruning has been carried on during the last six years in the Sacia Orchards.

They will, no doubt, at least be interested in the eventual outcome.

All of the 2500 trees in the new orchard have been ladder-way pruned. Now there never will be any long limbs protruding directly in to the way of travel, a must in the use of a mist sprayer. In this case, the spacing is 35 feet.

In the home orchard an estimated 2500 of 1 to 15 year old trees have been so pruned. The pruning of these trees is on an annual basis. Those that have been pruned five times require so little pruning that the cuttings may be left right on the ground. The minimum of time is required for operation—1 to 8 minutes per tree.

In addition to the number named, about ¾ of trees over 15 years have been ladder-way pruned too.

The trees today, after annual ladder-way pruning and cutting down of tops, are much smaller. Each tree has 8 ladder-ways, is about 18 feet across, the same in height and spaced 22 x 22 ft.

A new trend in apple tree growing is at hand. (Note Paul Stark in November American Fruit Grower.) Conventional pruning admits of no other than an out grown tree and for that reason, ladder-way type of pruning is offered as an alternative.

How the Pruning is Done

A cross section of the tree after pruning could well be represented by pie cut in either eight or sixteen pieces with every other piece removed. The openings continue vertically from the bottom to the top of the tree with openings wide enough to admit a ladder. Say we are working on trees sixteen feet in diameter. First, cut a "V" three feet wide on the side next to the way of travel.

Second, leave a wedge of tree three feet wide.

Cut another three foot "V" and so on around the tree. You thereby have eight openings and eight bearing sections and all within a short time. In our 20 year-old Wealthy block, it has taken less than 10 minutes per tree for each annual pruning for the last five seasons. The prunings are so small now that they can be left on the ground and still the trees are bearing unusually well.

All succeeding prunings after the first are just keeping the ladder-ways open and removing **all sucker** growth with light supplementary pruning.

Renewal of the tree depends on lateral and terminal growth and not sucker growth, which is impossible to control if one plans on holding a tree to a certain age.

DOOR COUNTY GROWERS MAKE WORLD'S LARGEST PIE

The world's largest apple pie was a feature attraction in Sturgeon Bay during Door County growers first apple promotion project, October 31—November 3.

Prizes were awarded the growers who exhibited apples in local store windows. Grand champion bushel was exhibited by Mr. Sid Telfer, Driftwood Orchards, Ellison Bay, on Red Delicious. Honorable mention was given the displays of Eames Orchards, Fruit Growers Co-op, Goldman Orchards, Hall Enterprises, Horseshoe Bay Farms, Jarman Orchards, Martin Orchards, George Vogel and Charles Whitford.

Apple Products Display

Honorable mention was also given the apple products display by Reynolds Brothers Co., and Griffin and Toohey Co. These two firms produce apple products with a high reputation for quality. The climax of the festival was the baking, displaying and the final eating. of the world's largest apple pie. Two bakers combined their talents and by using 13 bushels of Door County Wealthy apples, 100 pounds of crust ingredients, 40 pounds of sugar, two pounds of butter and a half pound of cinnamon, they produced a pie six feet across the bottom and a depth of 12 inches. After a pie eating contest by local boys, the pie was cut into small pieces and served to a tremendous crowd of spectators.

WISCONSIN NURSERYMEN'S MEETING

The Wisconsin Nurserymen's Association met at the Schroeder Hotel in Milwaukee on September 5-6. Officers elected for the coming year are Mr. Howard Anderson, Wisconsin Rapids, president; Robert Gieringer, Milwaukee, vice president; Mr. Thomas Pinney, Sturgeon Bay, remains treasurer. The Association voted for a summer meeting the second week in August in the northern section of the state and discussed the possibility of holding a one-day school on plant propagation at that time.

Speakers included Paul Reynolds of the Wisconsin Taxpayers' Alliance, Madison; Peter Cascio, vice president of the National Association; H. P. Nutley of the Parker Pen Co., Janesville; Murl Deusing of the Milwaukee Public Museum, banquet speaker. E. L. Chambers and Phil Smith of the State Department of Entomology discussed insect problems. Mr. Donald McDowell, director of the Department of Agriculture and Prof. O. B. Combs, chairman of the Department of Horticulture, U. W., spoke on the services available from their departments. Guest speaker was Prof. L. C. Chadwick of the University of Ohio on dwarf shrubs.

WISCONSIN JUNIORS WIN NATIONAL AWARD FOR GROWING VEGETABLES

Three attractive girls of rural Wisconsin areas were honored during the 17th annual convention of the National Junior Vegetable Growers Association at Cleveland in December.

Barbara Ann Sommerhalder, 16, of Menasha; Beverly Jean Bishop, 18, of Sherwood in Calumet County; and Carol R. Mahn, 20, Town of Oak Creek, Milwaukee County, each received $100 scholarship awards from the $6,000 provided by A & P Food Stores for the national gardening and marketing contest.

The top or national award of $500 was won by Albert B. Bishop, 20, of Guilford, Conn. Other awards went to these Wisconsin junior growers: Donald Koegel, 21, of Milwaukee County; John L. Hoh, 16, and Frederic Kaphingst, 14, both of Appleton; and Ellyn Marie Roudebush, 16, of Waunakee.

By E. Swingle in the Milwaukee Sentinel.

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

HIGHLIGHTS OF THE ANNUAL MEETING

The annual fall meeting of the Wisconsin Berry and Vegetable Growers' Association at Oshkosh, November 14, was a decided success. County Agent Verne Peroutky expressed it well when he said that "the program gave us a regular short course in berry and vegetable growing."

OFFICERS ELECTED

New directors elected for the coming three years are E. L. White, Fort Atkinson; Charles Swingle, Sturgeon Bay and Glen Swartz, Kenosha. Other directors holding over are Agnes Phillipson, Oshkosh; John Hauser, Bayfield; Roy Rasmus, Waupaca; Harry Barlament, Green Bay; Chris Olson, Berlin; F. W. Van Laer, Oconomowoc.

The Board of Directors met after the convention and elected Harry Barlament of Green Bay president, Charles Swingle, Sturgeon Bay, vice president; Chris Olson, Berlin, 2nd vice president; and E. L. White, secretary-treasurer. H. J. Rahmlow continues as corresponding secretary.

The Board discussed plans for 1952 and decided to dispense with the regular spring meeting and instead discuss the possibility of two summer meetings, one with a tour for strawberry and raspberry growers, to be held in Door Co. if conditions are favorable and another day for vegetable growers in a vegetable growing section. Time and location is to be decided later.

The program was so full of valuable material that Board members realized there was not enough time to discuss both topics, berries and vegetables, during one day. It may be that the next convention will be divided into two parts, a day for berry growers and a day for vegetable growers. The program was so good everyone felt attendance should have been much larger and every effort will be made to increase it next year. Mr. E. L. White, treasurer, reported 65 active members in the Society.

Treasurer's Report

Mr. E. L. White, treasurer of the Association, presented the following report:

Balance on hand,		Receipts:	
December 31, 1950	$ 44.00	Dues	98.00
		Registration and luncheon	51.50
		Received for posters	9.85
		Total	$159.35

AT THE WISCONSIN BERRY AND VEGETABLE GROWERS MEETING —Upper picture: Admiring a beautiful painting of squash are from left, Mr. John Schoenemann, Vegetable Extension Specialist, U.W., one of the speakers; County Agent Verne Peroutky of Oshkosh and Mr. Chris Olson, the artist and Vice President of the Association. Mr. Olson displayed six beautiful paintings of berry and vegetable scenes.

Lower picture. Some members, Board of Directors, Wisconsin Berry and Vegetable Association. From left, Mr. E. L. White, Sec., Fort Atkinson; Mr. F. W. Van Lare, Oconomowoc. Congratulating the newly elected president is Mr. Charles Braman, Waupaca, past president, shaking hands with Mr. Harry Barlament, newly elected president, Green Bay. Mrs. Chris Olson, Berlin; Mr. Glen Swartz, Kenosha and Mr. Charles Braman, Waupaca.

Grand Total	$203.35
Expenses:	
Dues to Horticultural Soc. for membership	$ 48.00
Posters	28.45
Luncheon, Green Bay Meeting	14.55
Miscellaneous expenses	24.90
Total	$115.90
Balance on hand, November 13, 1951	$ 87.45

Notes From The Program

Best Strawberry Varieties

Prof. C. L. Kuehner opened the program with a report of a survey of growers on favorite varieties of strawberries. This was an excellent presentation and indicated that most commercial growers still prefer the old varieties, Senator Dunlap, Premier and Beaver, depending on their location and soil type, but that newer varieties such as Robinson, Catskill and Thomas are being tested and meeting with favor.

As an indication of the variable results growers are obtaining with different varieties of strawberries under different soil, fertility, and climatic conditions, Prof. Kuehner's report on letters received from growers in answer to questions about their favorite varieties is of interest.

Grower No. 1 wrote he likes Evermore. He thinks Wis. No. 537 is not of satisfactory size and he will discontinue Robinson.

Grower No. 2 wrote Robinson is a heavy plant maker, but it and Senator Dunlap are poor shippers.

Grower No. 3 likes Sparkle and will discontinue Robinson.

Grower No. 4 in Milwaukee Co. has 8 acres and likes Robinson and Ambrosia (the latter is no longer grown in many places.)

Grower No. 5 will not change from Premier, Beaver and Catskill until we get something that he is sure is better.

Grower No. 6 has Wis. No. 537, Catskill and Beaver (in Bayfield Co.) and will continue with them. He likes No. 537 and says it's a good shipper.

Grower No. 7 grows 90% Premier and some Beaver. Says Robinson went out as it came in, with a splash.

Grower No. 8 thinks Fairfax is the best eating strawberry but a poor producer.

Mr. John Swartz of Kenosha stated that the variety Thomas is the best shipper. He gets $2 per crate more for it in the Chicago market because it looks so good.

Harry Barlament stated that a new variety called Lindelicious grows well at Ogden, Utah, and he plans to test it. The variety Nectarine is excellent if handled right, but it must be spaced well to get good size.

Chemical Weed Control

Mr. Frank Gilbert of the Branch Experiment Station at Sturgeon Bay gave an excellent report on weed control with chemicals. A detailed article will be published in a later issue on this subject.

From the growers standpoint it looks as if chemical weed control is here to stay and that growers are learning to use it. It is practical with crops of high per acre value where high priced labor is used for weeding in the rows. As yet the cost of most chemicals is prohibitive for broadcasting on many crops. Machine cultivation is still cheaper and just as effective for weeding between rows. With proper machinery for spraying the rows, only small amounts of material need be used and the cost per acre is then relatively small.

Some of the newer materials are quite effective for weed control in a variety of crops. 2,4-D and Crag are two that look very promising. Further recommendations will be given in spring issues.

Fertilizers for Strawberries

Mr. Gilbert spoke on the use of fertilizers for growing strawberries. He said that the variety Sparkle is a heavy feeder and requires fertile soil for best results. He recommended the use of fertilizer before planting and again in mid-season of the first year. Where irrigation is possible, the use of 10 pounds of a soluble fertilizer in 50 gallons of water, as a starter at planting time, greatly improved the set of the plants.

Mr. E. L. Chambers, State Entomologist, talked on field observations during berry plant inspection. He cautioned against the use of 2,4-D. It is quite difficult to remove from containers so it will be safe to use such containers or sprayers when spraying berry or vegetable crops. He told of a grower whose grapes showed serious leaf injury; on investigation it was found he had mixed spray materials in a container that had been previously used for 2,4-D.

Too heavy foliage on strawberry plants makes pollination difficult and may result in reduced yields. Red stele disease shows up in wet years or on low, wet soils.

Recent Developments in Vegetable Growing

Prof O. B. Combs, chairman of the Department of Horticulture, U. W., talked on developments in vegetable growing. Costs, he said, are rising. Competition is increasing. Prices are not rising in proportion. Growers must do considerable thinking during the winter months and plan for economical production. They must cut costs by growing better varieties such as hybrid sweet corn. They must grow the kind of vegetables and fruits that consumers will want to buy for freezing, as the deep freeze offers a future market that should not be overlooked.

Prof Combs promised to give us recommendations on vegetable varieties for publication in the March issue of Wisconsin Horticulture. He recommended the use of yellow's resistant cabbage and stated that consumers want a small cabbage. The size of the head can be reduced by close planting, stunting before the plants are set out, such as is the case with plants shipped in from the South, and also by growing on a soil low in nitrogen and high in phosphorus and potash.

Best results with tomatoes are obtained by planting stocky plants and then mulching. Excellent results have been obtained with a starter solution of nitrogen fertilizer used in the planting machine.

Good varieties of muskmelon are: Delicious and Iriquois. The best head lettuce is Great Lakes.

Weed Control in Vegetables

Mr. John Shoenemann, vegetable extension specialist, U.W., talked on weed control in vegetables. He emphasized that weeds should be curbed before planting by good cultural practices. Some chemicals can be used as pre-emergent sprays. We plan to publish an article on this subject by Mr. Schoenemann in a spring issue of the magazine. Here again, chemicals are not a substitute for cultivation wherever cultivation can be practiced. However, where hand weeding is

done in the rows, chemicals can be quite economical and valuable. Among the materials mentioned were Stoddard, Solvent and CMU, which looks good as a pre-emergent spray for carrots. 2,4-D gave good results on muck soils for onions. He did not recommend 2,4-D on sweet corn after emergence because the stalks become too brittle and warned against the use of the estor form of 2,4-D on or near a vegetable crop because it is highly volatile and injury may result a number of days after spraying.

Vegetable Insect Control

Dr. R. Keith Chapman, Department of Entomology, U. W., talked on the subject of 1951 tests on materials for vegetable insect control.

VEGETABLE INSECT CONTROL

Dr. R. Keith Chapman gave these recommendations.

During the 1951 growing season, outbreaks of several insects occurred in Wisconsin which have not been present in large numbers for some years. Among these were the onion maggot, cabbage maggot, beet leafminer and spinach leafminer. All of these insects are similar in nature and cool, wet springs favor their abundance, often completely killing the plants. This year in Wisconsin, many fields of onions were abandoned and disced up and a considerable loss of cabbage was also accounted for by the cabbage maggot. Damage from onion maggot was greately reduced. Large increases in yield were obtained with the use of aldrin on onion fields when the plants were about 1 inch tall with the application being repeated in 10 days or 2 weeks. On cabbage it is suggested that the cabbage plants be dusted or sprayed with aldrin or chlordane in the seed bed and that one of these materials be added to the transplant water if the insect is threatening at that time.

The beet and spinach leafminers are maggots which feed between the upper and lower surfaces of the leaf, eating out irregular blotches which causes a loss in vitality of the plant and an unsightly appearance if the leaves are to be used as greens. Although these insects are protected by the leaf surfaces from direct contact with the insecticides, they are still easily killed by such materials as DDT, chlordane, aldrin, toxaphene and parathion. Precautions have to be taken when applying these materials to spinach, however, so that toxic residues do not remain on the leaves when they are marketed.

Berry Growing

Prof. J. G. Moore has been carrying on some very interesting experiments at the University on varieties and methods of growing small fruits. Relative to varieties of raspberries, he emphasized that Early June, which was developed in New York state, has been most profitable on the University farm at Madison on heavy soil. He recommended for that type of soil the early variety June and also Latham. June will mature 50% of its crop before the Latham comes on and is often quite profitable because of better prices at that time. It seems to do better on heavy than on light soil, but it doesn't make many plants in the nursery.

Relative to winter injury the June has been about as good as Latham. After a severe winter, Latham seems to come back the best when there has been injury.

Relative to pruning, he remarked that the earliest and the smallest berries grow at the top of the cane, so by pruning we remove the earliest and the smallest, but the berries from lower shoots are more uniform and the average is just about as early.

On the subject of strawberries, Prof. Moore remarked that we need to practice runner control on varieties that produce a large number of new plants, such as Senator Dunlap and Robinson. He remarked on the possibility of using 2,4-D to reduce the number of runners, but we must first learn how to use it; how many plants to expect and how to apply it.

Prof. Moore has promised an article on pruning raspberries and on strawberry runner production for our next issue. We will be looking forward to it.

Don't worry about finding your station in life; somebody will be sure to tell you where to get off.—The Gillet Times.

If you're a man of few words, you won't have to take so many of them back.—The Cedarburg News.

A STRAWBERRY WAFFLE SANDWICH

Cooley's Cupboard at Evanston, Ill., features every day in the year, for tea and an evening snack a **strawberry** waffle sandwich. It is their largest selling item according to Miss Freda Schroeder, of Loyal, Wis., and Evanston, who gave the recipe for the waffle at the annual meeting of the Wisconsin Berry and Vegetable Growers' Association in Oshkosh in November.

Miss Schroeder emphasized, however, that whenever the restaurant gets frozen berries of the wrong variety, sales drop tremendously. For example, a shipment of Texas Premiers were the most anemic looking berries and made a vast difference in sales. The berries must be dark red in color and firm.

Here is the recipe for the waffle. Try it. And if you can make it as good as Cooley's perhaps you can greatly increase the sale of strawberries in your community by inducing some restaurants to adopt it.

Strawberry Waffle

- 1½ cups flour
- 3 teaspoons baking powder
- 1 teaspoon salt
- 3 tablespoons sugar
- 4 eggs, beaten separately
- 1½ cups very cold water
- 4 tablespoons melted butter or salad oil.

Sift flour, measure and resift with oter dry ingredients. Beat egg yolks and white separately. Combine beaten yolks with melted butter or salad oil, add water, add liquid to dry ingredients and beat well. Gradually fold in beaten egg white. Bake on a very hot waffle iron.

This waffle should be allowed to cool — break in two pieces, place two scoops of ice cream on the bottom half and place other half over the ice cream. Cover the waffle with frozen or fresh strawberries.

From the Editor's Desk

HAPPY NEW YEAR

We wish all members of the Wisconsin State Horticultural Society a very happy and prosperous new year. We hope your work in horticulture will be happy and profitable and that 1952 will bring added blessings to all of you.

Arnold Nieman, Cedarburg, president, Wisconsin State Horticultural Society.

OUR COVER PICTURE
Fruit Store Window
Painting by Mrs. Chris Olson

In our cover picture, Chris Olson, our berry grower artist from Berlin. Wis., has captured a familiar scene of human interest. It's a cold day outdoors and an appealing array of fruits and vegetables has been arranged in the store window. Folks are through window shopping for Christmas and as store windows have been re-arranged they are thinking of going back to normal and eating good, well-balanced meals. Perhaps they're wondering a little how they're going to pay for some of these things after paying Christmas bills and taxes. At any rate they're starting the New Year right; they've made a resolution to economize by buying only essentials—until next December when they'll do the same thing over again.

IN MEMORIAM
Resolutions Adopted at the Annual Convention

Two of our members who had been active for many years, namely, Mrs. Peter Swartz, Waukesha, and Mr. Henry Mahr, Sr., Caledonia, have passed to their reward during the past year.

Therefore, be it resolved that the members of the Wisconsin State Horticultural Society express their deep appreciation of these two loyal and hard-working people and that we extend our deepest sympathy to the bereaved family and friends.

Mrs. J. L. Larson

Mrs. J. L. Larson of Iola passed away Monday, November 19th. Mrs. Larson had a dynamic personality and was a true exponent of Christian

Faith and Loyalty. She was an active promoter of garden clubs and was president of the Iola Garden Club, Secretary of the Central Wisconsin Region, and Chairman of the State Advisory Board, Garden Club of Wisconsin.

Therefore be it resolved that the Executive Board of the Wisconsin State Horticultural Society express their appreciation of her services and extend deepest sympathy to the bereaved family and friends; also that this memorial be published in the Horticulture magazine and copies sent to Mr. Larson and the presidents of the Central Region and Iola Garden Club.

THE CONVENTION FLOWER SHOW

A number of excellent arrangements were shown in connection with the meeting of the Womens' Auxiliary at the annual convention of the Society at Fond du Lac, November 27-28. The arrangements helped create a beautiful setting for the meeting. Premiums have been sent to the exhibitors by the Society.

The Winners

Arrangement Of Fruit And Greens. Excellent, by Agnes Phillipson, Oshkosh.

Arrangement Of Walnuts, Pecans And Lemon Drops. Excellent, Mrs. Roy Sewell, Milwaukee.

Chrysanthemum Arrangement. Very good, Mrs. W. F. Vollstedt, New Holstein.

Arrangement Of Dried Material. Excellent, by Mrs. H. Dorn, New Holstein.

Christmas Arrangement With Madonna. Good by Mrs. G. J. Hipke, New Holstein.

Making Old Flowers Useful. Good by Mrs. W. F. Vollstedt.

Arrangement of Dried Materials. Good, by Mrs. H. Dorn.

Arrangement Of Strawberries. Corn And Fruits, Dried. Very good, by Mrs. H. Dorn.

Arrangement Of Fruit. Very good, by Mrs. H. Dorn.

Arrangement Of Combination Of Gourds And Flowers. Excellent, by Mrs. H. Dorn.

Arrangement Using Feathers. Excellent, by Mrs. W. F. Vollstedt.

Fruit Arrangement. Excellent, by Miss Bessie Pease, Oshkosh.

Fruit Arrangement. Excellent by Mrs. L. T. Zinn, Hartford.

Cornucopia. Good, by Mrs. G. J. Hipke.

Arrangement With Moss. Excellent, Mrs. G. J. Hipke.

Holiday Decorations. Very good, Mrs. Fred Schildauer, New Holstein.

Corsage. Very good, Mrs. G. J. Hipke.

Auxiliary Has Fine Program

The Womens' Auxiliary had an excellent program. Prof. O. B. Combs talked on "Freezing Fruits and Vegetables," and Prof. Gale Beck on house plants. Mrs. Lillian Moehrke, Fond du Lac, judged the apple cookery and discussed the dishes brought in. Mr. Beck and Dr. B. Esther Struckmeyer judged the flower arrangements, which were of excellent quality this year.

Mrs. Forest Middleton gave an excellent demonstration on flower arrangement on the afternoon program. Her topic was, "Fun With Flowers, Fruit and Vegetables. How to use the material you have for holiday decorations." She gave many practical suggestions.

New Officers Elected

The new officers elected by the Auxiliary are Mrs. Arnold Nieman, Cedarburg, president; Mrs. Dawson Hauser, Bayfield, vice president; Mrs. R. H. Sewell, 7341 N. 76th St., Milwaukee, secretary-treasurer.

Honorary Recognition Services

Society Presents Certificates To Its Secretary and Treasurer

Mr. E. L. Chambers, State Entomologist and Wisconsin Horticultural Society treasurer since 1929, and H. J. Rahmlow, secretary since 1927, were presented honorary recognition certificates at the annual convention banquet in Fond du Lac on the evening of November 27th.

The certificate presented Mr. Chambers recognized him for, "leadership in advancing horticulture as State Entomologist, as an officer of the Society and outstanding showmanship as superintendent of horticulture at the Wisconsin State Fair."

Mr. Rahmlow was recognized "for his outstanding achievements in the fields of organization, education and journalism in horticulture, as secretary of the Society for 24 years." This was the 25th annual convention in which he took part.

Presentation of honorary recognition certificates. President Gilbert Hipke presents honorary recognition certificates to, left, H. J. Rahmlow, secretary, and right, E. L. Chambers, State Entomologist and Society treasurer.

ERNEST LESLIE CHAMBERS

Ernest Leslie Chambers was born on an Ohio farm at Seville, Medina County, Ohio, on September 9, 1896. He was the youngest of a family of six boys, and grew up on a 325 acre farm devoted to general farming, including such diversified activities as caring for a large herd of pedigreed Holstein cattle, several hundred Spanish Marino sheep, fancy breeds of poultry; operating a small nursery in connection with the growing of small fruits, an apiary, a large sugar bush, and a farm orchard with more than 50 different varieties of apples, pears and peach trees. Corn and wheat were grown for seed. Since the farm was located only a few miles from the State Experimental station at Wooster, Ohio, many experimental crops were also grown on the farm in cooperation with the Station. This probably accounts for his continued interest in experimentation now being carried on a 5 acre tract of land near Madison.

After graduating from Seville High School, Mr. Chambers attended Ohio State University at Columbus, Ohio, where he received his B.S. degree in the College of Agriculture, specializing in entomology. His college work at Ohio State was interrupted by the 1st World War, of which he is a veteran. During his service in the army, he was in the Medical Corps receiving training in medical entomology and serum and vaccine work at the Army Medical School in Washington, D. C., and the Yale Army Laboratory School at New Haven, Connecticut. After getting out of service, he was employed for about a year as an inspector with the Federal Horticulture Board in Washington and with the Bureau of Entomology, doing research work with greenhouse insects at a field station he set up at Doylestown, Pennsylvania. He then returned to Ohio State University, where he graduated in 1921. He came to Madison, Wisconsin, in July 1921 to work as a nursery inspector, and shortly afterwards he was appointed assistant state entomologist for the State Department of Agriculture, under Dr. S. B. Fracker. In September 1922, he was married to Crystal Hart, an Ohio Girl. In 1925, he received his M.S. degree from the University of Wisconsin, where he had continued his studies in entomology and plant pathology. In 1926 he became Secretary of the Wisconsin Horticulture Society, and in 1927 he succeeded Dr. Fracker as State Entomologist, which position he still holds. In 1940 the Seed and Weed, and the Feed and Fertilizer offices were also put under his supervision, and he was made Chief of the newly created Plant Industry Division, which responsibility he now carries. The Bee and Honey Section was also added to his division later.

On July 1, he completed 30 years of service with the Department of Agriculture; for 25 years he has also served as superintendent of the Horticulture Department of the State Fair. He is a life member of the State Horticultural Society and has been its treasurer since 1929. He is an honorary member of the Wisconsin Nurserymen's Association, and is a member of the Sigma Xi and Phi Sigma honorary scientific societies, a member of the American Association of Economic Entomologists, Entomolog-

(Continued on page 102)

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
JOHN GATES
Two Rivers

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

TREASURER
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

Society Holds Annual Meeting

New Board Members Elected

The Wisconsin Gladiolus Society held a very interesting meeting at the Retlaw Hotel, Fond du Lac, on November 11. For the first time on record a snow storm prevented the meeting from being held as planned on November 4.

Business Transacted

The Treasurer reported a membership of 284 and that 94 had dropped out during the past year or two.

The resignation of Mr. Paul Ravet of Marinette as a member of the Board of Directors was accepted due to illness in the family. Mr. Ray Casimir of Spaulding, Mich., was elected to take his place.

The Society voted to increase the annual dues for state membership to **$1.35 per member per year.** Dues for foreign members will be $2.00 per year.

Directors Elected

The following directors were elected for a period of three years: Walter Krueger, Oconomowoc; Otto Kapschitzke, Jr., Sheboygan; Jerry Merchart, Marinette; John W. Perkins, Neillsville; Archie Spatz, Wausau.

The Board of Directors had a short meeting immediately after adjournment and elected the following officers: Walter Kurtz, Chilton, president, John Gates, Two Rivers, vice president; Mrs. A. E. Piepkorn, Plymouth, secretary; Mrs. Lois Wightman, Plymouth, treasurer.

Our Next State Show

There was considerable discussion on where to hold the next Wisconsin Gladiolus Show. The President appointed **all chapter presidents** as a

committee to scan possibilities for a location for holding the State Show. There being no invitations, the final decision on the show was held over for action at the spring meeting.

The decision on where to hold the spring meeting was left to the officers. In case invitations are received for holding the State Show, the meeting may be held in that city.

Financial Report

Mr. John Gates reported on the receipts and expenditures on the Wisconsin Gladiolus Show held in Two Rivers on August 11-12, 1951.

Receipts from ticket sales and donations were $464.65. Show expenses amounted to $313.05.

Receipts for advertising in the premium schedule amounted to $726.00. Expenses for printing the schedule were $281.50, leaving a net profit of $444.50.

This was an excellent showing and Mr. Gates was given a vote of appreciation by the Society for the excellent work he and his committee carried on.

WISCONSIN GLADIOLUS SOCIETY
Financial Report, Nov. 1, 1951

Receipts

Cash Balance, Oct. 1, 1950	$492.69
Cash Advance returned from Madison Chapter	300.00
Dues Recieved (Including Hort. NEGS & NAGC)	446.00
Bulb Auction	139.00
	$1377.69

Expenses

Wis. Hort. Soc.	$181.06
NEGS	90.25
NAGC	65.25
NAGC Class. List	31.00
Exp. Madison Show	67.50
Flowers	58.65
Hall Rent	15.00
Refunds	10.25
Membership cards, Stationery, Stamps	52.85
Nat'l. Affiliation Dues	25.00
Bank Service Ch. & Bond	7.46
Director's Picnic Expenses	3.64
State Show—1951	165.71
	773.62

Balance on Hand Nov. 1, 1951 $604.07. Paid up Members—284.

By Mrs. Len. Wightman, Treasurer.

SHEYBOYGAN COUNTY CHAPTER MEETING

The annual meeting of the Sheboygan County Chapter was held on November 13 with 28 members present.

The following officers were elected: Walter Axel, Sheboygan, pres.; Jacob Kertz, Elkhart Lake, vice pres.; Mrs. Harvey Pierce, Sheboygan, sec.-treas.; directors: Dr. L. C. Dietsch, Plymouth; Otto Kapschitzke, Sheboygan, and William Bonanze, Sheboygan.

New members accepted for the chapter are Mr. and Mrs. Wegemann of Sheboygan and Mr. Baugart of Chilton.—By Elenora Piepkorn, Sec.

WE TAKE A LOOK AT NEW GLADIOLUS VARIETIES

By Walter Krueger, Oconomowoc

Since white gladiolus comprise a large percentage of the florists' requirements for wedding and funeral work, and since many people prefer this color, it might be well to begin this series of gladiolus comments on varieties in this color group.

Silver Court is the nearest to "dead white" and its glistening florets, and superb placement of florets make it a truly beautiful flower. Its bulbs do not split like its older competitor, and it has all of the attributes necessary for a long stay in the plantings of amateurs and commercial growers. I consider it to be one of the best ten gladiolus ever offered to the public. No other gladiolus except Wax Model has the same precise floret placement. **Newport White** is said by many persons to be a good white. I have no experience with growing it.

In creamy white, **Florence Nightingale** seems to outspike its competitors. It will open 8 five inch lightly ruffled florets at one time. Like Silver Court it is an early blooming variety.

Leading Lady and **Silver Wings** are the commercial standard bearers in this color area with the older **Snow Princess.**

Rugged **Texas,** not as classy in purity of color as other cream whites, out performs them in spike making in rugged conditions. Spikes of No. 6 bulbs of **Texas** frequently out-perform No. 1 bulbs of other varieties.

Cream whites with yellow throats are always attractive. In this group **Mt. Index** gets its competition from **Lady Anne.**

There seems to be a return to favor of whites with darker colored throat petals. **White Challenge** (pale rose throat) is the best "ribbon getter."

Sparkling **Skippy,** very ruffled (with sharp pink thumb size throat spot) is perfection in medium sized flowers.

A clean white with a lavender throat that will soon be introduced as **Frenchy** will appeal to many glad lovers.

A white sport of a sterling variety now in commerce will one day startle the gladiolus world.

THE TWIN CITY GLADIOLUS SHOW MARINETTE, AUGUST 18 - 19

The Twin City Gladiolus Show held in Marinette was a great success and was very well attended, writes Jerry Merchart, show chairman, of Marinette. There were about 2,000 spikes shown and the quality was excellent.

The Winners

SECTION CHAMPION, CLASS A, 500-400. Mrs. Hugo Krubsack, Peshtigo, on Spic and Span.

DIVISION CHAMPION AND GRAND CHAMPION, Mrs. Hugo Krubsack on Spic and Span. Runner-up, Arnold Sartorius, Porterfield, on Burma.

Special awards were given A. Sartorius for the most ruffled glad, Daniel Boone. He also had the spike with the largest floret, Chantenay; the spike with the longest flower head, Grand Monarch, and with the most florets open in good condition, Spic and Span.

SECTION CHAMPIONS, RECENT INTRODUCTIONS. Large. Jerry Merchart, on variety Mother Fisher.

Small and Medium. Gordon Shepeck, Green Bay, variety Nocturne. Division champion, Jerry Merchart, variety Mother Fisher.

Junior 4-H Division

27 boys and girls from Marinette received gladiolus bulbs from chapter members last spring. 18 reports had been sent in by November 1, These will be judged and reported later.

The Junior Champion Spike in the 4-H division was shown by Alice Utter, Marinette, variety Corona.

In the amateur division, Jerry Merchart won the section and division championship on Phantom Beauty. Mary Lou Salewsky, of Menomonee, Mich., won the section championship in Class 300-100 on Charmaine.

MARATHON CHAPTER ELECTS OFFICERS

Lloyd Prahl was elected president of the Marathon County Chapter of the Wisconsin Gladiolus Society at its annual banquet meeting in November. A total of 68 attended. Other officers to serve during the coming year are Arthur Schulz, vice president; Mrs. Lloyd Prahl, secretary; and Albert Scholtz, treasurer.

Two directors-at-large elected for a three-year term are Edward Schaepe and Carl Jahnke. Jahnke showed slides of the chapter's 1951 show held at the YMCA, and of views in local gardens. Mrs. Edward Baesemann, a chapter member, showed movies taken at the show and also in local gardens.

GLADIOLUS BULB HEARING

Proposed trade practice rules for the gladiolus bulb industry have been made public by the Federal Trade Commission and were considered in Washington on November 29. The gladiolus industry will be greatly benefited by fair practice rules to prevent deception of buyers. At a previous hearing in Chicago a heated debate arose over the commission's control of **advertisements containing bulb sizes.** It relates to the practice so evident during spring months when advertisements appear in many of our newspapers and magazines, lauding the possibilities of bulblets in the home garden. The ruling adopted at the meeting reads in part, "It is the consensus of the industry that the size of the gladiolus bulb should be specified in all advertisements . . . such size should be the measurement of the diameter of the bulb and should be stated in inches." The ruling further stated that it is not in the interests fair competition to state the size in circumference or in centimeters. This is certainly a step in the right direction.

CHICKWEED SENSITIVE TO DN

DN's are showing exceptional promise for chickweed control in seedling and established alfalfa plantings. Use suggestions are now available in Delaware, Maryland and New Jersey. Premerge and Dow Selective Weed Killer can be used in late fall or winter. Complete coverage of the chickweed is particularly important. Where thick and matted, a second application may be needed for satisfactory kill.

In the stage of grower trial is the use of DN in strawberries to control this same weed pest. Here again, it seems that application while the strawberry plants are dormant or nearly so is best. — From Down to Earth, Winter, 1951.

A telephone pole never hits an automobile except in self-defense.—The Bonduel Times.

Honorary Recognition

(Continued from page 99)

ical Society of America, American Phytopath Society, and Society of American Foresters. He has three children, two sons and a daughter.

HENRY J. RAHMLOW

The 1951 annual convention of the Wisconsin State Horticultural Society was the 25th in which Henry J. Rahmlow participated.

Mr. Rahmlow was brought up on a farm near Appleton. After graduation from Appleton High School and the College of Agriculture, University of Wisconsin, he taught agriculture at Bayfield High School, where he became actively interested in fruit and flower growing, working with Bayfield fruit growers and Mr. John Huaser, one of Wisconsin's largest perennial flower growers. After two years at Bayfield, he became director of the Department of Agriculture at Northland College in Ashland and managed the college farm. Following this, he served eight years as County Agricultural Agent of Price County. While in this work he developed as a hobby a 20 acre vegetable and flower farm on muck soil. He was, in the mid-1920's, the largest grower of head lettuce in the state.

In November of 1927 Mr. Rahmlow succeeded the late Frederic Cranefield and E. L. Chambers as Secretary of the Wisconsin State Horticultural Society and took part in the 58th annual convention held that year in Madison on November 30th—December 2nd in the state Capitol.

Mr. Rahmlow's first efforts were to build up the membership of the Society which numbered about 1,000 in 1928. By 1945 this membership had reached 6,500. His first efforts were to create a state-wide organization of the garden clubs affiliated with the Society, and he became Corresponding Secretary of the Wisconsin Garden Club Federation, which position he held for 19 years, helping build it from a membership of 15 to 103 clubs. This was followed shortly by the affiliation of 8 county fruit growers associations, the fruit growers organizations of Door County, the Wisconsin Gladiolus Society and the Wisconsin Beekeepers Association. He was instrumental in organization of the Wisconsin Apple Institute and has supervised its apple promotion program. The latest organization he helped create is the Wisconsin Berry and Vegetable Growers Association and the new Garden Club of Wisconsin.

Mr. Rahmlow has taken an active part in the affairs of each of these state-wide affiliated organizations, helping them to become among the most active in the United States. During all these years he has been editor of Wisconsin Horticulture, which is recognized as one of the leading all around horticultural magazines in the nation.

AFRICAN VIOLET CULTURE TESTED AT OHIO EXPERIMENT STATION

Six experiments were conducted at the Ohio State University greenhouses under an African Violet Society fellowship for 1950-1951. The results were published in the December quarterly bulletin of the African Violet magazine, official organ of the Society. (Membership, $3.00 per year. Membership secretary, Mrs. Earl Mutchner, 606 Richmond Ave., Richmond, Ind.)

The results of the six experiments were summarized as follows:

1. Under natural light conditions Saintpaulias grow and flower best at about 1,000 foot-candles of light.

2. Saintpaulias grow and flower best at a temperature near 70° F.

3. Saintpaulias grow satisfactorily under 300 foot-candles of artificial light from either "White" or "Daylight" fluorescent lamps that are lighted for twelve hours a day.

4. This plant grows equally well when organic or inorganic sources of nitrogen are used.

5. Mature plants should be fertilized with a complete fertilizer about every four to six weeks. One half to one teaspoon of dry complete fertilizer or a liquid complete fertilizer applied according to dilution directions should be used.

6. About one half teaspoon of calcium sulfate (gypsum) should be applied to the soil about every four months.

7. Saintpaulias grow well at a pH near 7.0 (neutral).

8. Well-rotted manure or "moats" are the satisfactory organic materials to use in soil mixtures for this plant.

9. Earlier flowering and slightly more abundant flowering and slightly larger plants resulted when Saintpaulias were watered by the constant level method.

Watering Method Experiment

A table showing the time of flowering and average number of flowers per plant by two methods of watering —the constant level method and regular hand watering are given.

In the constant level method of watering a water level is continuously maintained one inch below the surface of a sand layer upon which Saintpaulia pots have been placed. While this is practical only in a greenhouse, it probably compares well with the method of bottom watering used in homes by adding water in a saucer.

The results of these two methods of watering on the average number of flowers per plant are given as follows:

	Average Flowers Per Plant to June 1, 1951	
Varieties	Hand Watered	Constant Level
Mentor Boy	8.4	27.8
White Lady	0.2	6.0
Pink Girl	12.0	4.8
Amethyst Amazon	9.5	3.8
Redhead Girl	4.3	16.0

It will be noticed that there is considerable variation in the number of flowers per plant produced by different varieties. While most of the plants produced the largest number when watered by the constant leveling method, the varieties "Pink Girl" and "Amethyst Amazon" produced more by the hand watering method.

This is an illustration of how difficult it is to derive definite conclusions from experiments until they have been carried on for a number of years.

(To be continued)

Poor Old Hiram! He went up to New York determined to make his living pulling some skin games on innocent strangers. However, the first fellow he tried to sell the Brooklyn Bridge to turned out to be the owner of the darned thing, and if Hiram hadn't paid him ten dollars to keep quiet they would have him arrested.

Garden Club News

FLOWER ARRANGEMENT LECTURES

Garden Club of Wisconsin And Horticultural Society

A systematic course of flower arrangement and flower show judging is being planned by the Garden Club of Wisconsin.

The first course will be given by Dorothy Biddle of Pleasantville, New York, at a series of four meetings to be held from **Monday, May 19, through Thursday, May 22, 1952.**

Meetings will be held in the following cities: Milwaukee, Fort Atkinson; Oshkosh and Iola. Details of the program and location of the meetings will be given later when full plans have been made.

The Milwaukee committee has announced plans to devote the forenoon session to the topic, "Fundamental Principles of Design in Flower Arrangement and the Mechanics of Arrangement." The afternoon program will be devoted to table settings. Registration fee at the Milwaukee meeting $1.00 per person. Four meetings are planned so as to reduce the expenses of members for travel. It will be necessary to have an attendance of at least 100 at each meeting to meet all expenses.

The meetings will be open to everyone. Examinations will be given to those who desire to work for a State Judging Certificate.

GARDEN CLUB YEARBOOK CONTEST

We wish to announce a garden club yearbook contest sponsored by the Garden Club of Wisconsin, affiliated with the Wisconsin State Horticultural Society. Prizes will be announced later. There will be a grand champion and reserve champion award. All the books will be judged by the merit system; those scoring from 93 to 100 rating Excellent, those from 85 to 93, Very good. The winners will be sent to a national contest.

Complete scale of points for judging will be published in a later issue. In brief, the score card will consider

the activities of the organization, the value of the club program and the contents and make-up of the yearbook. The size of the club will carry no weight in judging. Consideration will be given to activities, such as systematic course of study, a flower show each year, a garden pilgrimage a club project and an authoritative speaker at at least one meeting.

The yearbook should also contain evidence of progress in projects chosen, names and addresses of members, program of meetings, and supplementary material of value to the members.

Yearbooks may be printed, mimeographed or prepared in any other way. Scrapbooks, however, are not considered. Yearbooks must be submitted to a committee to be announced later, before September 1, 1952.

CHICAGO FLOWER SHOW BY THE GARDEN CLUB OF ILLINOIS

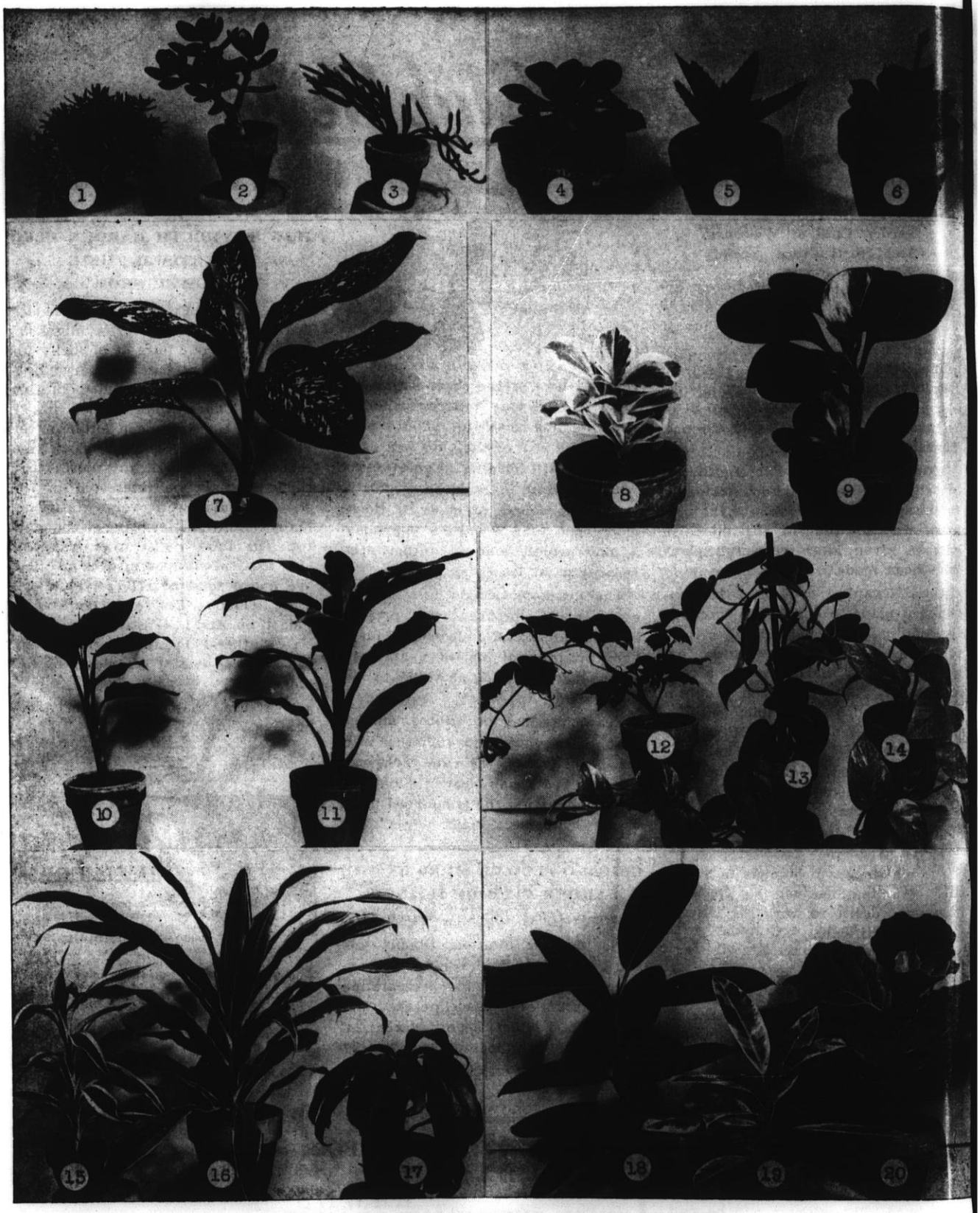
Congress Hotel, Chicago, March 14-18

The Garden Club of Illinois will start the celebration of its 25th anniversary year with the presentation of its 1952 flower show at the Congress Hotel, Chicago, March 14 through 19. "Outdoor Living Today" will be featured with shade trees, terraces and gardens for young people, all following the modern trend.

HOW PLYMOUTH GARDEN CLUB ADVERTISED THEIR FLOWER SHOW

Mrs. William Curtis of the Plymouth Garden Club writes, "You might be interested in our form of publicity for our flower show. Our secretary printed 300 postcards with an invitation to attend. These were divided among members, each taking a letter of the alphabet in our telephone book and sending the cards to those they thought might be interested in the show. Results were very gratifying. Many thanked us for being so thoughtful. The total registration was 261. Our local newspaper also cooperated. We had a total of 171 individual entries, which were very competently judged by Mrs. L. G. Stewart and Mrs. Val Suttinger by the merit system. We like the idea of comments by the judges.

"We are planning a Christmas lighting contest this year."



LEARN TO KNOW YOUR HOUSE PLANTS

1. Sedum variety. 2. Crassula Dexteri. 3. Clubmoss Crassula. 4. Sempervivum or houseleek. 5. Aloe Humvir. 6. Echiveria. 7. Dieffenbachia. 8. Variegated Peperomia. 9. Oval-leaf Peperomia. 10. Chinese evergreen. 11. Variegated Chinese evergreen. 12. Grape ivy. 13. Philodendron. 14. Scindapsus—ivy arum, or Pothos. 15, 16 and 17. Species of Dracena. 18. India rubber plant. 19. Variegated India rubber plant. 20. Ficus pandurata, fiddleleaf fig.

WAUWATOSA GARDEN CLUB NEWS

Around an L-shaped table at the Hillcrest Tea Room 35 members of the Wauwatosa Garden Club gathered for their annual dinner on Oct. 16. Mr. H. J. Rahmlow was guest speaker.

In keeping with the season, chrysanthemums were used profusely on the table. Other decorations were place cards, made of natural dried materials by some of the members, and oak leaves in their present splendor.

After a short business meeting, Mr. Rahmlow spoke about various bulbs and how to store them; care of house plants and showed colored slides of 27 varieties of zinnias and other annuals. Other pictures were from the flower show at the Garden Club of Wisconsin convention in Milwaukee, West Allis Flower Show at Allis Chalmer's Club House and excellent arrangements in a home in Glencoe, Illinois, part of the flower show of the Garden Club of Illinois last June.

At the Nov. meeting Mrs. Pearl Johnson gave a talk and demonstration on Christmas decorations. On Nov. 30 there was a plant sale at the Wauwatosa Woman's Club to which the Wauwatosa Garden Club contributed plants, aprons and fancy breads.—By Mrs. Martha G. Koch.

A good sized audience including guests heard Mrs. Pearl Johnson talk about decorations for the coming holidays.

Mrs. Johnson created a white and green display of a sleigh filled with snow balls and long needled pine which would be most attractive anywhere at Christmas. The use of plastic snow and the latest in delicate metal ornaments was shown.

Attendance prizes were drawn. Mrs. Thwaits won a Santa Claus vase with a cap made of red carnations. A guest won a Christmas corsage, and Mrs. Johnson was the recipient of a beautiful cluster of silver grapes. Officers were elected for 1952.—By Mrs. Martha Getzlaff Koch.

MARINETTE GARDEN CLUB HAS INTERESTING PROGRAM

At our September meeting, we had a small flower show and also showed some films of iris and flower gardens. At our October meeting, we responded to roll call by bringing and identifying a roadside plant suitable for use in a winter bouquet. Two of our members had arranged a number of "winter bouquets with color".

At our November meeting, a guest speaker talked on "Continuous Bloom in a Small Border." She used her own small planting space as an example. Two families, husbands and wives, talked on "California vs. Florida for Your Winter Vacation." One couple had been in each state.

Our Christmas party was held in the Episcopal Guild Hall with an exchange of gifts from our own gardens and a pot luck and social hour.—By Miss Mary O'Connell, Sec.

THE POTTERS OF BARABOO ARE SUCCESSORS TO THE TOOLES OF GARY NEE DULE

A farewell note from Flora Rich Toole is the introduction to a beautiful and instructive booklet, "Guide to Good Cookery, With Spices, Jellies and Vinegars," just sent out by the Potters of Baraboo. Mrs. Toole writes, "I have tried to carry on alone here at Baraboo. since by beloved husband, William A. Toole, passed away in 1945. It was my hope that in time I might find a successor to continue the tradition of fine products and fair dealings which my husband and myself endeavored to maintain through the years. That hope has now been fulfilled and I therefore can take great pleasure in introducing the Potters to our many friends."

Time marches on! We are sorry that Mrs. Toole can no longer carry on. We welcome the Potters and compliment them highly for the beautiful booklet they have published. Write the Potters of Baraboo, Wis., for a copy. On the cover we find, "Price, 25c." It's worth it.

Indoor Gardening

ANSWERS TO QUESTIONS ABOUT GROWING PLANTS INDOORS

By G. E. Beck, Dept. of Hort., U. W.

Mealy Bugs

Question: There are some little white fuzzy spots on the leaves and stems of some of my house plants. Is it an insect and if so, how can it be controlled?

Answer: Yes, undoubtedly the white fuzzy spots are mealy bugs which are sucking insects. Once these pests are established, they're hard to control because the white cottony mass around them serves to protect them from insecticides. The most satisfactory way to control this pest on house plants is to set the plant in a sink, tub, or on the basement floor and syringe it with a forceful stream of lukewarm water. A good syringing will dislodge the protective coverings around the mealy bugs. Then hold the plant upside down and dowse the top in a solution of nicotine sulfate (Black Leaf 40.) For this solution add 1½ teaspoonsful of nicotine sulfate to 1 gallon of lukewarm water which has been made soapy with an old fashioned soap such as Fels Naptha, P & G, etc. Repeat this every week or 10 days until several treatments have been given or until the pest is eliminated.

You can also use a little brush or a cotton swab on a toothpick soaked in alcohol for pestering each group of mealy bugs. This method will probably take about a day for each plant though and then some eggs or young ones will be missed.

Christmas Cactus Blooms

Question: I used to keep my Christmas cactus in a window in a room where it was quite warm at all times. It didn't seem to bloom. This fall I had it on a north porch and left it there as long as possible before frost. Now it's just covered with buds and is blooming. In fact it started to bloom in early December. Why is it blooming better now?

Answer: Christmas cactus is a plant that requires temperatures around 31 to 60° F. for flower bud formation in the fall. The cool fall temperatures on your porch supplied this requirement well whereas in the warm room the high temperatures prevented

flower bud formation.

Grape Ivy

Question: Is the grape ivy a satisfactory house plant?

Answer: The grape-leaf ivy is a very good foliage plant for the home. It will do reasonably well under poor light conditions and it also survives inadequate watering better than many foliage plants. It's quite susceptible to mealy bugs though.

Bud Blasting

Question: The blossoms on my Poet's Narcissus blast before they open up. What is the cause?

Answer: One of the most common reasons for this bud blasting is lack of sufficient moisture. Insufficient moisture in the plant may be due to any of several reasons, such as lack of moisture in the soil or media, insufficient root development before forcing was started, injury to the root system by rotting or other causes, or excessively warm and dry air will also tend to cause bud blasting especially if the plant receives poor light.

Use Caution With Fertilizer

Question: Should I fertilize my African violets during the winter months?

Answer: Probably not if the plants were repotted within the last year and fertilized sufficiently during spring, summer, and early fall. A high level of nitrogen in the winter will result in very poor flowering.

Flower Pots

Question: Which is best for use in the home, a glazed flower pot or the common clay pot used in greenhouses?

Answer: Since very little soil moisture is evaporated from the surface of glazed pots less moisture will be used. This is an advantage for folks who tend to forget their plants and not check them daily. Since considerable amounts of moisture are given off by clay pots, it's important that plants being grown in them be supplied with water regularly as needed. For this reason it is more difficult to over-water plants grown in clay pots than it is plants grown in glazed pots. The type of pot that is best for your home will depend on how the plants are watered.

Care of Christmas Plant

Question: I received a poinsettia and an azalea plant for Christmas and have never had much success with them because the blossoms of the poinsettia drop off and the azalea leaves turn yellow and later drop off too. I have seen both of these plants grown in the home all winter. What is the trouble?

Answer: Yes, we often see poinsettia plants which last well into late winter or early spring; this is especially true for the white-flowered varieties. Some suggestions which may help you care for the plant better are: place the plant where it will receive the best supply of light possible, keep the plant watered thoroughly—don't let it dry out but give it free drainage, keep the plant out of drafts—this means setting it back away from the window several inches, and don't expose the plant to cold temperatures (60° F. nights to 70° F. on bright days is ideal).

Your azalea needs an acid soil to keep it happy. Hard water removes this acidity rapidly. Rain water or melted snow would be best for watering your plant although boiled tap water would also be good. If you use tap water for watering your plants or if the foliage starts to turn yellow, every two weeks add a pinch of alum or iron sulfate to the water used for the regular watering. It's important also to keep the plants uniformly moist. If they are alowed to dry, fallen leaves and flowers and blighted buds will result. Azaleas will do best if they can have a cool but light location. After early April the plants should be protected from full sun.

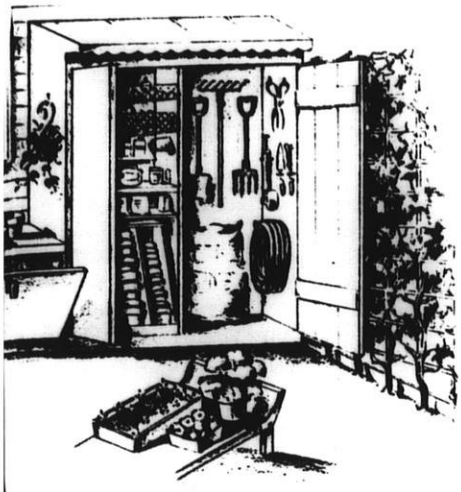


Fig. 1. Small tool storage house built onto the garage can solve many problems. All of your work equipment would be located in one spot.

Landscape Architecture

For The Well Ordered Work Space

By Geo. Ziegler, Dept. of Horticulture, U. W.

A well planned work center outside, can be as helpful as a well planned kitchen inside. With thoughtful planning, the average home garden can be more attractive and much easier to maintain. Work, of course, is important. No beautiful and productive garden can exist without it. This work can be difficult and time consuming, or it can be done with enjoyment and a minimum of effort. It all depends on the design.

The Work Space

The work space on the average home grounds usually centers itself around the garage. This is natural and it makes planning easier. This area is devoted in most cases to the vegetable and cutting garden, drying yard, compost pile, hotbeds or coldframes if you have them, and tool storage.

All garden tools and equipment should be stored together so that you can lay your hands on everything you may need for one garden operation without chasing all over the back yard. Sometimes an arrangement such as is shown in the illustration for tool storage can be worked out simply by building a small lean-to attached to the garage.

The Vegetable Garden

The vegetable garden should be in close proximity to the tool storage and usually the compost pile is near the vegetable garden. These can, as far as beauty is concerned, best be screened somewhat from the outdoor living room area of the garden. The drying yard too fits into this picture well for in most cases we like to have that out of the way and somewhat screened. And certainly the compost pile needs a spot where it is unobstrusive. So we find all of these parts which go to make up the outdoor work space fit in well together and demand some division from the rest of the home grounds.

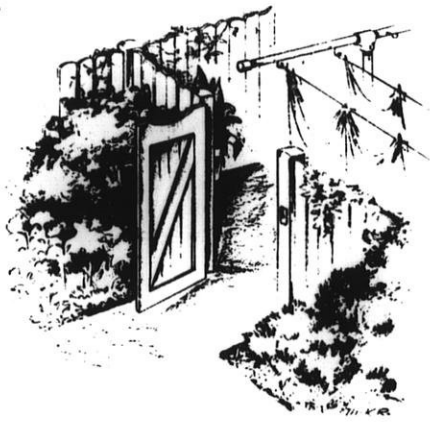
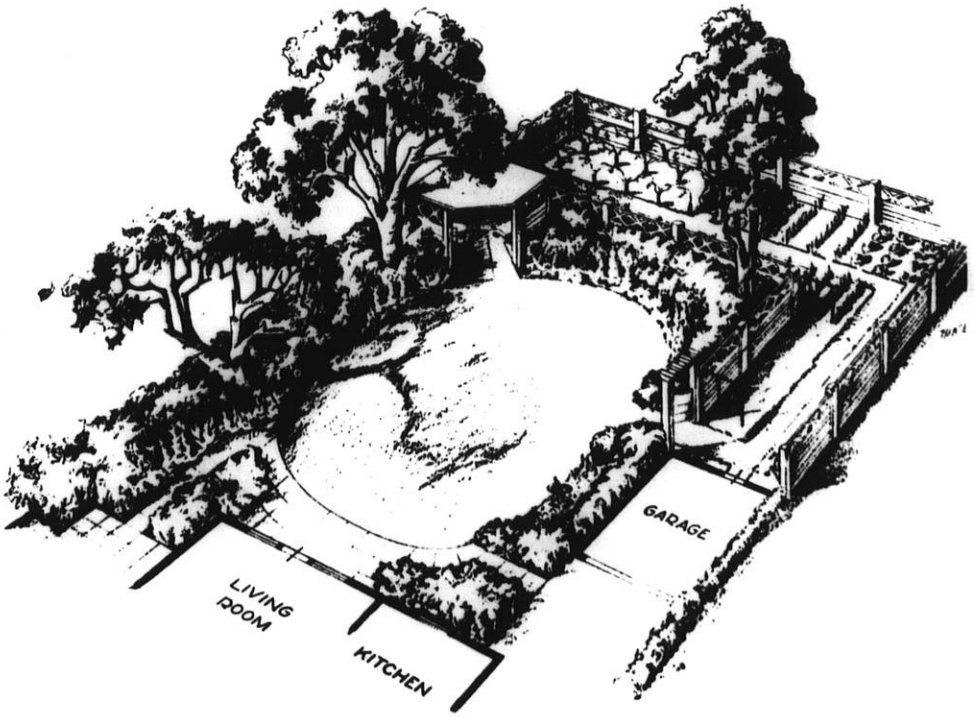


Fig. 2. A fence can easily be an attractive and space saving separation for the drying yard.

How this division is managed depends upon the general lay-out of the grounds and the space allotted to various areas. Sometimes a fence for separating is the best answer, for it does not take much room, perhaps a well placed tree clump or shrub and flower border will best fill the bill.

The landscape architect is trained to visualize all these possibilities and give you a well designed work space whether you have a large expanse or a very limited area to devote to it.

Fig. 3. A well planned arrangement showing relationship of drying area and vegetable garden to outdoor living room and house. Compost pile could be added in corner of vegetable garden. Tool house could be built on to back of garage.* *Illustrations adapted from "A Book of Garden Plans" by Norman Morris.



Peppermint Stick - Flower Of The Sun

A NEW ZINNIA WITH AN INTERESTING HISTORY

Description

PEPPERMINT STICK is an exciting new **striped** form of Zinnia developed by the famed Zinnia specialists, the Bodgers of California. Like all Zinnias, PEPPERMINT STICK is a descendant of Mexican varieties but is strikingly unique with each petal gaily striped with white or yellow. PEPPERMINT STICK brings you a galaxy of vivid color combinations—carmine and white, pink and white, scarlet and white, orange and yellow, red and yellow, etc., and approximately 70% of the flowers are striped. PEPPERMINT STICK has fascinating surprises as some flowers come up with colors divided half-and-half or quartered, ideal for unusual flower arrangements.

The flowers of PEPPERMINT STICK are Pumila-type in shape and of medium size but the plants are somewhat taller than Pumila. PEPPERMINT STICK is one of the cut-and-come-again Zinnias; blooms will be produced until frost if kept picked. An early strain, extensively reselected, peppermint stick is as easy to grow as any Zinnia and loves hot weather and sun.

Some Zinnia History

The particular strains from which PEPPERMINT STICK has been developed have an unusual story that can be traced back to some eighty-five years ago when the handsome Archduke Maxmillian of Austria and his attractive bride, Carlotta were selected by Napoleon III to reign as the Emperor and Empress of Mexico.

On June 12, 1864, Maxmillian and Carlotta made their colorful entry into Mexico City. In the Zocalo, before the great Cathedral, a vast crowd had assembled. Lusty "vivas" echoed . . . bells rang out in joyous chorus. Tall, blond Maxmillian smiled at the dark-eyed girl by his side. Both felt the responsibility of this great adventure. As Emperor and Empress of Mexico they would liberate a war-torn people. They would bring education, industry, and good government to an unhappy, oppressed nation. Mexico would love and respect their new rulers . . . of this Maxmillian and Carlotta were certain.

Carlotta went right to work. She studied Spanish and took pains to learn the legends, the customs, the traditions of Mexico. She fell in love with the flowers and under her direction the gardens of Chapultapec Palace blossomed with color. One of her favorite flowers was the little Zinnia Elegans (Zinnias were very small in their native state) and she began collecting them. When she wrote to her relatives and friends at home in Europe she occasionally sent seed from her garden and described glowlingly the wonderful flowers that bloomed in her new empire. In one of her letters she wrote "this brilliant Flower of the Sun (the Zinnia) is always colorful but these seeds I am sending for your garden are of most unusual kind that has striped petals. I am certain they will grow in our Parma and Modena." It was not the custom for royalty to indulge in gardening but Carlotta was a homebody as well as an empress.

Tragedy

Maxmillian and Carlotta soon discovered they had been deceived and many factions opposed their reign. The unscrupulous Napoleon III had used them to further his plans for world conquest. History has told us the story . . . the execution of Maxmillian . . . the tragedy of madness that befell Carlotta, an innocent victim of imperial intrigue. Perhaps the only fruits of Maxmillian and Carlotta's brief reign in Mexico were the flower seeds that Carlotta sent to Italy and Austria!

Origin Of Peppermint Stick

Lovers of floral history long wondered, in particular, what became of "The Flower of the Sun" with "striped petals" about which the Empress Carlotta had written so enthusiastically. It seemed to have vanished until shortly after World War I when the Bodgers received some breeding stock from Southern Europe. Occasional plants from this stock had traces of striping. This discovery started a long and persevering effort of selection and reselection. Just prior to World War II, a Zinnia was selected that was beginning to take on the appearance of PEPPERMINT STICK. The percentage of striped flowers was small, however. When the war brought an interruption in extensive flower seed growing, the best stock was preserved in hermetically sealed cans. Finally, in the late 'forties, Bodger hybridists opened the cans and resumed their experiments. In 1950 PEPPERMINT STICK was brought to its present brilliance and abundant striping. A small quantity of seeds were released experimentally in 1951. The interest in PEPPERMINT STICK was phenomenal and the demand quickly exhausted the small quantity available. Now, in 1952, there is sufficient seed to supply, at least partially, the great demand for the Empress Carlotta's "Flower of the Sun".

PROJECTS FOR YOUR GARDEN CLUB

YEARBOOK. How about preparing a yearbook without a cover design and then asking each club member to make her own and bring it to the next meeting. You may find some very clever and humorous ones. Prizes for the best would be an added incentive.

PROJECTS. Here are some projects that garden clubs have carried on successfully during the past year.

Helping to landscape a school, church or public library, the local honor roll or railroad station.

Carry on a Christmas lighting contest in the community or a Community Christmas tree.

Provide flower arrangements for the public library.

Sponsor plant sales to raise money to buy gardening books.

Have at least one flower show each year.

Provide each club member with seeds of some varieties of flowers and give prizes for the best when they are in bloom.

For Your Program

Would a garden debate interest your club members? Try this question. "Resolved: Annuals are more attractive in the garden than biennials or perennials." It might bring out some interesting ideas.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

LETTER FROM THE PRESIDENT

We Wish You All a Very Prosperous New Year

May the year 1952 be a prosperous one for all our members.

We do, indeed, have many problems, and since our annual convention in Wausau, several members have asked the question, **"Is beekeeping a good business."**

The apparent lack of a stable honey market prompted the question. Since then, several other questions have also come to me from members; namely: "Can we sell our bee business without loss at any time the need may arrive?"

"Do we have a stable honey market?"

"Do our bankers recognize beekeeping and will they loan money if we need help to conduct our business?"

If these questions cannot be answered in the affirmative, then we do have a situation that is serious. What is the remedy?

I will welcome replies from our members. Let's get some action. Maybe we can find the answers. Write to me.

Henry Schaefer, Osseo, Wis. President, Wisconsin Beekeepers' Association.

REAL PROGRESS IN BEE BREEDING WORK

Walter T. Kelley, Paducah, Ky., writing in Modern Beekeeping for October, tells of his trip to Kelley's Island and spending a day with Dr. Wm. Roberts, inspecting the work on breeding bees. He writes:

"I am pleased to report that they are making real progress with their breeding work and they were making a real honey crop and were shipping out hundreds of queens each week."

JANUARY AND FEBRUARY IN THE APIARY

Prepare Now to Examine Your Bees Within Another Month

We have been examining our bees the first week in February for 4 or 5 years. More than ever we feel that if every beekeeper could do this and properly care for the bees at that time it would decrease winter losses by a big percentage.

Have you ever examined your bees early in February? If not, try it just to see what it's like. Choose a nice day when there is no wind, when the sun is shining and when the temperature is around 32° F. Open the colonies slowly. Use just a little smoke. To determine if there is brood present take out an outer comb and move the others outward until you reach the cluster. You don't have to remove the combs entirely unless you so desire. It's a good time to see if there's any A.F.B. present—we found one or two cases during the past year and that was all we did find last year.

However, the main reason for inspecting colonies in early February is to determine if they might starve to death before spring, for starvation is the real cause of winter loss. There must be enough honey within that tight winter cluster to enable them to raise brood and keep alive. There is lots of cold weather ahead when they cannot leave the cluster for several weeks at a time and unless there is honey within reach they're sure to starve.

All we do is to inspect the combs adjacent to the brood. **Yes, there will be brood** present when you look at them early in February if it's a normal colony; at least one or two combs with patches almost as big as your hand. The combs adjoining these frames of brood should have honey and pollen in them. If they haven't, try to find some in the hive and move them in. If there isn't enough honey available to keep the colony alive you'll have to feed sugar syrup. The best way to do that is to shake the bees off of empty combs and sprinkle syrup into the combs with a sprinkling can. It should be at least 1¾ parts sugar to one of water and should be sprinkled in while quite warm—almost hot to the touch. Move the filled combs next to the brood and if the combs have some pollen so much the better.

We like to look at our bees early in February because it's interesting; the bees look as healthy, active and as gentle as they do in early fall. Sometimes by April 1st they look less so if they have not had a balanced ration on which to feed and raise brood. Don't be afraid to feed a pollen supplement this spring for fear the colonies may become too strong. There are beekeepers who make such statements as "We don't want our bees to get so strong they will swarm in May." Or like the farmer who says he doesn't want to feed his cows a balanced ration in winter-time because he doesn't want to milk so much. The amount of honey you get next summer depends so much upon colony population during the honey flow.

A girl telephoned her sweetheart.

Girl: "You better not come over tonight. Daddy is mad. He found out that we used his car for joy-riding last night."

Boy: "How did he find out?"

Girl: "We hit him."

Recommendations On Disease Control And Marketing

In the Report of the Bee and Honey Advisory Committee to the Director of the Wisconsin Department of Agriculture.

The following are two of the recommendations of the Bee and Honey Advisory Committee to the Director of the Wisconsin Department of Agriculture, as presented at the annual convention of the Wisconsin Beekeepers' Association, by Mr. John Long. Other recommendations will appear in early issues.

Disease Control

It is the responsibility of the State Department of Agriculture to appropriate funds and carry on apiary inspection work. Counties have come to the aid of beekeepers by appropriating funds in increasing numbers. Even so, the control work is inadequate due to the shortage of sufficient funds. Colonies must be free from disease to be profitable as a hobby, commercial honey production, or pollination. The fight against disease must be continuous. Undoubtedly the demand for bees as pollinators will grow and with the increased movement of bees, more time and money will have to be expended for the examination of colonies and the issuing of permits. The committee recommends:

1. State funds for apiary inspection be substantially increased.

2. That honey producers bear a portion of the increased appropriation by an increase in the bee occupational tax.

3. The Indemnity Payment statute be repealed. Monies going into indemnity payment will accomplish more good if applied to disease control work instead.

4. Dept. of Agriculture should strive for a more efficient bee inspection service whereby mileage and other travel expense could be reduced possibly thru the full time employment of trained entomologists serving in an assigned area as inspectors during season and in other fields at other periods in the year.

Marketing

Wisconsin produces a large percentage of high quality table grade of honey.

The trouble is that much of this production has not been properly prepared and properly offered to the consumer with the result that many potential users have become indifferent to honey. When the producer understands the principles which are necessary for successful marketing a big change in the entire honey consumption problem will result. The committee recommends that:

1. High quality standards be maintained by the enforcement of present honey grading regulations.

2. An advertising program be established bringing Wisconsin Honey to the attention of the consuming public.

3. A honey house improvement program designed to improve sanitation conditions under which honey is handled be established.

4. Cooperative extracting and marketing should be studied as a possible solution to the grading and marketing problem.

5. Beekeepers should continue to have the opportunity of displaying their product for promotional purposes at county and state fairs.

(To be continued)

THE USE OF FEDERAL HONEY GRADES

Beekeepers have asked for information about the use of federal honey grades. Mr. John Long, chief apiary inspector, wrote to Harold J. Clay of the U. S. Department of Agriculture, asking these questions:

1. Must honey shipped from one state into another be graded according to federal grades? 2. Here in Wisconsin we have our own grades; will it be illegal to ship this honey into another state without conforming to federal grades.

Use of Grades is Optional

Mr. Clay replied, "The use of these grades is optional; the federal government cannot require that honey in interstate shipment be graded according to the federal standards or in any other way.

"Several states require honey labels to conform to the language of the federal honey grades. Others simply call for use of U. S. grades on honey labels whether shipped in from another state or not . . . If you or a honey packer plan to ship to any other state honey labeled according to Wisconsin regulations, I suggest you first check with the Grades and Standards staff or with the Department of Agriculture of that state as to whether your present label needs to be revised in accord with their state regulations."

Convention Report

(Continued from November issue)

Dues Raised

The convention voted to increase the annual dues of the Wisconsin Beekeepers' Association to $2.00 per member for all types of dues, both to organization and individual members. It, of course, includes the dues to the Wisconsin State Horticultural Society and the magazine, as before. It was pointed out that the Association needs more money to carry on an active program.

Financial Report

Mrs. Louise Brueggeman, recording secretary-treasurer of the Association, presented a very comprehensive financial report. Mimeographed copies were passed out. In brief, the main receipts and expenditures were:

437 memberships brought in a net of $144.75. Stationery sold and commission on glass and pails brought in $86.33. Net receipts were $256.08.

Balance in the treasury from 1950 was $1008.17.

Expenses were: 1950 Convention, $141.35; Office Supplies, $27.25; Printing, Secretary's Salary; Bond, American Honey Institute, etc., $191.50.

Received from Wisconsin State Fair for exhibits, $500.00. Cost of State Fair exhibit, $630.32. Deficit was taken from the general fund.

In the label account handled by Honey Acres, Menomonee Falls, there was a balance of $830.69. Profit on labels this year was $105.35. There is also a label inventory of $248.65 and an office inventory of $31.63.

The Net Worth of the Wisconsin Beekeepers' Association is recorded as $1605.38.

The modern husband comes home from work and greets his wife with, "Hiya honey, what's thawing."—The Bonduel Times.

New Honey Price Support Requested

Report of Meeting in Washington

PMA officials in Washington held a meeting of honey producer's representatives from all states having bee associations on December 11 in Washington, D.C.

Our State Executive Board authorized your state president to attend this meeting. Prior to the meeting, the representatives from 16 states producing ⅞ of all U. S. honey met to compare notes and to work out a plan of action for the meeting.

At the official meeting each state representative gave a resume of beekeeping conditions in his state. After some discussion, it was found that all states had the same problem—that beekeepers needing funds sold honey early, sometimes below the market. A request for a loan and purchase agreement was made. It was the opinion of those present that the loan program would prevent distress honey entering the market.

It was agreed that the present floor price program was diverting too much honey from the regular channels of trade into the School Lunch Program and the Export Subsidy Program. Fearing a possible shortage of table honey next spring, PMA officials and the producer wanted a different program.

A loan program would give the producer cash for operating expenses, giving his honey as security. 75% of parity was the price agreed upon by the producers present, and 80% of this figure would be the maximum amount a producer could borrow on his honey; receiving only 80% of the floor price, he would want to sell the honey himself to get the full price, repay the loan, and have the balance, 20%, in his pocket. A purchase agreement is an agreement signed by the producer with PMA that for a fee, PMA would buy the honey at an agreed figure at some future date. Meanwhile the producer could sell his honey at a better price, not being bound to deliver his honey.

The PMA officials and officials of the fruit and vegetable section of PMA were very attentive and helpful in trying to work out a program with the above feature. They gave no opinion and they would not give one until after the Dallas meeting of the Federation. Details of the program were to be worked out later.—By Henry Schaefer, Osseo, president, Wisconsin Beekeepers Association.

1951 Apiary Inspection Report

Submitted by Mr. John Long at the Annual Convention

COUNTY	Active Apiaries	Colonies Inspec.	Colonies with AFB
Adams	2	42	27
Barron	64	631	64
Bayfield	1	36	2
Brown	61	741	9
Buffalo	34	319	6
Burnett	2	46	
Calumet	26	400	14
Chippewa	17	297	
Clark	261	2,163	5
Columbia	58	426	31
Crawford	103	876	18
Dane	77	649	76
Dodge	112	786	29
Door	21	157	20
Douglas	82	464	4
Dunn	8	367	6
Eau Claire	76	519	
Fond du Lac	26	554	15
Grant	32	606	60
Green	36	579	28
Green Lake	102	487	
Iowa	5	95	9
Jackson	70	619	11
Jefferson	54	493	13
Juneau	11	99	26
Kenosha	32	194	15
Kewaunee	32	395	13
LaCrosse	77	1,175	2
LaFayette	10	768	16
Langlade	3	13	
Lincoln	35	204	4
Manitowoc	36	707	18
Marathon	76	1,104	10
Marinette	39	274	6
Marquette	1	8	
Milwaukee	132	1,064	74
Monroe	59	497	24

(To be continued)

Wisconsin Horticulture

February, 1952

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A New System For Pest Control

Concentrate Spraying

Reduction in Cost is the Big Item in Its Favor
Annual Convention Paper

By H. C. Young, Ohio Exp. Station

The use of the mechanical sprayer began over 60 years ago. At the start, the rig was more or less a hand operated affair and the spray material was applied in fairly concentrated form. As spraying procedures progressed, it was found year by year that too much injury occurred on the fruit and foliage and for this entire 60-year period the spray materials were gradually reduced as the spray machinery became more efficient and complicated. The final hydraulic sprayer is one of great efficiency and was developed to apply sprays thoroughly and in an extremely dilute form.

Change In Sprayer Development

Recently, partly by accident, this trend of sprayer development was reversed. Two principles made the change possible. The one is the use of air to carry the spray material instead of water. The other, and primarily by accident, was a change in the application of dusts. The dusting method has been used for almost 50 years and in general has failed to effectively control diseases or insects. During the last few years it was found that dusting was as effective as spraying if applications were made in the rain. With this principle in mind, several research units attempted to develop machines that would atomize water on the dust particles and make application as a wet dust. A rig of this nature was sent to us for field trial. We removed the duster part, simply added a small amount of water to the spray formulation, and applied it as a concentrate. This, in principle, was the same as wet dusting.

Since the development of this first wet duster and concentrate, several other principles have been studied. First of all and after a period of many years, it was concluded that the concentrate sprays should be forced into the air stream so that a rather uniform aggregate or droplet size would be blown onto the foliage of the tree. To obtain such droplet sizes,

ranging from 30 to 60 microns, it was found that a small pump developing from 400 to 600 pounds pressure was a necessary part of the machine. It was also found that it required upwards of 20,000 cubic feet of air per minute to envelop and replace the air occupied by an average-size apple tree as the sprayer passed by in its operation. It has also been found that the sprayer should develop about 90 to 100 miles an hour wind velocity. The sprayer, therefore, is what is known as an air blast machine that will perform with the capacity described above.

Concentrate Spraying Found Successful

Concentrate spraying has been under development now for approximately five years in the field. In this time it has been found that diseases and insects can be controlled as well as with the hydraulic system. It has been found, moreover, that almost all materials that are normally used in the hydraulic sprayer can be used as concentrate. Oils can be used, but should not be concentrated further than 9 to 12 gallons of regular oil or 6 to 8 gallons of superior oil to 100 gallons of water and applied at the regular 1/5 rate.

Certain soluble materials like lime-sulfur and the Puratized group may injure if applied under night or slow drying conditions. However, soluble materials, as well as all others, have been found safe when applied under ordinary conditions. Results indicate that night spraying with concentrates can be done but is no more effective than when applied in the day time. Unfavorable weather conditions may make night spraying at times necessary.

Concentrations

At the present time, with the sprayers and materials available, a ten time normal or 10X concentration seems to be about as high as we can go. Five times normal or a 5X concentration has given slightly better control of apple scab than the higher concentrations in the tests at Wooster and has been more widely used in commercial orchards. Therefore, it is suggested that the beginning concentrate user employ a 5X concentration at 1/5 normal gallonage in the early critical scab season applications, shifting to a 4X concentration (a 20% reduction in materials) at 1/5 normal gallonage later in the season. Since there is no "run-off" with concentrate sprays, deposits resulting from the application of 4X concentration at 1/5 gallonage should be equal to those obtained with the dilute method where "run-off" is a factor. Concentrate users who desire to try the higher concentrations should use a 10X or 8X concentrate at 1/10 of normal dilute gallonage.

An averaged-sized 20-year old apple tree requires, after petal-fall, about 20 gallons of spray for good coverage. If a given tree requires 20 gallons of dilute spray, it will require 4 gallons of 5X concentrate, 2 gallons applied from each of two sides. As a tree develops in the spring, leaf and fruit surfaces increase in total area. More spray is required by a given tree after petal-fall than is needed early in the spring. With dilute spraying, the grower quickly realizes this as he sprays, but with concentrate spraying, it is a point that requires special attention. An increase in the nozzle output or a decrease in driving speed is needed to apply the increased gallonage.

With a concentrate rig the actual spraying operation is automatic. The quantity of spray applied to a given tree can be regulated in two ways. One is by changing the output of the nozzles discharging into the air blast. This can be done by varying the number of nozzles or within certain limits,

by changing the size of the nozzle discs. The other means of regulating the rate of application is to change the rate of driving speed. The user of a concentrate rig must correlate the nozzle output and his driving speed so as to apply the gallonage required. For mature apple trees of average size a driving speed of 2 miles per hour should be considered as maximum. Speedometers for mounting on the tractor or sprayer are available and their use will greatly facilitate the application of correct concentrate gallonage. Too much or too little becomes a very serious matter when applying concentrates.

A great deal of information has been given to the public in regard to the cost or the savings by the concentrate method. The following table gives results that can generally be expected. After sufficient experience is had with the use of concentrate machines, perhaps additional savings can be made, but it should be pointed out that there are no very definite shortcuts and that a thorough job is necessary if efficient control is to be obtained.

*Estimated Comparative Spray Costs—Concentrate versus Dilute.
(40-acre mature apple orchard)

Dilute		Concentrate		Savings
Labor, 120 man-days	$ 960.00	14 man-days	$ 112.00	$ 848.00
Tractor, 40 days	320.00	14 days	112.00	208.00
Materials, 192,000 gallons @$1.25 per 100 gal.	2400.00	⅞ of $2400.00	2100.00	300.00
Water, 192,000 gallons @ 30c per 1000	57.60	38,400 gallons @30c per 1000	11.52	46.08
Totals	$3737.60		$2335.52	$1402.08

*Estimated costs based on a full season program (8 applications) using the generally recommended spray materials. Dilute spray costs are based on a 30-35 gallon per minute rig equipped with 2 spray guns. Labor and tractor each estimated at $1.00 per hour. Pesticides figured at 1951 prices.

Conditions Cause Variations In Procedure

The conditions at the time of spraying will cause variations in the procedure. If the wind velocity is from nothing to 1 or 2 miles per hour, a very good job can be done. As the wind velocity increases, it is necessary to proceed slower as the rig is pulled past the trees and this speed needs to be further slowed as the wind velocity becomes higher. Oftentimes, it means the weaving in and out as the trees are passed so that the spray can be driven into the center of the tree and to the top. In our operation, it has not seemed advisable at any time to spray one side and then wait until the wind changes to spray the other. The most efficient manner seems to be to spray against the wind as well as with it. The amount of material needed will increase as spraying conditions become unfavorable and while it might be said that it would be unadvisable to spray in a gale, almost as good job can be done as spraying under similar conditions with a gun or as good or better than with a boom.

An orchard practice which will help in most spraying applications, and particularly with the concentrate, is to prune trees a bit more severely and head them lower. The weakest point of a concentrate air blast sprayer is to cover the tops of tall trees under adverse winds.

Conclusion

In conclusion it should be stated that the concentrate sprayer will not necessarily control diseases and insects any better than will the regular hydraulic sprays. In general, the careless grower who has trouble producing clean fruit with dilute sprays will have similar trouble using a concentrate rig. Reduction in spray costs is the big item in favor of concentrate sprays.

Embarrassing Moments: Discovering that the bee that had sneaked up past your ankle, while showing the girl friend the wonders of the hive, has finally found open country above the kneecap.—The Beekeepers Magazine.

In the old days a man who saved money was a miser; nowadays he's a wonder.—The Midcounty Times.

WATCH THOSE MICE

A warning is given by G. C. Oderkirk and W. D. Fitzwater, rodent control specialists, that mice are numerous in the mid-West this winter and urging frequent inspection, because many orchards have suffered severe damage. They condemn some of the new mechanical methods of treating orchards and recommend the more sure old method of trail baiting where the bait is put into the runways.

Zinc phosphide-treated apple bait is most effective during above freezing weather. However, in freezing weather, use the strychnine treated oats, which is still available from our Wisconsin sources. Place the bait in the active runways of the mice, using a teaspoonful for each placement and then cover with vegetation.

Rabbit and Deer Repellent

Several effective chemicals have appeared on the market as deer and rabbit repellents, according to the Rodent Control Bulletin. They are: Goodrite z.i.p., distributed by Innis, Speiden and Co., 722 W. Hibbard St., Chicago, Ill., and through garden supply and other dealers. Retail price is $7.20 per gallon; diluted to 25 gallons at a cost of 28 cents a gallon of spray. No-Nibl, for rabbit control, handled by the same distributor, is considered satisfactory.

Diamond "L" Brand Deer Repellent is distributed by the Harry N. Leckenby Co., 1634 W. 15th Ave., West Seattle 99, Wash., and is being used extensively against deer in the West. Those troubled with deer and rabbits might test these materials.

COUNTY FRUIT GROWERS ASSOCIATION MEETINGS

The following County Fruit Growers' Association meetings have been scheduled by the county agent and association officers. Excellent programs have been arranged. Prof C. L. Kuehner will be the principal speaker and will discuss the spray program for 1952 and topics of importance for the coming season.

February 26, Tuesday — Racine County. Racine County Agricultural School, Rochester.

February 27, Wednesday — Milwaukee County. Greenfield Town Hall.

February 28, Thursday — Waukesha County. Court House, Waukesha.

March 3, Monday — Jefferson County. Community Building, Fort Atkinson.

March 4, Tuesday — Washington County. Village Hall, Jackson.

March 5, Wednesday — Ozaukee County. Town Hall, Mequon.

March 6, Thursday — Manitowoc County. Lincoln Field House, Manitowoc.

March 7, Friday — Sheboygan County. City Hall, Plymouth.

March 12, Wednesday — Calumet County Fruit growers meeting.

March 19, Wednesday — Outagamie County F.G.A. Community Hall, Black Creek.

THE WORLD'S BIGGEST APPLE PIE

We were quite sure last fall that Door Co. fruit growers had produced the world's largest apple pie. In our January issue (page 94) we published the story of the giant pie made in Sturgeon Bay.

Now, however, our leadership is challenged. In the January news report of the Iowa State Horticultural Society, appears this article:

"Who Made the Biggest Apple Pie?"

"About two years ago, it was my distinct pleasure to sample the insides of a 6' (diameter) Missouri pie of Golden Delicious. Then, in Wisconsin this past November, another "World's largest" pie was baked. Writing in the Packer. Dec. 8, 1951, Charles W. Howard, RFD 3, Albion, N.Y., answers these claims with the following.

"We cannot let this pass for this pie was but a **mere tart** in comparison to the pie made in Orleans county, N. Y. state, at Albion in 1927. This pie was 12 ft. in diameter and nine inches thick. It required over 100 bushels of good western New York apples to make it, some 600 lbs. of sugar, 600 lbs. of flour and weighed nearly 3 tons.' "

SPEED SPRAYER FOR SALE

For Sale: Speed Sprayer in good condition. Inquire Nieman Orchards, Cedarburg, Wisc.

ORCHARD AND CHOICE BUILDING SITE FOR SALE

5 acres of young, ready to bear fruit trees (approximately 225) and home site with 71 foot frontage on main highway, about one mile from Racine city limits.

Orchard well cared for; lot landscaped with valuable shrubs and trees. Price, $6,000. Owner, Mrs. Milo Johnson, 4601 Spring St., Racine, Wis.

Some Growers Experience With

Chemical Thinning Of Apples

Results Obtained By More Than Fifty Growers Have Been Encouraging

By Conrad L. Kuehner, Dept. of Horticulture, U. W.

While chemical blossom thinning of apples is not entirely new to Wisconsin orchardists, it is not by any means a completely learned practice nor has it been fully accepted by all growers who might find it a valuable new operation in efficient orchard management. Perhaps part of the reason why chemical thinning has not been widely employed in our orchards is because not all of the important facts about its use and behavior under varying weather, tree and variety conditions have yet been learned. Much is being added each year through careful experimentation work of our research workers at Wisconsin and elsewhere as well as through grower trials.

During the past season more than fifty growers of twenty-two different counties made chemical thinning one of their new practices on some, or all of their heavy blossoming trees of varieties which usually set an overload of apples, many of which fail to develop into fruit of marketable size and color. The experiences gained by these growers have on the whole been encouraging and through it they are learning valuable lessons on the techniques of chemical thinning.

At the Wisconsin-Minnesota Orchard tour at Sunridge Orchards of William Connell near Menomonie in Dunn County. Prof. Brierly of Minnesota University is discussing Minnesota experiences in chemical thinning of Haralson. This picture shows some of the Haralson trees in the Sunridge Orchards, where chemical thinning had improved the crop. The Wealthy in this orchard has also been thinned. They were really fine crops; very few small apples and of excellent color.

The following short survey of grower experiences may contain a lesson or two for those who may be interested in some trial spraying in 1952. This table may also help those who have already been doing some chemical thinning to understand more clearly their own results or lack of satisfactory returns.

FAVORITE APPLE RECIPES

Apple Recipe Bulletin Receives Praise

A letter from Mrs. Marion Pieper of Oakfield, states, "I've enjoyed using the new booklet, "Wisconsin Apples, 44 New Ways to Use Them," very much. However, there are several recipes in the older bulletin, "36 Ways to Use Wisconsin Apples," that I wouldn't trade for the world. The four outstanding favorites are apple sauce, fruit cake, apple crunch, apple torte and apple fritters.

"I have a delicious apple macaroon pie recipe that has never been seen in any of your bulletins. Our family enjoys it very much. Here it is."

Apple Macaroon Pie

1 recipe pie crust.

Arrange about 5 or 6 cups of sliced apple on dough (Cortland or McIntosh.) Sprinkle with a mixture of:

½ cup sugar
1 tsp. cinnamon
¼ tsp. salt

Dot with 2 tablespoons butter. Bake in hot oven 20 minutes. Cover apples with topping of:

2 cups shredded coconut
½ cup sugar
¼ tsp. salt
1 egg, well beaten
¼ cup milk

Reduce heat to 350° and bake 30 minutes.

Editor's Note: Perhaps the four recipes mentioned should be included in the next reprint of the apple recipe bulletin. Thanks for the pie recipe. The Piepers ordered 100 copies of the bulletin to be given to apple customers.

Not being able to understand women wouldn't be so bad if women didn't understand men.—The Viola News.

CHEMICAL THINNING EXPERIENCES IN 1951 AS COPIED FROM REPLIES TO A QUESTIONNAIRE

Orchard	Varieties Thinned	Material Used	per 100 Gal. of Spray Mixture or water	Time of Application	Applied in Regular Spray or Separately	Harmful Effects	Remarks on Results
1 Waukesha County	Wealthy Early McIntosh Golden Delicious	App-L-Set	8 oz.	Calyx	Separately	Leaves wilted on Early McIntosh	"Golden Delicious nearly double size—well satisfied and will continue to use it. Wealthy and McIntosh doubled in size. Color very good. Better than unthinned trees. Yield did not increase."
2 Washington County	Yel. Transparent Wealthy Yellow Delicious	Parmone	4 oz.	Calyx	Regular	None	"Yellow Transparent were bigger and Wealthy size and color was improved."
3 Ozaukee County	Golden Delicious	Stop-Drop	1 qt.	Calyx	Regular	None	"No results."
4 Washington County	Snow Yellow Transparent Perkins Salome	App-L-Set	16 oz.	Bloom	Separately	Yellow Transparent and Snow distorted leaves and spurs. Small apples adhered	"Good results on Golden Delicious and Perkins. Color good and fruit almost oversize. No small apples stuck to Golden Delicious and Perkins; on other varieties the small fruit stuck until picking time."
5 Ozaukee County	Melba Wealthy Kendall McIntosh	Liq-qu-stick	1 pt.	Calyx	Separately	Leaf injury on Kendall	"Melba and Wealthy very good, Kendall overthinned. McIntosh overthinned. Wealthy thinned out mostly to 2½ inches and up, while unthinned trees were mostly 2 inches to 2¼ inches. Color was 25% better on thinned trees. Yield about the same."
6 Racine County	McIntosh (old) N. W. Greening Starking Tolman Sweet	App-L-Set	6.6 oz.	Calyx	Not Reported	None	McIntosh set and size the best we ever had. The check tree carried more small apples. N.W. Greening was overthinned. Starking was overthinned. Weaker wood was thinned more than vigorous wood. Tolman Sweet had ideal set. Check tree overloaded."
7 Kenosha County	Jonathan Wealthy McIntosh Snow	App-L-Set	20 p.p.m.	Calyx	?	?	"McIntosh and Snow were overthinned. Jonathan was overthinned even on untreated trees (winter injury to blossom buds). Wonderful size on McIntosh and Jonathan where thinned. Next year I'll spray at 10 p.p.m. a week or two after calyx, when one can know better how badly thinning is needed."
8 Chippewa County	Beacon, Prairie Spy, Whitney Haralson, Wealthy Duchess	App-L-Set	12 oz.	Calyx	?	?	"Good results on Beacon, Prairie Spy, Whitney and Haralson. On McIntosh, Wealthy and plums set seemed to be increased where trees were in ravine. No help on Wealthy and Duchess."

BLOSSOM END ROT OF APPLES CAN NOW BE CONTROLLED

"Blossom end rot"—a fungus disease which heckled apple growers of New York's Hudson Valley during the 1951 growing season, can be controlled by a change in ingredients in early-season orchard sprays, according to work reported by Dr. D. H. Palmiter of the New York Experiment Station.

In three experimental orchards, injury from this disease was cut down by more than 92% when "Fermate" fungicide was substituted for the usual sulfar applications in the pink, bloom and petal fall sprays.

Sulfur has very little, if any, effect on reducing blossom end rot on McIntosh apples, Dr. Palmiter reported.

Blossom end rot flourishes in cool, damp weather, when early sprays are being applied. Young fruit at that time is standing upright on the trees and rain collecting in the calyx cup provides sufficient moisture for the disease to develop and infect the sepals.

SOME FACTS ABOUT NEWER APPLE VARIETIES

Variety	Parentage	Place of Origin	Year of Introduction
Cortland	Ben Davis x McIntosh	N. Y. Sta.	1915
Dolgo Crab	A Russian Crab	S. Dak. Sta.	1916
Early McIntosh	Yel. Tr. x McIntosh	N. Y. Sta.	1923
Haralson	Malinda (open poll.)	Minn. Sta.	1923
Lobo	McIntosh (open poll.)	Canada	1909
Macoun	McIntosh x Jersey Black	N. Y. Sta.	1923
Melba	McIntosh (open poll.)	Canada	1911
Milton	Yel. Tr. x McIntosh	N. Y. Sta.	1923
Newfane	Deacon Jones x Delicious	N. Y. Sta.	1927
Orleans	Deacon Jones x Delicious	N. Y. Sta.	1924

Massachusetts Fruit Notes, January,

CHANGES IN APPARENT PER CAPITA CONSUMPTION OF SELECTED FRUITS, UNITED STATES

Fruits	1935-39 Average (Pounds per person)	1950 (Pounds per person)	Percent Change 1950 from 1935-39 (percent)
Fresh (Total)	138.5	114.1	-18
Apples (Commercial)	30.4	25.9	-15
Canned fruit	14.9	19.4	30
Canned fruit juices	3.9	13.6	249
Frozen fruit	0.8	4.0	400
Dried Fruit	5.8	4.2	-28

Consumption per person of fruits (total) in fresh form in 1950 was 18 percent below the 1935-39 average. Consumption of fresh apples was 15 percent below average. Canned and frozen fruits and canned fruit juices were considerably above the 1935-39 average.—Maryland Fruit Growers' News-Letter, Maryland State Horticultural Society, March, 1951.

KEEP SCAB OUT WITH DU PONT "FERMATE"

TOUGH ON DISEASE. "Fermate" fungicide gives foliage and fruit of apples and pears sure protection against scab. It also controls cedar-apple rust, black rot, sooty blotch and bitter rot.

EASY ON BLOSSOMS, LEAVES AND FRUIT. "Fermate" is safe to use through the scab season, provides disease control without burning or stunting even tender young growth. Safe in hot weather, too.

BETTER YIELD AND QUALITY. Leaf growth reaches full vigor when protected with "Fermate." Helps make higher yields of larger fruit with better finish.

COMPATIBLE WITH OTHER CHEMICALS. You can use "Fermate" safely with most pest-control products. For exceptional wetting and covering power, use Du Pont Spreader-Sticker in the spray mixture.

IDEAL FOR MANY FRUITS. "Fermate" also controls grape black rot, brown rot of stone fruits, peach scab, cherry leaf spot, cranberry fruit rots and raspberry anthracnose and leaf spot.

***See your dealer now** for Du Pont "Fermate" fungicide and other proved Du Pont pest-control products. Ask him for free booklets, or write to Du Pont, Grasselli Chemicals Department, Wilmington, Delaware.*

DU PONT CHEMICALS FOR THE FARM INCLUDE:

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BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Cost Of Packing Apples In Baskets And Boxes Compared

It costs about 13c less to pack a basket of apples than a Northwestern type box, is the conclusion reached in a study made by the U.S. Department of Agriculture.

The Apple Research Digest, published by the Washington State Apple Commission, makes this comment: "It is estimated that about one-half of Eastern apples are being packed in baskets. We in the West, being unfamiliar with the problems of the Eastern apple industry, are often led to wonder why it continues to use the basket, which is more difficult to handle, uses more space in storage and in transportation, and is prone to cause more damage to the fruit.

"Perhaps one of the reasons for the East's continuing use of the basket lies in the fact that the Industry is geared to it and market continues to demand this type container. The USDA study (quoted in the previous section) throws further light on the problem, indicating that it costs 13c more to pack out a box of apples in a Northwestern-type box than in a basket. This undoubtedly is a major reason why the East does not use more boxes.

"There have been reports that basket costs are rising in the East. These rising costs undoubtedly will increase the quantity of Eastern fruit being packed in Northwestern-type boxes. As the use of the box continues in the East, it would appear logical that the packers will gradually become geared to the box and thereby be more able to bring their packing costs closer to those of the basket, encouraging further expansion in its use."

The Producers Share of the Consumer's Dollar

Further studies of the percentage of the consumer's dollar received by the producer of apples led to these conclusions:

"1. Growers and shippers received 47% of the consumer's dollar spent for Washington apples in Pittsburgh in 1949-50, as compared with 45% in 1939-40 and 54% in 1944-45.

2. Upward adjustment of marketing charges presents the Industry with a two-fold problem—reduced returns and a danger of larger losses in a low price period.

3. Retailing and wholesaling margins, percentagewise, are higher on Eastern apples than on Pacific Northwest apples, but the returns to the growers were somewhat the same."

Pedestrians can be classified two ways—the quick and the injured.—The Bonduel Times.

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

SOME SUGGESTIONS ON RED RASPBERRY PRUNING

James G. Moore

Safety first usually necessitates removing fruited canes as soon as harvesting is finished.

At the same time remove new canes which are so small they will not produce well next season.

If there are surplus canes of fruiting size also remove some of them.

Under Wisconsin conditions it is not wise to reduce at this time the number of canes to that ultimately to be left for producing the crop.

Do not cut back long canes in late summer as it may result in serious winter injury and crop reduction.

The earliest and smallest berries are produced nearest the tip of the cane. Heading back means somewhat later first fruits and an increase in average size of berries. Heavy heading back of moderate length canes is likely to reduce the crop.

In spring pruning the extent of heading back canes will depend upon the length of cane, the amount of winter injury, whether and how canes are supported, the effect on ease of harvesting and the desires of the grower as regards earliness and the average size of fruits produced.

Winter injured canes should be cut back after growth has started several buds below the evidence of injury.

If canes are unsupported, cut back so that the cane will be able to keep the expected fruit off the ground.

Supported canes of good diameter which have four and one-half feet or more of uninjured wood may be cut back to four or four and a half feet if normal production is desired.

When the earliest possible fruit is desired, cut off only injured wood. This increased earliness is not likely to materially affect average earliness of the crop.

When one desires larger average fruit, heading back should be more severe.

Heading back heavily to secure larger fruit has its dangers, as too severe heading reduces the total crop. The amount of heading back desirable therefore, may depend upon how much premium you can get for larger fruit.

Usually the heavier the heading back the longer and heavier the laterals produced. This frequently makes harvesting more difficult when heading back is severe.

When canes are branched, it is desirable to remove all the weak branches and cut the others back proportionally to their strength. Good strong laterals may be headed to about 8 to 10 inches.

Opinions vary greatly as to the number of canes to be left at the final thinning in the spring. There is probably no one best number. It is likely to differ with normal size of canes produced by the variety grown, whether canes branched the first season and the extent of winter injury. When canes are average size (Latham), do not have side branches and when they have not been seriously winter injured, an average distance between canes should probaby be from 8 to 10 inches when grown in hedge rows, or 6 to 10 in a hill if grown in hills. The distance between canes of small growing varieties (Sunrise) should be somewhat less.

Varieties vary greatly in their growth habit. Latham represents the intermediate group, Sunrise is a variety of numerous and relatively small canes, Taylor a heavier grower and more inclined to branch the first season. Hard and fast pruning rules would not be equally applicable to each of these varieties. Suggestions are for so-called average varieties. The grower must adjust his practices proportionately when dealing with varieties which vary widely from the average and also to meet his special conditions.

DECREASE IN STRAWBERRY ACREAGE

All evidence points towards an appreciable reduction in strawberry acreage and production in 1952. Reports from many important producing areas indicate that the acreage will be down from 5 per cent to as much as 50 per cent in some sections. Nationally, the decrease may average 7 to 8 per cent lower than in 1951. To cite a few specific examples, it appears that the Arkansas and Pennsylvania plantings will be down 10 to 11 per cent, and in Louisiana the most recent estimate indicates a drop of over 50 per cent.

Many factors have contributed to this reduction in the acreage planted to strawberries for the 1952 crop. Unstable economic conditions in general have had a depressing effect. Present and anticipated future shortages of labor undoubtedly have had a pronounced influence on the plantings in many localities.

The rather severe draughts which occurred in late summer of 1951 in many sections of the East have caused additional damage to many plantings and will cause yields to be low during the coming season.

The downward trend in acreage should result in only moderate supplies of berries in 1952 and a strong market. Prices should hold relatively firm for good fruit. This will be an improvement over the situation during 1951 season when the market slumped on several occasions and did not give the hoped-for return to growers.

Irrigation during the ripening season may appreciably increase the yield if rainfall is short.—By Wesley P. Judkins, Virginia Experiment Station. In January American Fruit Grower.

The Case Of Sawdust

It Won't Ruin Your Farm. If You Can Get It, It Will Improve The Soil

The **Market Grower's Journal** for January tells the story of James Chadbourne of Maine, who attributes his rich, high humus land to sawdust.

Mr. Chadbourne started harrowing sawdust into his soil 34 years ago. He's been farming 39 years, and has never had a crop failure and his soil never soured, nor did it make potatoes scabby.

He uses sawdust and shavings for mulching strawberries, raspberries, tomatoes, asparagus, squash, cukes and melons, as well as to build up organic matter in the soil. He uses about 1,000 tons a year and is called the "sawdust king." Since sawdust is a plentiful product in Maine's forest land, it was first hauled from nearby hardwood mills. Hardwood shavings decay in about one year, or about half the time for soft woods, containing resin. In breaking down into organic matter, sawdust makes heavier soil easier to work, gives body to lighter soils, increases moisture holding capacity, and aids in aeration and root penetration.

Chadbourne is a supervisor of soil conservation and says the high humus content of his soil protects the topsoil against erosion. He says, "I have no set rule for application, but if I apply a large coat of three or four inches, I don't put it on again for three or four years."

Must Watch Nitrogen

"I'm apt to put on a light coat nearly every year. I can't say how many acres I sawdust annually; it depends on how much time I get to haul it."

He hesitates to recommend sawdust to everybody, because alone, he says, it won't do the trick. **Extra nitrogen is needed because bacteria absorb nitrates from decaying matter and from soil.** A grower using sawdust must keep a close watch for signs of nitrogen deficiency.

Scope of his operation can be gauged by the fact that it takes some 27 cords of sawdust for one acre inch. In giving land full treatment, his favorite method is to apply in autumn, harrow sawdust and soil again and again. He rarely plows, wants his humus in the top six inches where it will do the most good.

He follows up in spring with a legume crop, figuring 200 lbs. of actual nitrogen per acre. Sometimes he carries legumes a second year. When sawdust has been absorbed into the soil, Jim makes another entry in Early Slope Farms' soil bank account.

WANT MORE VEGETABLES

USDA is asking growers to put in 503,240 acres of vegetables for harvest next spring. Acreage goal is 9% above last spring's. Spring vegetables are marketed April, May and June. Most of increased acreage will be in early spring cabbage and onions. 1951 acreages of these crops were abnormally low as a result of adverse weather conditions.

Acreage increases are recommended for celery, green peppers and shallots. No change from 1951 acreage is noted for lima beans, cantaloupes, cauliflower, cucumbers, lettuce, green peas, spinach, tomatoes, or watermelons.

Demand May Go Up

Vegetables, fresh and processed, probably will be more in demand in 1952 than this year. Level of prices received by growers will depend in part on volume of production. Increases in demand may be offset by increases in production, but production could be overdone in potatoes and dry peas. Production costs are almost certain to rise, and supplies of farm labor, fertilizer, containers and other production factors will be somewhat shorter than they were this year.

For the first time in 7 years storage stocks of potatoes were not in heavy surplus January 1.

All in all, USDA officials believe vegetable outlook of '52 is favorable if production is not excessive.—From Market Growers Journal.

Moral Yardstick says: "If a would-be dictator is given an inch, he begins to think he's a ruler."—Pierce County Herald.

STRAWBERRY VARIETIES SHOULD BE GOOD FOR FREEZING

Increased Demand for Freezing Berries is Certain

The increase in sales of home freezers and the development of locker plants throughout the country indicates the modern trend from preserving to freezing. It means that fruits and vegetable varieties must be good for freezing if they are to be in the greatest demand. That applies particularly to strawberries. Far too many strawberry varieties on the market today are not good for freezing and if such varieties are frozen by the housewife and she then finds them of poor quality for the table, it decreases the interest and demand for the fruit.

In buying new varieties of strawberry plants this spring, therefore, we should look first of all to their freezing qualities. Neither the Senator Dunlap or Premier, so widely grown in Wisconsin are very good for freezing. We anticipate that in the future growers will have requests from consumers for crates of berries good for freezing. Let's plan for that trade now.

WHY TAXES STAY HIGH

In a recent issue of the Wisconsin Agriculturist and Farmer, we find a table of how the Federal government will spend its money in 1952. Here it is:

Military expenses	60%
International	10%
Interest on debt	8%
Veterans	8%
Social Security, Welfare, Health	4%
Agriculture	2%
Business	1%
Education, Labor	1%
Running expenses	2%

"So you can see where the money is going. The big bulk goes to pay for past and future wars. This has always been the case.

"It has to be that way until there actually is 'peace on earth.' Federal taxes can go down when the arms load is lifted. But not before."

To this we might add—add up the percentages of the first four items, and then wonder what is in the minds of some of our politicians who claim we could cut taxes if we could cut internal spending. Notice that Agriculture gets 2%, and yet that is where they are trying to effect great savings.

YOUNG GARDEN EXPERTS LOOK TO 1952 CONTEST

National Scholarship Awards Announced at Recent NJVGA Convention

Young vegetable growers from Wisconsin and the rest of the nation looked toward another year of scholarship competition in January with the opening of the 1952 production-marketing contest of the **National Junior Vegetable Growers Association.**

Enrollment for the study course and practical gardening competition got under way in the wake of a four-day convention in Cleveland, O., that climaxed the 1951 contest.

Thousands of rural boys and girls from 42 states matched gardening skills in last year's competition.

More than 300 of the youngsters attended the Cleveland meeting to map a program for 1952 and to witness awards from the $6000 scholarship fund provided annually for the program by A & P Food Stores as part of its youth sponsorship.

Wisconsin youngsters who won awards were Barbara Ann Sommerhalder, RFD 1, Menasha; Beverly Jean Bishop, Sherwood; Carl R. Mahn, Route 13, Milwaukee; Fredric K. Kaphingst, R. R. 1, Appleton; John L. Huh, Route 1, Appleton; Donald M. Koegel, 5749 S. 13th St., Milwaukee, and Ellyn Marie Roudebush, Bacon St., Waunakee.

Throughout the competition the Wisconsin entrants had the guidance and counsel of Miss Doris Mae Gnauck, Department of Agricultural Education, University of Wisconsin, and state NJVGA leader.

NJVGA's chief adult adviser and its chief adult adviser and its co-founder, Prof. Grant B. Snyder of the University of Massachusetts, said that "in 1952, as in the past 17 years, NJVGA will work with and through the two basic farm youth groups to achieve the common goal of preparing farm youth for their adult roles in agriculture."

Snyder said youngsters wishing to enroll in the 1952 production-marketing contest must: (1) be between the ages of 14 and 21; (2) have an interest in vegetable crops; (3) have completed at least one year of garden or vegetable project work, and (4) not have been national champion in any previous NJVGA production marketing contest.

He said eligible boys and girls may obtain enrollment cards from their local adult leader or from NJVGA Headquarters, 103 French Hall, University of Massachusetts, Amherst, Mass.

NEW CHEMICAL TO CONTROL POTATO AND TOMATO DISEASES

A new chemical has been introduced by Du Pont Co.—its name, "Manzate."

Chemically, it is manganese ethylene bisdithiocarbamate, the sixth in a series of organic plant protectant materials, based on derivatives of dithiocarbamic acid, developed by Du Pont.

Manzate is expected to be recommended specifically to control anthracnose, gray leaf spot and Septoria leaf spot on tomatoes, and early and late blights on both tomatoes and potatoes. The fungicide has undergone extensive field testing for several years. It will be available in limited quantities in 1952.

SPRAY PROGRAMS AND THE BEEKEEPER

From the Report of the Bee and Honey Advisory Committee to the Wisconsin Director of Agriculture.

The Bee and Honey Advisory Committee made the following recommendations to the Director of Agriculture at their meeting last October on the subject of spray programs.

Many agricultural chemicals now in use for control of weeds and insect pests are toxic to bees. The use of insecticides in some states has virtually put honey producers out of business. Reports indicate that several instances have occurred in Wisconsin where bees were killed. The drift of toxic sprays and dusts from a field being treated to adjoining areas bearing honey producing plants constitutes a real danger to bees. The promiscuous application of weed sprays along roadsides can result in the elimination of many nectar yielding plants. Recommendations in this field are as follows:

1. The users of spray and dust chemicals should be educated as to the harm that can result from the careless application of same.

2. That methods of application and the timing of same be so regulated as to protect bees from harm as much as possible.

3. Road commissioners and railroad companies should be advised of the importance of sweet clover and other nectar plants growing along the right of ways to beekeepers.

4. Nectar bearing sources should not be destroyed except in areas where highway safety is a factor.

From the Editor's Desk

FROM THE PRESIDENT

As the days grow longer and the sun shines brighter, we know that spring and a new season for the horticulturist is at hand. It is with a renewed feeling of devotion to the cause of horticulture that I as your president accept the high honor bestowed upon me. My active connection with the operation of the Wisconsin State Horticultural Society during the last decade, as a member of the executive board of an affiliated organization, a board member and as vice-president has given me opportunity to meet many of the leaders of Wisconsin horticulture groups. These contacts have impressed upon me the necessity of having an organization like our Wisconsin State Horticultural Society to help coordinate the activities of all these varied groups, by assembling and dissembling information on fundamental and new practices in their respective fields.

It is assuring to me as president to be able to work with our experienced and capable secretary, Mr. Henry J. Rahmlow, who has spent so much time and energy in helping local horticultural groups throughout the state and has been and still is at the service of all who are interested in the welfare and advancement of such groups.

It will be our policy as it has in the past to make full use of our magazine Wisconsin Horticulture to keep our members informed on the tried and fundamental practices as well as new and promising discoveries that should be given a trial by interested horticulturists.

It is my sincere hope that you as members of a group who have devoted part or all of your time, directly or indirectly, to help mother earth clothe herself with plants of beauty and usefulness, will continue to support our society's programs and activities.

Arnold F. Nieman, president.

Arnold F. Nieman

WELCOME PINE LAKE GARDENERS

The Pine Lake Gardeners Association of Waukesha County affiliated with the Wisconsin State Horticultural Society in January.

The Society welcomes the gardeners and wishes them success in their organization work. The members hold interesting meetings each month on all phases of gardening. Officers are: Clyde Ludwig, president; Ervin Kind, vice president; and Gordon Piehl, Hartland, Wis. secretary-treasurer.

TED OSMUNDSEN NEW SUPERINTENDENT OF HORTICULTURE AT WISCONSIN STATE FAIR

Mr. Ted Osmundsen, Sturtevant florist, has been appointed to succeed Mr. E. L. Chambers as superintendent of the Horticultural Building at the Wisconsin State Fair. Mr. Osmundsen has assisted Mr. Chambers, in charge of commercial florists' exhibit, for a number of years and so is familiar with the management of the building. According to reports, exhibits will be continued along the same lines as in the past.

STATE DEPARTMENT OF AGRICULTURE PROMOTES WISCONSIN FARM PRODUCTS

The last legislature authorized the State Department of Agriculture to promote all major Wisconsin farm products. As a kick-off, the Department sponsored the broadcasting of all University of Wisconsin basketball games over 25 radio stations in or near Wisconsin. In each broadcast, several announcements were made encouraging greater consumption of one of Wisconsin's quality foods, according to Don E. Wilkinson, marketing specialist for the Department.

Both Wisconsin apples and honey were mentioned as "good buys" during the basketball season.

A Sample Broadcast

As an example of the type of promotion used, we give here the announcement made during the Wisconsin-St. Louis game on December 17.

Can you think of any fruit more versatile than the apple? For example, apples can be eaten as they are, in salads, desserts or hot dishes. The number of uses is almost endless—and each is an appetizing way to good health. By the way, the Wisconsin Department of Agriculture points out that Wisconsin apples are suited to all the various uses to which this "King of Fruits" can be put. Yes, Wisconsin apples are just another of many quality, home-grown foods that have made Wisconsin famous. The next time you are planning to replenish your fruit basket, do it with Wisconsin's many varieties of tasty apples. You'll find them an ideal food to serve at all times. And best of all, apples are kind to your budget while at the same time serving as nutritional additions to your daily menu.

A lady is a woman who makes it easy for a man to be a gentleman.
—Menomonee Falls News.

A race track is a place where windows clean people.—The Wittenberg Enterprise.

WANTED—REPORT OF EXPERIENCE GROWING SWEET POTATOES IN WISCONSIN

Can sweet potatoes be grown successfully and economically in Wisconsin? One of our members has asked that we publish information on how to grow sweet potatoes successfully in this state.

We will appreciate hearing from members who have grown them telling their experiences.

OUR COVER PICTURE

Variegated sanseverria, Chinese evergreen, English ivy, spotted Gold Dust dracina and Philodendron cordatum are effectively arranged as a dish garden. Ducks are waddling in the moss at the base of the plant, giving an impression of a miniature tropical forest. Here is a chance for discussion. What are the ducks doing in such an arrangement—aren't they out of place? They make the other plants look like trees.

Sanseverria like a dry soil; ducks like water. Chinese evergreens and philodendron like a uniformly moist soil. Perhaps the container is a little shallow and will dry out rapidly.

Yes, I guess we could find a lot of things to talk about and sharpen our wits on design, perspective, harmony of plant material and appropriateness. But when we are all through, let's hope we can say, "Well it's a nice picture and will be very interesting to have around. It should stimulate interest in growing plants indoors."

ATTENTION MEMBERS OF THE WOMEN'S AUXILIARY

Through a misunderstanding, winners of the apple cookery exhibit at the annual convention of the Wisconsin Horticultural Society and Auxiliary were not recorded. Consequently, we have not been able to send premium awards for apple cookery exhibits excepting in cases where we were notified of the winners. If you know of an exhibitor who won a prize and has not yet received her prize money, please write Horitcultural Society at once, listing the winnings.

A saint has been defined as a person who's good even when nobody is looking.—Amherst Advocate.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
JOHN GATES
Two Rivers

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

TREASURER
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

ANNUAL CONVENTION, NORTH AMERICAN GLADIOLUS COUNCIL, HELD IN MILWAUKEE

The Schroeder Hotel in Milwaukee was the scene on January 17-20 of the 7th annual convention of the North American Gladiolus Council. It was a splendid meeting, sponsored by the Southern Wisconsin-Northern Illinois chapter of the Gladiolus Society. The attendance was the largest in the history of the organization with about 225 registered. The Secretary reported 55 member societies with 5 new ones during 1951. Membership is about 4,000.

The Program

The program was excellent, with papers from some leading national authorities on gladiolus culture and marketing. We plan to give summaries of some of the papers in early issues of the magazine.

Mites

Dr. C. L. Fluke of the Department of Entomology, University of Wisconsin, talked on mite control. He said that mites are found everywhere and are injurious to glads. They live over winter in the grass and rubbish. They are, of course, very small, have 8 legs and spin a fine web. The eggs hatch in 4 to 5 days and the young have only 6 legs. The old method of control was to wash them off with a stream of water or dust with sulfur, but some of the newer insecticides have been more effective. Parathion and other phosphate dusts or sprays were mentioned, but growers were warned about the danger of using them. Dimite and aramite are not dangerous and have been found quite effective.

Systemics were also discussed by Dr. Fluke. They are chemicals added to the soil. The plant absorbs the chemicals and insects are killed which

suck or eat the sap. However, we should go slow on their use, as they may disturb the plant food balance in the soil. They have been used quite successfully in the greenhouse, especially with aphids but should not be used on plants for food.

Popularity of Glads

Mr. Paul Frese, editor of **Popular Gardening,** Albany, N. Y., gave an excellent talk on how to popularize gladiolus. He said gladiolus are the most popular and most widely grown cut flowers in America today. The rose is second. In Florida alone 104 million bulbs were planted last year. He gave credit to garden club women who have popularized gladiolus by using them in making arrangements. Growers should give them all the help possible, as they are doing more for the industry than we realize. He encouraged classes at gladiolus shows of arrangements showing how to use gladiolus in the home and discouraged showing large baskets which look like funeral pieces. Also, we should stimulate the growing of small-flowered varieties, which can effectively be used in arrangements and corsages.

Gladiolus growers should stimulate showing gladiolus at various shows—both local and at county fairs. It greatly increases the interest of home owners in growing flowers and buying bulbs. "Don't discourage gardeners by offering them small bulbs which will not bloom the first year," he said. His magazine will not accept adds such as were found in some visit their Twin City Show which is held in a bank building in Minneapolis one year and St. Paul the next year. newspapers last year of "100 gladiolus bulbs, 1½" in circumference at $1.69." He urged the industry to find gladiolus varieties that are resistant to diseases and can be grown without too much spraying and other care; home owners become discouraged easily if it is too difficult to grow them.

Attendance at Shows

There was an animated discussion on attendance at gladiolus shows and the question was asked, "How can we get larger attendance?" A delegate from Minnesota invited growers to He said they had great difficulty in getting the one bank to relinquish the show for the next year. The show draws many thousands of visitors. The soundness of his advice may be found in the success of the show held annually by the Madison chapter in the First National Bank lobby in Madison. It is held on a Monday night because stores are open and as many as 12,000 to 15,000 people have been clocked as visitors.

Mr. Frese told of chrysanthemum shows in the East that were highly advertised but brought out very few visitors last fall. On the other hand an African violet show in the mid-West brought out 20,000.

It is well to analyze the difference in attendance. Gladiolus shows held in school gymasiums and composed largely of spikes of named varieties which are of interest largely to gladiolus growers, may not draw large numbers of the public. On the other hand, gladiolus shows in which garden clubs have taken an active part by making arrangements have an additional drawing card.

LARGE ATTENDANCE

Mr. Orrin Baxter, secretary of the Southern Wisconsin-Northern Illinios Gladiolus Society, of Janesville, states that registrations for the meeting came from 24 different states, two provinces of Canada and one from Holland. Wisconsin had the largest attendance—71 registrations. Illinois followed with 28, and then Michigan, 19; Ohio, 17; Minnesota, 12; Iowa, 10; and a lesser number from New York, Connecticut, California, Massachusetts, New Jersey, Maryland, Oregon, Kentucky, Washington, Pennsylvania, Nebraska, Wyoming, Idaho, South Dakota and Vermont.

The Southern Wisconsin-Northern Illinois chapter had 51 members present at the convention. 210 attended the banquet.

SHEBOYGAN CHAPTER PLANS MEETING

President Walter Kurtz of Chilton is making plans for a meeting and bulb auction of the Sheboygan Chapter at Chilton on Sunday, March 9th, at the City Hall. A publicity campaign throughout Calumet and Outagamie Counties should bring in many gardeners and create interest in growing gladiolus. There will be music and entertainment supplied by the 4-H Club members; slides on gladiolus; a talk by H. E. Halliday on soils and diseases and Mr. Kurtz will talk on how to grow gladiolus followed by the bulb show.

There is a possibility that a new chapter can be organized in the Outagamie County area, according to Mr. Kurtz.

The event will be followed by a pot luck supper and an evening program of entertainment and gladiolus movies for the members.

DUES ARE INCREASED

Membership dues in the Wisconsin Gladiolus Society were increased at the last annual meeting. NAGC dues were also increased.

Membership for one year in the Wisconsin Gladiolus Society, including affiliation with the Wisconsin State Horticultural Society—$1.35.

* * *

Wisconsin Gladiolus Society and North American Gladiolus Council—$2.85.

Annual Meeting Wisconsin Gladiolus Society

Milwaukee, Sunday, March 30

Medford Hotel

EXCELLENT PROGRAM

Details in the March Issue

GLADIOLUS SOCIETY COMMITTEES 1952

N. A. G. C. Convention Delegates: James Torrie, Madison; Archie Spatz, Wausau; W. A. Kurtz, Chilton.

Alternates: Charles Melk, Milwaukee; Jack Gates, Two Rivers; Otto Kapschitzke, Jr., Sheboygan.

Legislative: Walter C. Krueger, Oconomowoc, Chm.; C. Melk; Leland Shaw, Milton.

Auditing: C. Harrison, Chm.; So. Wis., N. Ill. Chapter; W. Axel, Sheboygan Chapter; J. Torrie, Madison Chapter; G. H. Thompson, Manitowoc Chapter; Paul Ravet, Twin City Chapter; Dr. R. H. Juers, Marathon Chapter.

Ways and Means: E. C. Fenske, Chm., Route 2, Clinton; Jack Gates, Archie Spatz.

Program: L. Shaw, Chm.; D. Puerner, Milwaukee; H. J. Rahmlow, Madison.

Trophy Committee: Elenora PiepKorn, Plymouth; Walter Axel.

Supervisor of Judges: Walter Krueger, Oconomowoc.

Show committees to be appointed as soon as show location has been designated.

GLADIOLUS IN YOUR FLOWER GARDEN

Gulf Coast Experiment Station, By Robert O. Magie, Bradenton, Fla.

Dr. Robert Magie, in charge of gladiolus investigation at the Experiment Station at Bradenton, Florida, gave us a list of varieties recommended for Florida gardens, based upon resistance to diseases and pests in that state. His recommendations will be of interest to growers and gardeners.

Of the many hundreds of varieties available, the choice for gardens narrows down to those that do not need to be sprayed for disease control and are not very susceptible to bulb rot. Gardeners who attempt to grow some of the varieties commonly found on the cut-flower farms will be disappointed. Some commercial varieties such as Picardy, Wanda, Leading Lady, Corona, New Europe, Stoplight, Purple Supreme, Dr. F. E. Bennet, Rapturo, Beacon and Vredenburg are entirely unsuited to the home garden because they are so susceptible to disease.

The following varieties are suggested as suitable for Florida gardens. **Those underlined** are considered outstanding in color value.

White: **Heavenly White, June Bells,** Maid of Orleans, Margaret Beaton, and Morning Kiss.

Cream: Canopus, Pacifica, White Gold, **Winston.**

Yellow: Elizabeth Maier, **Nugget,** Yellow Herald, and **Hopman's Glory.**

Buff: Color Marvel, Paradise, and **Patrol.**

Orange: Abnaki, **Circe** ,Marqueeta, **Trocadero,** and **October Sunshine.**

Salmon: Dieppe, Margaret Fulton, H. B. Pitt.

Scarlet: **J. V. Konynenburg, Intruder, Seminole.**

Pink: Cover Girl, **Friendship, Heart's Desire,** Ivy Robertson, Lady Boo, Phantom Beauty, **Spic and Span.**

Red: Firebrand, Black Panthor, **Red Cherry,** Rocket, and Will Scarlet.

Rose: **Burma, Modern Times, Rosa van Lime,** and Rose O'Day.

Lavender: **Elizabeth the Queen, Lavender and Gold,** Lavender Prince and Myrna Fay.

Purple and Violet: **Convoy, Dana,** Gail, Vulcan, Blue Beauty, **Memorial Day,** Music Clementi, **Puccini.**

Smokey shades: **Bolero,** Dusty Miller.

In addition to those large and giant varieties, there are graceful and dainty miniatures and small-flowered glads:

White: Snow Baby, Starlet, Sub Deb, White Ribbon.

Cream: Fluffy Ruffles, Sulfur Frills, Filigree.

Yellow: Prim Queen, Lullaby, Comet.

Orange: Crinklette, Elda, Elf, Fliker, Ito, Mazie.

Salmon: Jingles, Nadia, Twinkles, Minnetonka.

Scarlet: Atom, Osage, Perky.

Pink: Aria, Betty Co-ed, Bo-Peep, Little Sweetheart.

Red: Black Jack, Kewpie, Ruby, Massassoit.

Rose: Crinkles, Silversides, Tweedledum, Patty Berg.

Lavender: Fairy, The Orchid, Queen of Bremen.

Purple: Hylas, Tapestry, Taurus.

Violet: Blue Lily, Magic, Viola.

TRY THESE NEW ANNUALS IN YOUR 1952 GARDEN

Marigolds, variety Glitters. The all-America bronze medal winner of 1951. It has large, clear, yellow, double chrysanthemum flowered blooms. Plants are bushy and erect, 2½ feet tall with long, curling stems.

Petunia, variety Rose Charm (F-1 hybrid). A clear rich rose, dwarf, compact plant. It is a heavy bloomer and very showy. Grows 12 to 16 inches.

Aster, variety Super-giant, wilt resistant. The largest flowered aster now bred to resist wilt. It's excellent as a cut flower because of its long, wiry, non-branching stem and huge, ostrich feather flowers. Grows 3 feet tall.

New zinnias. The improvement in zinnias has been phenomenal. Try the new **Persian Carpet** (honorable mention, all-American selection, 1952). Fully double, ball shaped flowers of a miniature type in variegated colors.

Grow named varieties of zinnias. Some of the new ones are a clear color and beautiful.

Sweet allysum—Snow Cloth—is a compact mass of white without green center. Blooms early.

WAR

A guy with a gun goes out and kills another guy who has no gun. Society then punishes the killer and the dead guy is buried. This is peace.

A guy with a gun goes out and kills another guy with a gun. Then three or more guys get into the brawl and pretty soon the alley is full of busted heads. This is war.

In both cases nobody is very happy. In both cases there are two things that cause all of the trouble. Guns and guys.

One solution is to abolish guns. That's been tried. It didn't work. The other is to abolish guys. It looks like that's what they're working on now.

Bird Questions

Answers By Prof. Robt. McCabe, Dept. of Wildlife Management, U. of W.

Question. Do robins come back to the same place in the spring? How long do robins live? Do they mate for life and are they faithful?

Answer. In general, adult robins come back to the same place in spring, often to the same yard or tree. Young robins may come back to the general vicinity, but may often be as far as a half mile or more from the original nest site. For all intensive purposes, a robin lives about three years. On an occasion, you may have one or two that will be five and six years old, but the chances are very small. Robins do not mate for life. They disperse as a flock in the fall and regroup each spring to choose new mates. Occasionally because adult robins come to the same place, the chance of remating with the same bird may occur. One cannot use the word "faithful" with the pairing of birds or any forms lower than man. Faithful is an anthropomorphic term that cannot be applied to lower animals.

Question. Do wrens come back to the same place?

Answer. The same general statement may be made of wrens as of robins relative to their coming back to the place where they nested.

Question. Do all birds of each breed go south or do some of them stay all winter?

Answer. Most birds migrate south for the winter. In some cases, birds move from the far north to Wisconsin to winter, and in other cases, birds remain in Wisconsin all year long. The robin is a good example of a bird that goes south for the winter and returns in the spring. The junco is an example of a bird that nests in the north and winters in Wisconsin. The cardinal and downy woodpecker are examples of birds that remain with us all year long.

Question. What kind of birds pair off and what kinds do not?

Answer. All birds pair in spring, however occasionally as with the red-winged blackbird, one male will be mated with a number of females. This is also true of a bird like the pheasant. Occasionally birds do not reach sexual maturity until the second year, in which case the birds spend the first spring without mates. An example of this is the Canada goose.

Question. What is the best food for a cardinal?

Answer. The cardinal is a seed eater, and the preferred foods are sunflower, buckwheat, hemp, millet and unhulled rice. It will eat a mixture of scratchfeed, commonly used to feed chickens.

PERENNIALS OF EASY MAINTENANCE

Here is a topic that at a recent garden club meeting brought forth some spirited discussion. The majority of those present favored the Peony as best qualifying but a second or third choice was not clearly eviden Some of the other perennials sug gested for easy care were lily, day-lily, hosta, sedum, gasplant, columbine, butterfly weed, violets, iris and bellflower and New England aster. From Newsreport, Iowa State Horticultural Society.

Garden Club News

FLOWER ARRANGEMENT SCHOOL

Dorothy Biddle Lectures Will Draw Large Attendance

Four flower arrangement schools have been scheduled with Dorothy Biddle of Pleasantville, New York, as the lecturer. They will be low cost schools and at least 500 to 600 people are expected to take part. Further details in our next issue.

The schools will be held as follows:

May 19—Monday, in Milwaukee. Sponsored by the Milwaukee Region, Garden Club of Wisconsin.

May 20—Tuesday, in Sheyboygan. Sponsored by the Sheboygan Garden Club.

May 21—Wednesday, in Oshkosh. Sponsored by the Winnebagoland Region.

May 22—Thursday, in Iola. Sponsored by the North Central Region.

Miss Biddle has a number of topics available, including fundamentals of flower arrangement, table settings, color in flower arrangements, and arrangements for special occasions. Each region will have her present the topics in which the largest number are interested. Special invitations will be extended to members of womens' clubs, homemakers clubs and everyone interested in the use of flowers.

THE RIGHT AND WRONG WAY TO ENTERTAIN FLOWER SHOW JUDGES

Skit Available for Garden Club Programs

A skit entitled. "The Right and Wrong Way to Entertain Judges," has been loaned us through the courtesy of the Iowa State Horticultural Society. The skit was presented at the Society and Iowa Garden Clubs. It can be given by any garden club. The first section illustrates how not to entertain judges and is quite humorous.

We have made copies of the skit and will be glad to send one to any garden club requesting it, free of charge. Write the Wisconsin State Horticultural Society.

REPORT FROM THE AMHERST GARDEN CLUB

The Amherst Garden Club had two outstanding programs during the past year. One was on garden work in the fall—bulbs, tulips, hyacinths and daffodils, and winter covering for the flower garden.

At roll call, each member responded with the name of a tree, and if possible, she had a leaf and its seed to show. At this meeting, also, Mrs. J. R. Olson, our president, gave a splendid report on the Garden Club of Wisconsin Show and meeting in Milwaukee and demonstrated a man's idea of an arrangement. It was very clever

Mrs. Chester Bumfus gave a report on the regional meeting at Clintonville on October 6.

Another interesting program was given by Mrs. Ted Peterson of Waupaca on Bird Study and ways of attracting, feeding and housing birds.

On January 22 we had an open meeting attended by our husbands and some interested outsiders. Slides on hemerocallis, delphinium, and tuberous rooted begonias and perennial phlox, obtained from the Wisconsin State Horticultural Society and also slides of our own and surrounding gardens were shown.—By Mrs. Harold E. Smith, Sec.

ANTIGO GARDEN CLUB NEWS

Four outside speakers are scheduled for Antigo Garden Club meetings during 1952.

The questions about gardening that affected members during the past year will form the opening part of each monthly program. A club member has been selected to answer the questions of each month. Typical problems are: How to keep pansies in bloom all summer and what is meant by the "breaking" of tulips.

Fifteen minutes of each meeting will be devoted to the principles of

AFRICAN VIOLETS

VIOLETS—50 Cents each—CHOICE OF FINE YOUNG PLANTS, MANY ALREADY IN BUD, OR POTTED LEAVES WITH WELL GROWN CLUSTERS OF YOUNG PLANTS ATTACHED IN the following varieties: Red King, Red Head, Lancaster Red, Lady Geneva, White Girl, Dickanson Purple, Pink Girl, Gorgeous, Gypsy King, Gypsy Apple Blossom. Gypsy Jane, Oros Dubonnet, Double Neptune, Blue Eyed Beauty, White Lady, Ruffles, Crinkles, White Boy Hybrid, Lady Sue, Grotei, Dupont No. 4. Dupont Lavender Pink, Pink Beauty, Heavenly Blue, Rosita, Snow Prince, Mauvette, Fringette, also Red and Blue, Blue Amazon Girl, Tinted Lady and Bi-Color. WHILE THEY LAST! Mrs. O. F. Isenberg, 433—3rd St., Baraboo, Wis.

flower arrangements, design, scale, balance and harmony, flower show classes, and selection and handling of material and the use of color, containers, accessories and background. Each member will be asked to exhibit an arrangement at a specific meeting. Members may also show plants and arrangements at any time.

Two clinics are scheduled, one on house plants and one on bulbs, and will be in the form of panel discussions.

The garden club will also continue sponsorship of its annual project, the Antigo Flower Show. Our annual picnic will be held July 8th at the Eau Claire Dells, with a program on nature studies, and a Christmas tea on December 9 will close the year's program. By Mrs. Earle Holman, pres.

BERLIN HOME GARDEN CLUB NEWS

The Home Garden Club of Berlin finished last year with a Christmas meeting and program. The afternoon was spent making favors to be used on the trays of hospital patients at the Home for the Aged and Convalescent in Berlin. Gifts appropriate for the garden were exchanged and the meeting closed with a luncheon on the holiday theme.

The 1952 programs were distributed. We will have outside speakers as well as member participation. At each meeting one member will be responsible for a poem or verse appropriate for that month and a flower arrangement suitable for the following month will be made by a member, which will give others ideas to use in their own home.

Our January program consisted of a book review on "Country Life in America as Lived by Ten Presidents of the United States," by E. R. Booth. In February we will see colored slides of wild flowers by a noted naturalist and in March, Mrs. John D. West will be with us with her pictures and lecture on, "West of the Lake."—By Mrs. Alfred Huebner, sec.

Men should be like a good watch—open face, busy hands, pure gold, well regulated and full of good works.

—The Markesan Herald.

FORT ATKINSON GARDEN CLUB NEWS

The Fort Atkinson Garden Club toured the Burr Oak Gardens of the E. L. White's in July. We also toured the gladiolus and rose gardens of William Himmler, after which we held a pot luck picnic supper and enjoyed a friendly get-together on the E. L. White lawn.

In August, the ladies held a flower arrangement contest at the White residence. The program followed a pot luck supper. Flower arrangements had been made at home and brought to the meeting for comments. Two members were appointed as judges and critics for each arrangement and their comments helped improve knowledge of arrangements.

On September 12, we enjoyed another flower arrangement meeting at the Ray Breitweiser home. Seeds of marigolds had been distributed to the men and zinnias to the women in the spring. Flowers from these seeds were grown and shown at this meeting Each arrangement was lettered and every member rated each one by voting and the votes were then tabulated. It proved a very interesting stunt. Prizes were given for the best blooms and arrangements.

On November 14, fall flowers and weeds with dried leaves were made as arrangements for the meeting at the D. E. Roberts home. Ideas were gathered from the Milwaukee Flower Show and members showed a great deal of interest in the contest.

On December 21, the club enjoyed a pleasant Christmas party at the Harold Poyer residence. Games were played and presents exchanged from under a beautiful Christmas tree.

Our annual meeting and banquet was held on January 23rd.

By Albert Witte, sec.

NEW HOLSTEIN GARDEN CLUB MEETINGS

The New Holstein Garden Club enjoyed a Christmas party at which all displayed Christmas arrangements, which were later put on public display at local stores. A gift of $25 had been donated to the new high school for purchase of trees and shrubbery to be used in landscaping.

Yearly, our club donates a book or magazine to our public library. This year we gave a two year subscription to the Flower Grower.

A report on the State Horticultural Society and Auxiliary convention programs were given at our December meeting. New Holstein members had 16 entries in arrangements. Comments of judges were favorable. Members feel that they obtained a great deal from exhibiting, since the constructive criticisms were so expertly given.

—By Mrs. G. J. Hipke.

GREEN THUMB GARDEN CLUB (IRON RIVER) NEWS

The Green Thumb Garden Club of Iron River completed its third successful year with a booth exhibit at the Bayfield County Fair standing out in members minds because it took the first prize. Another outstanding achievement was the second annual flower show in June.

A Christmas party was held on December 27th, at which gifts were exchanged and prizes awarded to the various winners of games. Lunch was served and a very pleasant meeting was held.

To duplicate these events and to have regular debates on subjects pertaining to flowers, along with outdoor tours to broaden our field of knowledge on plant and tree life are a few of the plans for 1952.

Our meetings will continue to be held the first Wednesday of each month. During the summer months of June, July and August an extra meeting is held on the third Wednesday.—By Dorothy Riedle, vice pres., and Gertrude Diamon, sec.

BROOKFIELD GARDEN CLUB NEWS

Our opening meeting last year was an open meeting at which Mr. Arthur Lemm showed his slides of the Grand Canyon, together with flower pictures. This is always one of our outstanding meetings. At the October meeting, slides were shown on lilies and hemerocallis. The November meeting was called off because of bad weather, but for December we had our family Christmas party, always well attended and enjoyed.

In February, H. J. Rahmlow will speak to us, and during the following months, we will have one meeting on conservation, a bird lecture, another on growing vegetables and freezing them, and we are planning a garden tour for June.

—By Adela H. Harlos, treas.

A Study For February

Two Carnation Arrangements

The Warmth Of Soft Candlelight And Charm Of Beautiful Flowers Is Appreciaed In Winter

By Elizabeth Stewart, West Allis

It is during the frigid winter months that the florist shop with its abundant array of colorful blooms may, paradoxically indeed, appear to be an oasis in the snow.

Carnations are Popular

If we succumb to the temptation to pause and admire the lovely flowers, we will notice a goodly supply of carnations in a wide range of colors. We are told that the carnation ranks second in popularity only to the rose. It's spicy fragrance is pleasing to many, and it outrivals all other flowers as a masculine boutonniere. Florists tell us they ship well because they do not bruise easily, a fact which proves to be an asset to flower arrangers. The carnation also has a reputation for holding up very well outside of water, which accounts for its frequent use in corsages and Hawaiian leis. One need never worry about the dropping of petals.

Need Contrast In Size and Shape

On the debit side of the ledger, however, we find that the stems of these flowers are devoid of foliage. Then too, unless we are fortunate enough to obtain a few buds along with the fully opened carnations, another problem presents itself. All of the flowers are generally the same size and shape. In order to avoid monotonous repetition in an arrangement it is necessary, therefore, to introduce a certain amount of variety or contrast. This may be accomplished by combining carnations with other flowers, greens or accessories of different form, size, value (light or dark) or color.

Select Foliage Carefully

There was a time, and may we hope it has passed, when every bouquet of carnations had its "filler" of asparagus fern. Too often the average person thinks of foliage only as a "filler" to fill in certain empty spaces. Careful consideration of line, form, size, texture, value and color should always be given any greens which may be selected for use with flowers. Foliage and flowers should receive equal consideration in the creation of an arrangement.

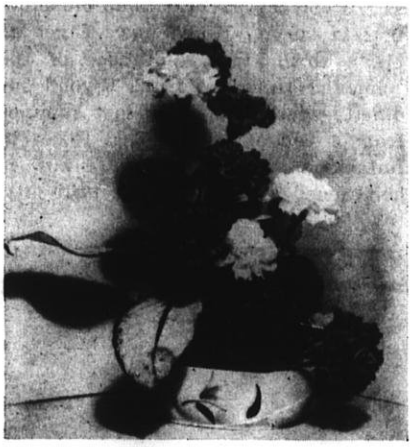

Fig. I. Dieffenbachia leaves and carnations of dark and light color are used to create interest in this arrangement.

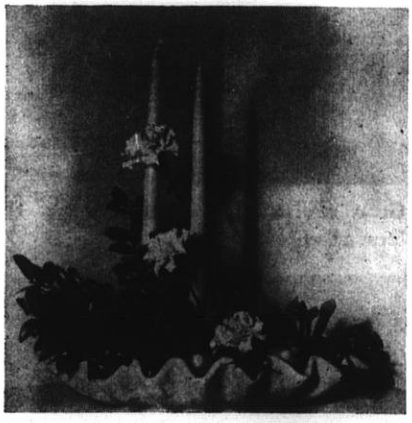

Fig. II. Carnations combined with huckleberry and candles for excellent contrast in size, line and form. Stems should have been placed upright to follow vertical lines of the candles.

Arrangement In Figure I

Dieffenbachia leaves and carnations of dark and light values were used to create a degree of interest in the arrangement in Fig. I. The rather sharp dividing line between the container and plant material could have been softened if material of light value had been grouped just above the rim of the container in the center. This would have created a stronger focal point and greater unity between container and plant material. The fact that the light value of the container is carried up through the arrangement is commendable. Notice that the flowers are arranged in an asymmetrical triangular pattern.

Arrangement In Figure II

Now let us look at the pattern of the arrangement in Fig. II. Carnations have been combined with huckleberry and candles for excellent contrast and variety in size, line, form and value. The light value of the container is nicely carried up through the arrangement. More material of light value could have been grouped in the center for a stronger focal point and greater unity between the container and plant material. The flowers then, would not have had a "stepped" appearance with equal intervals between forms. The diagonal stem across the vertical lines of the candles confuses the pattern of the arrangement. This could have been eliminated had the stem been placed upright following the same rhythm of the vertical lines. These vertical lines add good variety and contrast of form and line. The composition has an attractive silhouette due to some interesting space intervals. The repetion of the ruffled edge of the flowers and the fluted edge of the container also deserves favorable comment.

As a winter arrangement it is particularly suitable. At no other time of year can the warmth of soft candlelight and charm of beautiful flowers be more truly appreciated!

We wish to express our gratitude to Mrs. Ray Luckow of the West Allis Garden Club for letting us turn the analytical spotlight on one of her arrangements, Fig. II. She very graciously consented to be our "martyr of the month". The designer of the arrangement in Plate I is not known.

Planting for off-season interest—Snowberry fruits last well into winter.

If You EnJoy Gardening
Use Plants As Freely
As Good Design Permits In

Planting Your Yard

By Joseph S. Elfner, Dept. of Horticulture, U. of W.

I have seen good landscape developments that result from sparse plantings and much structure—fences, pavements, and walls. Some of you might like that idea; less work is required for weeding, spraying and mowing. If, however, you are a person who likes trees and shrubs and flowers, and if you enjoy gardening as a hobby, then use plants as freely as space, time, and good design permit.

Note that I included good design as a factor that enters our considerations. Selection of plants is a phase of landscape achitecture that can make or break even the best of landscape plans. Here are a few questions that bring out my point:

Does the shrub you have chosen for a certain location fit your needs regarding size and shape?

We assume that you have decided upon the requirements—tall and upright, low and spreading, or somewhere between these extremes. Should it be the first type, Nannyberry Viburnum might suit your needs very well; Fragrant Sumac wouldn't do at all. Or at either side of the front door where some emphasis is needed without competing for too much attention, you'll probably want a firm evergreen form of medium height. Pfitzer Juniper would be a good selection; Pyramidal Arborvitae is entirely out of place.

Have you chosen shrubs that have interesting characteristics beyond or in addition to their flowers?

Some shrubs that provide spectacular effect in bloom have little else to offer for the other fifty weeks of the year. The Winged Euonymus is as exciting with its brilliant fall foliage as the choicest Hybrid Lilac blooming in late spring. Right now, I get as big a thrill from a glimpse of the colorful Bittersweet fruits beyond our dinette window as I did last summer from a bed of Hybrid Tea Roses in full bloom. And my pleasure now is heightened when I find the poor misguided robin who winters here using these fruits to stoke his highly efficient boiler!

Do your various plant selections harmonize in color, texture, shape, and size?

Mass plantings of one kind of shrub

(Continued on Page 136)

Good selection for size and shape. Upright Japanese Yew at corners; spreading form at entrance.

Varied textures harmonize in summer. Winter scene enlivened by contrasting coarseness of Staghorn Sumac in background.

1952 Garden Club Directory

Garden Club Advisory Committee

Mrs. Herbert Gottschalk, Lodi; Mrs. T. O. Goeres, Lodi, alternate.

Miss Bessie Pease, Rt. 1, Box 35, Oshkosh.

Mrs. Roy Schmidt, 500-3rd St., Jefferson.

Mrs. R. H. Sewell, 7341 N. 76th St., Milwaukee.

Mrs. Vernon Rosholt, Rosholt.

Region 1, Fort Atkinson

Pres.: Mrs. Roy Schmidt, 500-3rd St., Jefferson.

Vice Pres.: Mrs. Sam Moore, 821-1st Ave. Jefferson.

Sec.: Mrs. Maurice Smith, Lake Mills.

Milwaukee Region

Pres.: Mrs. Robert La Philliph, 1335 S. 127th St., Milwaukee.

Vice Pres.: Mrs. Cyril Fus, 1803 S. 60th St., West Allis.

Sec.: Mrs. D. B. Gill, 2631 N. 89th St., Wauwatosa.

Treas.; Mrs. Arthur Knorr, Eastwood Lane, Rt. 8, Box 162, Wauwatosa.

Winnebagoland Region

Pres.: Miss Bessie Pease, Rt. 1, Box 35, Oshkosh.

Vice Pres.: Mrs. W. N. Crawford, Berlin.

Sec.-Treas.; Mrs. Willis Calkins, Omro.

Central Region

Pres.: Mrs. Marlin Steinbach, Clintonville.

Vice Pres.; Mrs. Jack Olson, Amherst.

Sec.: Mrs. Harold Smith, Amherst.

Treas.: Mrs. F. C. Wipf, Iola.

Amherst Garden Club

Pres.: Mrs. J. R. Olson.

Sec.: Mrs. H. H. Smith.

Antigo Garden Club

Pres.: Mrs. Earle Holman, 1418 Clermont St.

Sec.: Mrs. S. G. Spurgeon, 111½ Third Avenue.

Baraboo Garden Club

Pres.: Mrs. Henrietta Burckhardt, 227 Water Street.

Sec.: Mrs. John Leatherman, 303—3rd St.

Berlin Home Garden Club

Pres.: Mrs. Neils Fortnum, 137 N. Capron St.

Sec.: Mrs. Alfred Huebner, 240 Mound St.

Clintonville Garden Club

Pres.: Mr. Paul Dekarske.

Sec.-Treas.: Mrs. Joseph Paul.

Colby Blue Sky Garden Club

Pres.: Mrs. John Coates.

Sec.: Mrs. F. P. Puhlmann.

DeForest Garden Club

Pres.: Mrs. Morton Heisig.

Sec.: Mrs. Carl Thier.

Eau Claire—Elk Creek Lake Garden Club

Pres.: Mrs. Claire Brill, RR 2.

Sec. & Treas.: Mrs. Dan R. Anderson, RR 2.

Elkhorn Garden Club

Pres.: Mrs. O. W. Babcock, W. Walworth St.

Sec.: Mrs. R. W. Breitenbach, Lake Wandawega.

Fort Atkinson Garden Club

Pres.: Mrs. Herbert Gottschalk, Lodi. wards St.

Sec.: Albert Witte, 337 Roberts St.

Green Bay Garden Club

Pres.: Mrs. Richard Calliari, 2527 Martha St.

Sec.: Mrs. A. F. Hoppe, 2516 Martha St.

Hales Corners—Hawthorne Garden Club

Pres.: Mrs. Melvin Schneider, Box 27.

Sec.: Mrs. Herman Nacker, P. O. Box 328.

Hales Corners—Tess Corners Garden Club

Pres.: Mrs. L. Gaulke, Route 2, Box 403J.

Sec.: Mrs. G. Klumb, Rt. 2, Box 403A.

Iola—Clara Larson Garden Club

Pres.: Mrs. George Willett.

Sec.-Treas.: Mrs. Arthur N. Kruse.

Iron River—Green Thumb Garden Club

Pres.: Mrs. Gertrude Lavin.

Sec.-Treas.: Mrs. Gertrude Diamon.

Jefferson Garden Club

Pres.: Mrs. Bernice Shakshesky.

Sec.-Treas.: Mrs. S. S. Moore.

Jefferson—Green Thumb Garden Club

Pres.: Mrs. George Kohlhoff, Rt. 1, Sullivan.

Sec.: Mrs. Gilbert Schlaugenhauf, Helenville.

Lodi Garden Club

Pres.: Mrs. Herbert Gottschalk, Lodi.

Sec.-Treas.: Mrs. Si Swalkens, Arlington.

Madison Garden Club

Pres.: Mrs. Oliver Rundell, 2227 Van Hise Ave.

Sec.: Miss Gladys Rains, 906 Lake Ct. Box 128 A.

Madison Shorewood Hills Garden Club

Pres.: Mrs. A. R. Curreri, 3636 Lake Mendota Dr.

Sec.: Mrs. Carl J. Anderson, 1220 Shorewood Blvd.

Marinette—Twin City Garden Club

Pres.: Dr. Gust Nichols, 1413 Shore Dr.

Sec.-Treas.: Miss Mary O'Connell, 1151 Garfield Ave.

Mauston Garden Club

Pres.: Miss Johanna Roth.

Sec.-Treas.: Miss Grace Gates.

Meetings: 3rd Thursday of each month.

Milwaukee—Bay View Garden Club

Pres.: Mrs. Eric Raisch, 3473 N. Frederick Ave.

Sec.: Mrs. Hazel Dietzman, 235 W. Wilbur Ave.

Milwaukee—Blue Beech Garden Club

Pres.: Mrs. Harold Peterson, 1900 E. Newton Ave.

Sec.: Miss Jean Tainsh, 2408 E. Park Pl.

Milwaukee—Westchester Garden Club

Pres.: Mrs. John Moore, Dist. 763, Box 128 A.

Sec.-Treas.: Mrs. Robert Uecke, Dist. 763, Box 123.

New Holstein Garden Club

Pres.: Mrs. Frederick Klauck.

Sec.-Treas.: Mrs. Wm. A. Schmidt, Sr.

North Prairie Garden Study Club

Pres.: Mrs. S. Zamorski.

Sec.-Treas.: Mrs. E. Kirschke.

Ogdensburg Town and Country Garden Club

Pres.: Miss Carrie Rode.

Sec.-Treas.: Mrs. Bertha Rasmussen.

Omro Garden Club

Pres.: Mrs. T. G. Emerson.

Sec.: Mrs. Arthur Driessel, Route 2.

Oshkosh Horticultural Society

Pres.: Mr. Ward Schroder, Blackwolf Point.

Sec.-Treas.: Miss Agnes Phillipson, 1653-9th St.

Pewaukee Garden Club

Pres.: Mrs. Del Rogers.

Sec.-Treas.: Mrs. Roy P. K. Johnson, 4440 Parkside.

Poynette Garden Club

Pres.: Mrs. John Kelton.

Sec.-Treas.: Mrs. Walter Vogts, Arlington.

Plymouth Garden Club
Pres.: A. C. Erbstoezer, 222 Fairview Dr.
Sec.: Henry Winn, 415 Fremont St.

Ripon Garden Club
Pres.: Mrs. R. E. Kurth.
Sec.: Mrs. Lester Burr, 122 Lane St.

Rosholt Garden Club
Pres.: Mrs. Harry Hanson, R.R. 1.
Sec.-Treas.: Mrs. Norman Rosholt.

Scandinavia Garden Club
Pres.: Mrs. Curtis Hanson.
Corr. Sec.: Alvina Floistad.

Stevens Point, Park Ridge Garden Club
Pres.: Mrs. Anthony Klein.
Sec.: Mrs. Warren Jenkins, R. 2, Park Ridge.

Washington Island Garden Club
Pres.: Mrs. Al Stelter.
Sec.-Treas.: Miss Hazel Pederson.

Waukesha Town Garden Club
Pres.: Mrs. Walter Moss, Rt. 5, Box 85.
Cor. Sec.: Miss Martha Schacke, 605 Center Ave.

Waupaca Garden Club
Pres.: Mrs. Leo Jackson, King.
Cor. Sec.: Mrs. Hugh Johnson, 201 E. Lake St.

Wauwatosa Garden Club
Pres.: Mr. H. Konrad, 7917 Stickney Ave.
Sec.: Mrs. R. J. Stratton, 337 N. 62nd St.

West Allis Garden Club
Pres.: Mrs. Ray Luckow, Box 125, Dist 763, Milwaukee.
Sec.: Mrs. Henry Moody, 1101 S. 32nd St., Milwaukee.

West Allis— Hillcrest Garden Club
Pres.: Mrs. F. Wrobbel, 8441 W. Hayes Ave.
Sec.: Mrs. H. Krueger, 1421 N. 67th St., Wauwatosa.

West Allis—Home Gardeners
Pres.: Mrs. J. Dooley, 7724 W. Rogers St.
Sec.: Mrs. F. H. Wittberger, 2028 S. 82nd St.

West Allis— Lincoln Manor Garden Club
Pres.: Mrs. R. Stephenson, 1941 S. 107th St.
Sec.-Treas.: Mrs. E. Ries, 11305 W. National Ave.

West Bend Garden Club
Pres.: Mrs. Wallace Freund, Route 3.
Sec.-Treas.: Mrs. Herbert G. Kahl, 119 Mayer St.

BEST ROSE VARIETIES

If you are wondering what varieties of roses to plant in spring, the 1951 National Rose Survey of the American Rose Society, published in the December 1951 issue of their magazine will help. Here are the recommended varieties:

Best Ten Hybrid Teas for Garden Use: Peace, Crimson Glory, Charlotte Armstrong, Rubaiyat, Tallyho, Eclipse, Nocturne, Mme. Henri Guillot, Sutter's Gold and New Yorker.

Best Three Roses for Exhibition Purposes: Peace, Charlotte Armstrong and Crimson Glory.

Best Seven Floribunda Varieties: Fashion, Floradora, World's Fair, Pinocchio, Goldilocks and Betty Prior.

Best Five Climbers; Paul's Scarlet Climber, Blaze, New Dawn, Dr. J. H. Nicholas and Climbing Crimson Glory.

Hardy Varieties for Wisconsin

Wisconsin rose growers find difficulty in over-wintering some of the recommended varieties of hybrid teas. Many prefer the Brownell "Artic" varieties of hybrid teas because of their greater hardiness. Varieties such as Ann Vanderbilt will often come through under Wisconsin conditions without injury to a height of two feet or more. However, don't grow them with the idea they can be over-wintered without covering, as severe winters will injure them too.

PLANTING YOUR YARD

(Continued from Page 134)

may become monotonous. Even worse is the disorder resulting from too many contrasting characters. Interesting combinations arise from careful use of contrasts—a Paper Birch against a background of White Pine. But continuous changes in your design from light to dark, coarse to fine, large to small can only produce a kaleidoscopic effect that detracts from the restfulness you desire in a garden.

These few considerations point up the importance of that phase of landscape architecture called planting design. **"Plan before you plant"** is good advice to follow. Your own landscape efforts will be well rewarded by thoughtful selection of plant materials.

WE VISIT OUR OLDEST BEEKEEPER

During a short vacation trip, we visited Mr. A. C. Allen, formerly of Portage, Wis., now at Fort Meade, Florida, on December 26. Mr. Allen is now 87 years old and we found him and his wife both in excellent health and spirits. Mr. Allen had invited us for dinner, and after the meal suggested we look at some of his 30 colonies of bees to see what they are doing at that time of year.

Mr. Allen has a very nice apiary. He purchased about two acres of land on the edge of the city, covered with large live oak trees. After clearing a piece of ground among the trees, he established his 30 colonies so he can drive behind the rows and get his trailer behind each colony for putting on and taking off supers.

We were surprised to find, on December 26, about the same amount of brood in each hive as we find in colonies here the first part of February—from two to three frames. The temperature was about 75° F., that day, and the bees were bringing in pollen and perhaps a little nectar, although we didn't see many flowers in bloom excepting those for ornamental use. Mr. Allen emphasized the importance of stimulating brood rearing early so that colonies will be strong by the time of the orange flow in February and March. He was feeding Soy Bean flour and thought that Florida beekeepers could get much more orange blossom honey if they so managed their colonies as to have large populations at the beginning of the flow. He had received a very nice crop during 1951.

Mr. Allen acted as treasurer of his church during the building of a new church and school. He guided us on an interesting trip around Fort Meade including a sand mountain on which ski meetings are held. The mountain was built from refuse sand in the production of phosphate fertilizer.

After leaving Mr. Allen we wondered if we will be living as wholesome and useful a life if it is our good fortune to live to be 87 years old.—H.J.R.

Thrift is a wonderful virtue, especially in ancestors.—Hartford Times-Press.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

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Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

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Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

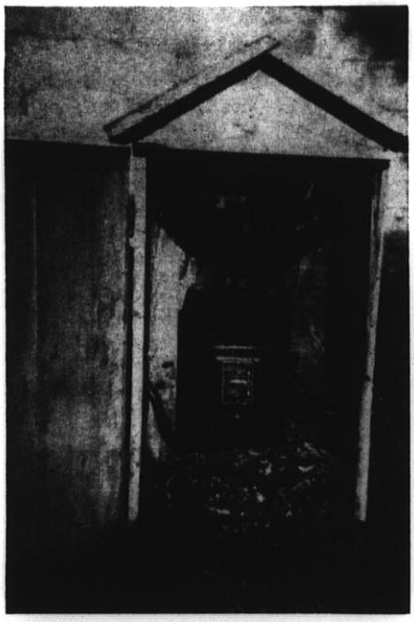
FEBRUARY IN THE APIARY

It's February again! How fast the years roll by. As beekeepers, we wonder what our colonies are doing during this cold month and if they will survive, come out strong or weak, or be infected with nosema and dwindle later this spring. Those are just a few of the problems beekeepers worry about.

February is a month of active brood rearing, even though temperatures may be low. It is a month in which colonies (let's open them up and take a look), appear almost as healthy, active and contented as they were last September. It is also the month in which they consume quite a bit of honey and pollen in brood rearing. They enlarge the area of the brood nest and decrease the area formerly covered with pollen and honey in the comb. If the area of empty combs becomes too large and the weather too cold, trouble begins—the bees may starve.

Last year, we had a colony starve on one side of the center comb, but remain in good condition on the other side. Opening up the colony in March, we discovered the dead bees in combs on the right side of the brood chamber. Fortunately, the queen was on the left side, where there was still pollen and honey which they could cover in cold weather. On the right side, they had used up all of the honey and the bees on that side were not able to move to the left side to get food. That simply indicates the importance of having the entire cluster cover honey preferably having honey in the top of each comb, so they can move upward on to it.

So, as good beekeepers, let's all take a look on a nice day during this month, just to see what the bees are doing. We will learn a lot and perhaps save some colonies.



Honey bees and bumblebees live in harmony. Upper combs were built by a new honey bee colony. Holes in mouse nest below are entrances to the bumblebees nest. Picture by Marvin Kosanke, Ripon.

AN UNUSUAL EXPERIENCE

By Marvin W. Kosanke, Ripon

During the past few years I have hived swarms of bees in some very unusual places. However, this past summer I had the strangest experience of all.

One day during July, I received a call from a nearby village that a swarm of bees had taken up residence in a box which stood on the ground at the rear of a garage. The next day I drove over to get the bees. Upon my arrival I found that the bees had entered this wooden box through a hole that a mouse had gnawed in the rear side. This box contained an electrical switch and fuse box but was no longer in use. I closed up the entrance and took the box containing the bees home.

When I arrived home I opened the door to determine the condition of the colony. I received the greatest surprise of my beekeeping experiences. Not only did I find a colony of honey bees but a nest of bumble bees as well on the bottom of the box. The bumble bees had made their home in an old mouse nest. Apparently they lived in complete harmony with the honey bees as they had an entrance on the lower righthand side where the wires entered the box through several augur holes while the honey bees used the small hole near the top of the box.

It was not difficult to transfer this colony to a hive. I removed the nest of bumble bees and then I laid the box on the ground, opened the door and set a hive body containing dark combs on it. In a week the queen was laying in the combs and practically all the bees were in the hive body as well.

REPORT FROM THE NATIONAL BEEKEEPING FEDERATION

Mr. Henry Schaefer, state president, and delegate to the National Beekeepers Federation convention at Dallas, Texas, in January, reports some of the important actions taken at the meeting as follows:

"Attendance was very good. About 300. Wisconsin folks present were Mr. Dankemeyer of the Marshfield Manufacturing Company; Steve Parks and Gordon Frater, of the G. B. Lewis Co., Watertown; Mrs. Harriet Grace, and Mr. and Mrs. Henry Schaefer.

"These important actions were taken: The Inspectors of America have started a plan to gather information on the study of nosema — it's

planned to have all inspectors record the weather, soil type, proximity to water, etc.

"No further action was taken on the price support program but representatives of USDA were present to obtain information as to what the beekeepers want. We still want 75% of parity and a loan program. We have made a survey as to types of publicity for marketing honey, and plans are now underway for a $75,000 advertising campaign in national magazines, radio and TV. It'll all depend on the desire of the beekeepers and their response by their prompt remittance of dues. The dues will be 50c minimum, plus 4c per colony. The plan is ready. It is now up to the producer. A more detailed outline will be sent each beekeeper soon. Here is a chance to get something for the beekeepers dollar. The campaign is to be a tie-in with a large food company and will include a two page spread in Life magazine and four weeks of radio and TV.

"Officers elected were: President, Glenn Gibson, Oklahoma; Vice President; Clarence Langely, Minnesota. Executive Board: Howard Graff, Washington state; Howard Foster, Montana; Charles Hanson, Texas; E. H. Adee, Nebraska; and H. A. Schaefer, Wisconsin.

ORDER PACKAGE BEES

We found it profitable last year to order more package bees than we thought we would need. It proved to be very profitable. After all, if we have the equipment, it's a mistake not to put it into use. Furthermore, it is a mistake also to try to build up a dwindling colony, whether the dwindling is due to nosema or a failing queen or some other cause. If the colony shows signs of dysentery or nosema and is dwindling, destroy it and use the equipment for package bees. It will pay—provided we get a good crop from them.

Plan to Feed a Pollen Supplement

One of the objects of mid-winter inspection, especially in February and early March, is to see if colonies have pollen available for brood rearing. You will probably find 8 out of 10 colonies unable to reach any pollen or have any available by the middle of March, especially if its a good colony which has been raising brood actively. So it's important to feed a supplement.

If we do not feed a supplement, such as soy bean flour, brood rearing slows down, and then fewer bees are born than die when flights begin in April, resulting in decreasing populations.

In otherwords, now is the time to plan to take care of your bees so that they will take care of you.

THE LEONARD OTTOS IN HONOLULU

Mr. Leonard Otto, Forest Junction, president of the Fox River Valley District and member of the Board of Directors, was married to Miss Esther Woodhouse of New York on January 12. They immediately left for Honolulu for a vacation trip.

Mr. Otto writes that he plans to be back in early March, in time to preside at the district meeting of the Association. We wish the Otto's every happiness and a pleasant journey.

1951 APIARY INSPECTION REPORT

Oconto	59	434	8
Outagamie	97	1,544	40
Ozaukee	15	87	27
Pepin	16	100	
Pierce	23	851	16
Polk	60	669	30
Portage	4	34	
Price	3	30	3
Racine	74	565	48
Richland	3	39	3
Rock	132	1,286	94
Rusk	47	392	16
St. Croix	25	418	7
Sauk	126	777	41
Shawano	53	724	4
Sheboygan	34	302	4
Taylor	27	271	2
Trempealeau	53	660	
Vernon	64	700	18
Walworth	65	514	69
Washington	7	215	5
Waukesha	7	72	
Waupaca	79	869	35
Waushara	73	521	21
Winnebago	76	1,311	30
Wood	84	755	43
TOTALS	3,179	32,993	1,219

Talk is cheap—the inevitable result of overproduction.—The Delavan Enterprise.

BEEKEEPERS EXECUTIVE COMMITTEE MEETS WITH STATE FAIR EXHIBIT COMMITTEE

The Board of Directors of the Wisconsin State Beekeeper's Association met with the State Fair Exhibit Committee in Mr. John Long's office, State Capitol, on December 14. Mr. Art Kehl, chairman, Exhibit Committee, reported that the fair management has been very cooperative, granting all requests made at the annual convention, with one exception—that being the return of the old Honey Building, which they plan to tear down.

He reported asking for seventy lineal feet of exhibit space, which was granted. Place of exhibit is not yet determined. Permission was yet determined. Permission was granted to sell honey under the Association label. Plans are to have the names of all paid-up members of the State Association listed in a directory, to be attached to each package of honey sold. The Fair management will again give $500 for the exhibit.

Honey Advertising

Mr. John Long told about the honey advertising which we will receive through the State Department of Agriculture, Publicity Department. There will be Wis. Farm Products broadcasts of one minute during University basketball games. Honey was included on the evening of December 13. These games are now broadcast by 25 Wisconsin radio stations. Honey is also being advertised on more than 200 billboards owned by the State Department of Agriculture during the month of January. The billboards featured butter and honey.

The group urged that the American Honey Institute and the National Federation be acquainted with the need of honey recipes in leaflet form, to be given to schools, which receive honey on the School Lunch Program. It was suggested that a sheet of tested recipes be included in each pack sent to a school.

There is no question about the value of these meetings of the Board of Directors, the difficulty being in the cost of travel and the time involved in getting together members scattered all over the state. Mr. Henry Schaefer acted as secretary at the meeting.

DISTRICT BEEKEEPERS MEETINGS

Wisconsin State Beekeepers Association, Affiliated with the Wisconsin State Horticultural Society.

February 19, Tuesday. Southern District meeting. Y. M. C. A., Janesville, 10 a.m. to 4 p.m. Luncheon in cafeteria.

February 21 (Thursday). Southern District meeting. Platt Deutscher Verein Hall. Corner of South 2nd and Market Streets, Watertown, Wis. Bring a dish for luncheon. coffee and extra food furnished by the G. B. Lewis Co.

March 18, Tuesday, Fox River Valley District Meeting, City Hall, Chilton, pot luck luncheon.

April 9, Wednesday. North Central District meeting. Marshfield, Wis. Central State Bank. Basement room. Corner of Third and Main Streets. Bring a dish for lunch. Coffee and cheese-buns furnished by the Marshfield Manfg. Co.

April 18, Friday. Southwestern District Meeting. Court House Sparta. Restaurants near-by for noon meal.

May 7, Wednesday. Northwestern District Meeting. Legion Memorial Hall, Bloomer. Pot Luck Luncheon.

PROGRAM

(Subject to change at some of the meetings)

10 a.m. Meeting called to order by the District President. How are the bees wintering? Round table reports from beekeepers.

10:30 a.m. The latest in beekeeping research. How to produce honey economically. By H. J. Rahmlow, Sec., Wis. Hort. Soc., Madison. Forum on Spring Management.

11:30 a.m. Annual business meeting and election of officers. Plans for the State Fair Exhibit. By Art Kehl, Chairman.

12 m. Noon luncheon. See luncheon announcement given above with date and place of meeting. If a pot luck luncheon, bring a dish if possible; otherwise stay and pay 75c with which additional food will be purchased by the committee.

1:30 p.m. Honey as a food. By the County Home Agent. Discussion by the County Agent.

2:00 p.m. Our beekeeping business as a banker sees it. Can we borrow money on our business and equipment? By a local banker.

2:30 p.m. What we have learned about nosema and what can be done about it. The disease control program. By John Long, Chief, Division of Bees and Honey, Madison.

3:15 p.m. This beekeeping business of ours. By Henry Schaefer, president of Wisconsin Beekeepers Association.

3:45 p.m. Report of the advertising committee. By Art Kehl, Committee Chairman, G. B. Lewis Co., Watertown.

NEW HONEY CO-OP EMPLOYS LLOYD FRANCE

The Rock River Honey Cooperative, 1014 North Bluff Street, Janesville, has engaged Mr. Lloyd France, Platteville, to handle sales of honey and beekeeping supplies at the Co-op's new plant.

Under his supervision, the co-operative will also custom bottle honey for beekeepers and has jars for sale at the plant, for the beekeeper's convenience.

Mr. France is well known in Wisconsin beekeeping circles. He has been deputy bee inspector for the past several years and will continue with this phase of his work. At present he is on full time duty at the co-op plant.—By Mrs. M. L. Osborne, Beloit.

WANTED—BEES FOR POLLINATION

Wanted, bees for pollinating alfalfa. Have twenty acres of alfalfa in good honey producing section. Write Mr. Ray Wealti, New Glarus, Wis., Route 2.

BEE SUPPLIES FOR SALE

Exceptional buy. Inspected bee supplies—standard, good condition. Hive bodies, 50c. Shallow, 40c. Some extracting combs, covers and bottomboards.—John Marken, 615½ 10th St., Oshkosh.

Wisconsin Horticulture

March, 1952

NIP SCAB IN THE BUD!

KOLODUST IN THE RAIN...

Timely Protection When It Counts

The surest way to control scab is to *dust in the rain* with Kolodust when scab spores are shooting. This Niagara planned operation is most effective because Kolodust is the only material that penetrates the rain drops and adheres to foliage, buds and fruit both during and after the storm.

Kolodust is *safe*. Being non-caustic it permits foliage to function in a normal manner. You benefit from larger leaves, smoother fruit finish and more fruit buds for next year's crop.

Remember, you can Kolodust when ground conditions bog down sprayers; time applications "on the nose" for maximum kill of scab spores.

This year follow the pattern of better growers everywhere. *Kolodust in the rain!* You'll harvest a bigger crop of finer finished fruit.

BE "JOHNNY-ON-THE-SPOT" WHEN SCAB SPORES ARE SHOOTING

Niagara INSECTICIDES, FUNGICIDES AND ORCHARD DUSTERS

Niagara Chemical Division

FOOD MACHINERY AND CHEMICAL CORPORATION

Middleport, N. Y., Richmond, Calif., Jacksonville, Fla., Tampa, Fla., Pompano, Fla., New Orleans, La., Greenville, Miss,. Harlingen, Tex., Pecos, Tex., *Canadian Associate:* NIAGARA BRAND SPRAY CO., LTD., Burlington, Ontario.

WHEN YOU BUY Niagara YOU BUY PROTECTION

fmc

EXCLUSIVE Non-caustic Kolodust contains fused sulphur adsorbed into Bentonite by an exclusive Niagara process. The end result is a highly penetrating dust that sticks to foliage and fruit through prolonged and heavy rains.

FRUIT & VEGETABLE GROWERS SUPPLIES

It is Now Time to Order Your Requirements for 1952

WRITE NOW FOR PRICE LIST ON MATERIALS

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Sulphate of Ammonia
Mixed Fertilizers
Sheep Manure

Pruning Supplies—

Saws
Snip
Tree Seal
Prunners
Pole Prunners
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Spray Materials—

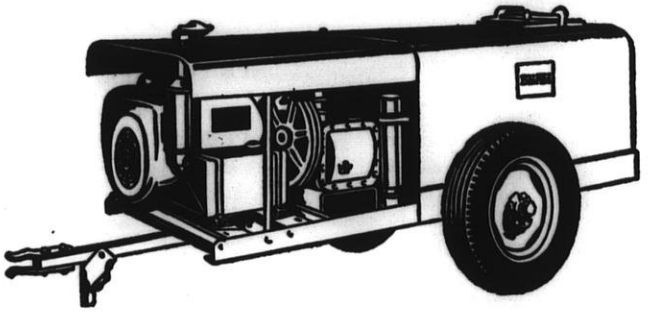
Arsenate Lead
Lime Sulphur (Liquid)
Lime Sulphur (Dry)
Kolofog
Kolospray
Sulfronx
Fermate
Ferradow
Carbamate
DN289
Chlordane
Toxaphine
Diathene D14
Parzate
Marlate
Cocs Spray
Z78
Wettable Rotenone
Dormant Oil
Crag 341 Fungicide
Crag Herbicide No. 1

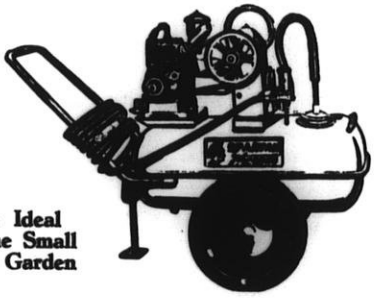
SPRAYERS

Orchard - Row Crop - Estate - Pest Control & Hand. All Models & Sizes.

See and read about the new Speed Aire attachment for high pressure sprayers. You can save time, labor and material with one of these pieces of equipment. You get full coverage from ground to the top of trees with full penetration for thorough coverage. The Speed Aire is the answer to the need for a lower cost air-type sprayer. It gives you true John Bean quality and performance. Write for prices and literature.

JOHN BEAN SPRAYERS





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Subscription by membership in the Wisconsin State Horticultural Society. Annual dues are $1.25 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

CHERRY SPRAY PROGRAM

In addition to the cherry fruit worm and destructive prune worm, there has been considerable injury caused by the fruit tree leafroller and bud moth. In some instances damage has also been caused by the red banded leafroller and codling moth. The following spray schedule is suggested as the best means of controlling these pests.

1952 Cherry Spray Program[1]

Time of application	Materials and amounts per 100 gallons
Petal fall Ten to fourteen day after petal fall	Lead arsenate 2 lbs., and bordeaux 6-8-100. 50% methoxychlor 2 lbs.[2]; and bordeaux 3-4-100 or ferbam 1½ lb.[3] —or— 50% DDT 2 lbs., and ferbam 1½ lb.
About four weeks after petal fall	50% methoxychlor. 2 lbs., and bordeaux 3-4-100 or ferbam 1½lb. —or 50% DDT 2 lbs., and ferbam 1½ lb.
After harvest	Bordeaux 3-4-100.

1/ For interplanted blocks of cherries and apples use ferbam (1½ lb./100 gallons) as the fungicide and follow the apple spray schedule timing. Add 50% methoxychlor or 50% DDT for cherry fruit worm about 4 weeks after petal fall. If this does not coincide with the regular spray, a separate application must be made.

2/ In all cases do not use DDT with bordeaux. Methoxychlor can be used with bordeaux or ferbam.

3/ If ferbam is used as the fungicide, an additional application may be necessary before harvest.

The Spray Program For *Apple Scab Control*

The 1952 Recommendation For Wisconsin

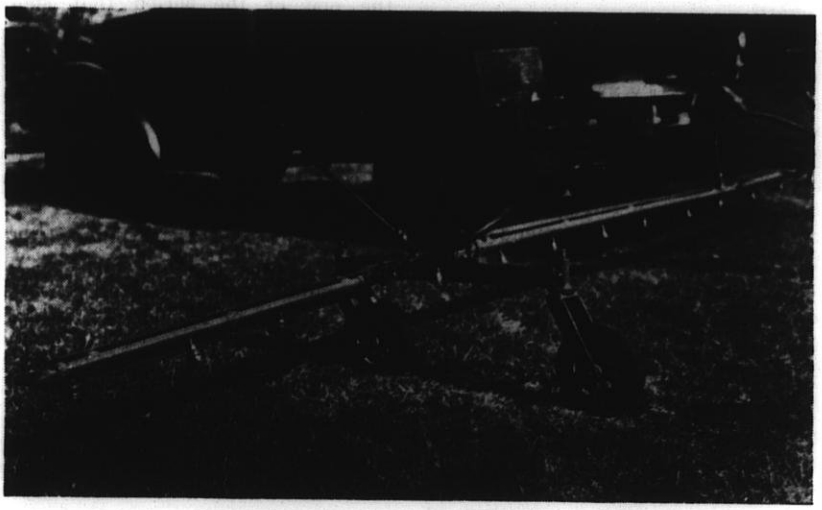
By J. Duain Moore and G. W. Keitt

In general, throughout the State of Wisconsin the 1951 growing season was very favorable for apple scab development, and in many orchards scab was not satisfactorily controlled. In fact, in some orchards the entire crop was lost because of this disease. The fall of 1951 favored much late scab infection in the leaves, the winter has afforded ideal protection of the fungus in the leaves on the ground, and a very heavy production of scab spores can be forecast for 1952. In view of these facts, it seems wise to recommend the use of the ground treatment in all Wisconsin apple orchards in 1952. The ground spray will probably be the most important single spray for scab control in most orchards.

The use of a ground spray for apple scab control has been recommended in Wisconsin for a number of years. Through the use of this ground spray it has been possible for the apple grower not only to obtain better scab control, but to accomplish this control with less spray injury to foliage and fruit since some of the less caustic materials could be substituted for liquid lime sulfur in spray program applied to the trees. Furthermore, many growers have discovered that the use of the ground spray has enabled them to obtain good scab control with somewhat longer intervals between applications than were possible without the ground treatment. This has resulted in the use of fewer applications of spray during the season, and the saving thus obtained was found to pay for the ground spray. The most important features of ground spraying have been the relatively uniform control of scab in wet, as well as in dry years, and the lessening of spray injury by making possible the use of milder fungicides in the sprays applied to the trees.

Ground Spraying

Ground spraying, as the name implies, means applying a spray to the ground. It is aimed at the control of apple scab through an attack at the scab fungus in the dead leaves on the ground. Under Wisconsin conditions the scab fungus is able to survive the winter only in the dead leaves on the ground, and spores produced in these leaves are released into the air during rainy periods in the spring and early summer. After release these spores are carried by the wind, and if they come to rest on susceptible apple tissue, they germinate and cause infection. The effectiveness of the ground spray is dependent, therefore, upon the use of an "eradicant" fungicide that will penetrate the leaves and prevent the formation of spores or limit the release of those already formed.



The Special Spray Boom for Ground Spraying in a Commercial Orchard

Experimental work on ground spraying was begun in the laboratory in 1938 and was taken to the commercial orchard in 1939. Many materials have been tested, but at present the chemicals in use are certain DN materials. There appears to be little, if any, difference in the control obtained with sodium dinitro ortho cresolate (Elgetol, Krenite) or the triethanolamine salt of dinitro secondary butyl phenol (DN-289, Elgetol 318).

Specifically the recommendations for the use of the ground spray are as follows:

The ground spray should be applied in the early spring as soon as the snow and surface water are gone and it is possible to operate the spraying equipment on the land. It is imperative for maximum control that the ground treatment be made before the buds have broken to expose susceptible tissue to scab infection. In Wisconsin there is usually a period of about 2 to 3 weeks in which a timely ground treatment can be applied. It is advisable, however, to use the earliest available opportunity to apply the ground spray so that any unfavorable weather may not delay the application past the time of maximum effectiveness.

In actual commercial practice the ground spray has been applied successfully by spray gun, by special booms, or by speed sprayers. It is essential in any method to use at least 1 gallon of the chemical (DN-289, Elgetol, Elgetol 318, Krenite, etc.) in each 200 gallons of spray and apply this spray at the rate of 600 gallons per acre. In cases of a very heavy carryover of the fungus scab it may be de-

sirable to use 1 gallon of the chemical in each 100 gallons of spray and still apply it at 600 gallons per acre. The application should be made as uniformly as possible to the entire orchard floor and to the area at least 50 feet beyond the edge of the orchard in order to treat those leaves that may have blown away from the orchard.

Although various methods of application are possible, it is desirable to have the outlets delivering the spray located as near the ground as possible. In nozzles of both guns and special spray booms, the use of weed discs that throw a fan rather than a cone of spray is recommended for most uniform coverage. The size of the discs and the rate of travel should be so regulated that the 600 gallons of spray per acre will be applied with 400 to 600 lbs. pressure.

In both gun and boom spraying it is usually more practical to treat the area between two rows of trees in two trips. The special boom developed for ground spraying is attached in such a way that the spray rig can be driven in each direction down the middle between two rows of trees, and the nozzles are arranged to provide about 1-2 feet of overlapping coverage at the edge of each sprayed strip. This boom is adjustable for spraying half the area between rows in plantings from 20 to 30 feet apart.

Although the speed sprayer has been used successfully in ground spraying, it does not seem desirable to recommend its use in plantings in which the trees are more than 20 feet apart. The angle at which the nozzles (turned down for ground spraying) deliver the spray to the ground is such that any area out near the tree trunk that is missed because of some obstruction near the ground would probably not be sprayed by the overlapping coverage from the next row if the trees were spaced more than 20 feet apart. It should be added that, because of its size, a speed sprayer usually is driven to make only 1 trip between each 2 rows of trees, and the area under the rig cannot be sprayed unless special outlets are provided for this purpose.

In the application of ground sprays with pressure sprayers, most growers have experienced a loss of pressure due to excess foaming of the spray. Since the materials used for ground spraying are completely soluble at the concentrations used, it is suggested that most or all of the agitator blades be removed to prevent this foaming.

Where the ground treatment is used for apple scab control, the orchard should not be cultivated before the end of the period that spores would naturally be released during rains. In Wisconsin this period usually lasts until 2 to 3 weeks after petal-fall. This recommendation is made since cultivation would tend to expose some leaves that had escaped the ground treatment because they were covered by other leaves. As long as they remain well covered they cannot release their spores into free air.

Spray Program For Scab Control

The use of a ground spray is recommended not as a replacement for tree spraying, but as a part of an overall program that includes both ground and tree spraying. The recommended spray program for apple scab control in 1952 in Wisconsin is as follows:

A. Dormant ground spray as outlined above.

B. Sprays before bloom.
(There will probably be three of these, applied at 7 to 10 day intervals, starting at the delayed domant stage. Two gallons of liquid lime sulfur per 100 gallons of spray is recommended as the concentration for each of these pre-blossom applications.)

C. A spray in bloom if necessary.
(If there is a blooming period of longer than 7 days duration a spray should be applied in bloom. Five to six pounds of a good micronized wettable sulfur or 1½ lbs. of ferbam to each 100 gallons of spray are suggested as the fungicide).

D. Sprays after bloom.
(There will probably be 4 to 6 of these, applied at 10-14 day intervals, starting at petal-fall. Five pounds of a good micronized wettable sulfur or 1 lb. of ferbam to each 100 gallons of spray are suggested as the fungicide.)

The insecticides recommended by the Department of Entomology for control of the various apple insects added to this program.

Additional information on ground spraying may be obtained by writing the Department of Plant Pathology University of Wisconsin.

FRUIT MATURITY LAW DISCUSSED AT MICHIGAN MEETING

With a thousand fruit growers attending the Michigan State Horticultural Society Meetings at Grand Rapids, a rather controversial item was discussed—that of a **fruit maturity law.** Several growers discussed the problem and the fact that since the first apples on the market set the pattern for the season, they must be ripe and of good quality. They mentioned cases where apples were put on the Benton Harbor market a full month before being ripe. A recommendation was made that the Department of Agriculture define the term maturity and instruct inspectors to enforce the law regarding it.

Another crusade is that of taking out 10% of Michigan's apple trees to improve the surplus apple situation. It is aimed at old trees and odd varieties which depress the market.

ORCHARD FOR RENT

For rent—30 acre operating orchard a few miles from Green Bay. 2,000 apple, 200 plum trees. Speed Sprayer Grader, Caterpillar, almost new House available. Large woodlot and garden space for extra year round income. Will rent to acceptable person for little more than the cost of the taxes and depreciation of equipment. Long term deal possible.

Write to Peter M. Platten, 40 Dousman Street, Green Bay, Wisconsin.

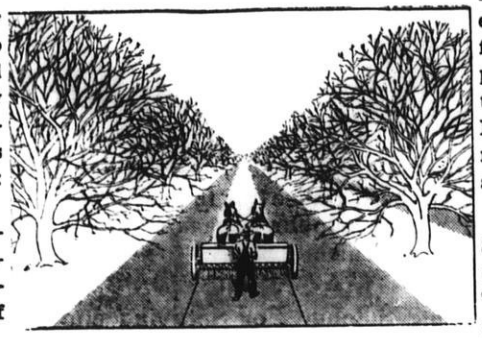
The Problem of

Fertilizer For The Orchard

Study Tree Growth To Determine the Amount Needed

"Will you write a short article for Wisconsin Horticulture on how to fertilize apple trees" the editor asked Dr. R. H. Roberts of the University of Wisconsin Department of Horticulture. Those who know Dr. Roberts will not be surprised at his reply: "I don't know anything about it."

What he expressed was the difficulty of giving blanket recommendations for fertilizing different varieties, trees of different ages, and of different nutritional requirements.



Then Dr. Roberts made this remark: "This is not a recommendation at all and yet it's surprising how well it fits—if a grower has had good results from the method he has been using, keep it up." To this we remarked: "Providing we know whether or not we have been getting the best results possible."

Ammonium nitrate is the fertilizer now available and in common use. Should we use some complete fertilizer? In answer, Dr. Roberts remarked: "The thing to do is get a bag of it and spread it between the rows over a certain area and observe what happens." It may improve the growth of the cover crop; or if the soil is deficient in certain elements it may benefit the trees, but the higher cost limits its use to conditions where it will pay.

The easy way to answer a grower's question as to how much nitrogen to apply is to say:: "Spread under each tree 1 pound of ammonium nitrate for each 4 years of the age of the tree." That, of course, is a starting point but inadequate for best results. Dr. Roberts has shown that McIntosh will produce best if the end growth on the branches is only 8 to 10 inches, which is not enough for Wealthy or Delicious; so some varieties need more fertilizer than others.

So what can we advise at this time. Just this: If you know you are getting good results—keep up your program. Spread the fertilizer between the rows so the cover crop will grow better, shade the soil from sun and wind during midsummer and grow organic matter. There are more feeding roots in the center of the rows than under the trees, and by applying fertilizer between the rows we feed both trees and cover crop. Then experiment with a sack of complete fertilizer spread between the rows. Study the growth of the **branches on each variety.**

During coming months we will publish tables, showing the amount of growth standard varieties should make for best fruiting.

ONE MILLION BUSHELS OF APPLES

Senator Harry Byrd, Virginia's top apple grower, produced in his orchards at Berryville, Va., and Charleston, W. Va., 1,033,000 bushels of apples on 2,000 acres, yielding, roughly, 5,000 bushels per acre.

In harvesting the crop, the following were involved: 325 pickers; 40 truck drivers; 15 tractor drivers; 110 loaders and crate handlers; 300 packing house and cold storage handlers; 80 apple wrappers.

About 500,000 bushels were hauled to the cannery, to be made into apple sauce, jelly, and sliced apples.

The above information was published in the January issue of Virginia Fruit, by the Virginia Horticultural Society. It adds that many Virginia growers are kicking themselves for not following Mr. Byrd's leadership in planting the red sport varieties and equipping themselves to supply to discriminating domestic markets.

THE NEW YORK STATE FRUIT TESTING CO-OP. ASSN.

New Varieties Available for Testing in Wisconsin

Members of the Wisconsin State Horticultural Society who are interested in testing new varieties of fruits should obtain the catalog and price list of the New York State Fruit testing Co-operative Assn., Geneva, N. Y. Many new varieties which might prove superior in Wisconsin are described.

Some 15 years ago the Wisconsin State Horticultural Society appointed annually a fruit testing committee. This committee visited the Experiment Stations of the northern states and inspected the varieties of fruit being introduced, with the view of recommending those that indicated possibilities for growing in Wisconsin. As a result of this a large number of new varieties have been tested here. The plan was to encourage members to purchase two trees of a fruit variety, the Society paying one-half the cost, and then report on their success or failure from time to time. Such varieties as Early McIntosh, Milton, Orleans, Newfane, Macoun, Kendall, Cortland, were obtained from the New York Experiment Station. A large number of varieties from Minnesota have been tested, as have some Canadian varieties including Melba, Lobo and Hume. Also the variety Secor from Iowa.

While the project has been discontinued, there is still considerable interest in testing new varieties. We do not recommend purchasing a large number of plants or trees for testing. Two trees and 25 strawberry or raspberry plants are ample.

Climatic conditions in New York state seem to be somewhat similar to Southern Wisconsin so that apple, strawberry and raspberry varieties recommended there have about the same value here. This does not, however, apply to varieties of grapes and plums, some of which are not hardy here.

A man may fall several times but he isn't a failure until he starts saying somebody pushed him.—Ripon Weekly Press.

STOP

CHERRY FRUIT FLY

and FRUIT WORM

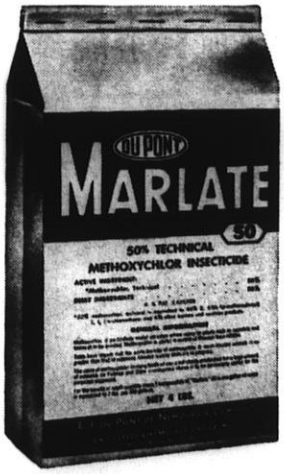
WITH DU PONT "MARLATE" Insecticide

SURE PROTECTION EARLY AND LATE. The same "Marlate" sprays control both these destructive insects and help you get clean fruit for market or cannery.

MINIMUM RESIDUE PROBLEM. Use "Marlate" for late-season control without residue hazards. For exceptional coverage of fruit, add Du Pont Spreader-Sticker to the spray mixture.

CONTROLS OTHER INSECTS. "Marlate" kills Oriental fruit moth, plum curculio, destructive prune worm, codling moth, apple maggot, Japanese beetle, leafhoppers and other major insect pests of fruit.

IDEAL FOR OTHER FRUITS. "Marlate" solves the residue problem with early apples, peaches, plums and the like. "Marlate" also has many advantages for insect control on vegetables, forage and seed crops.



See your dealer now *for "Marlate" and other proved Du Pont pest-control products. Ask him for free booklets, or write Du Pont, Grasselli Chemicals Dept., Wilmington, Del.*

DU PONT CHEMICALS FOR THE FARM INCLUDE: *Fungicides:* PARZATE* (Liquid and Dry), FERMATE,* ZERLATE,* Copper-A (Fixed Copper), SULFORON* and SULFORON*-X Wettable Sulfurs... *Insecticides:* DEENATE* DDT, MARLATE* Methoxychlor, LEXONE* Benzene Hexachloride, KRENITE* Dinitro Spray, EPN 300 Insecticide, Calcium Arsenate, Lead Arsenate ... *Weed and Brush Killers:* AMMATE,* 2,4-D, TCA and 2,4,5-T... *Also:* Du Pont Cotton Dusts, Du Pont Spreader-Sticker, PARMONE* Fruit Drop Inhibitor, and many others.

*REG. U. S. PAT. OFF.

On all chemicals always follow directions for application. Where warning or caution statements onuse of the product are given, read them carefully.

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BETTER THINGS FOR BETTER LIVING
THROUGH CHEMISTRY

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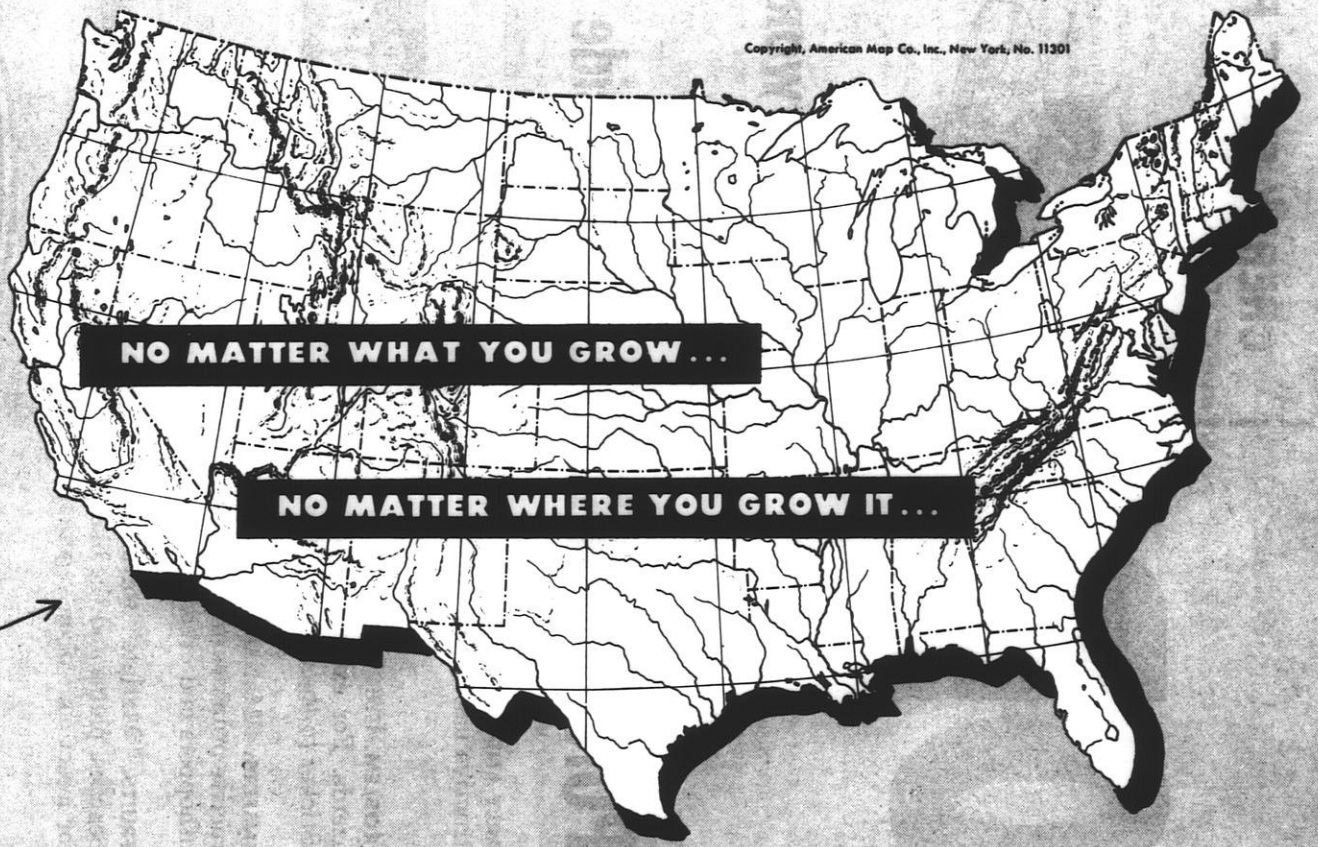

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AVAILABLE FROM NATIONAL MANUFACTURERS

REMEMBER, **PARATHION** KILLS MORE TYPES OF INSECTS ON A BROADER RANGE OF CROPS THAN ANY OTHER INSECTICIDE

Consult your local agricultural authorities on the advantages of PARATHION insecticides or write for Parathion Grower's Handbook.

The 1952 Spray Schedule For

Insect Control In The Orchard

By C. L. Fluke, D. A. Dever and C. B. McIntyre

An increased abundance of several insects and the possibility of a shortage of some insecticides has made it advisable to revise the apple spray schedule for 1952.

Parathion is effective against the codling moth, red banded leaf roller, bud moth, and fruit tree leaf roller. As a result it is being recommended in certain cover sprays this year as a possible substitute for DDT and lead arsenate. Parathion is not recommended for spraying McIntosh and Cortland as it may cause injury to the fruit.

If there is considerable second brood codling moth activity, an additional DDT or parathion spray is advised for late varieties. A fungicide at this time may not be necessary.

Where the plum curculio is a serious pest, lead arsenate should be used in the open cluster and an extra spray applied five days after the petal fall or calyx spray.

If apple maggot is late in emerging and it is necessary to apply a spray near harvest, use 50% methoxychlor; two pounds to 100 gallons of water.

Growers should consult their plant pathologists about any unusual fruit disease problems. In severe scab conditions, it may be necessary to use liquid lime sulfur in certain cover sprays. Do not use DDT or parathion in combination with liquid lime sulfur.

Tolerances on amounts of some insecticides allowed on fruits may be changed. If so, the spray schedule will be modified as necessary.

The Dormant Spray

A dormant spray for insect control is generally recommended. A dinitro compound such as DN-289, Elgetol, or Krenite at 1% will control mite eggs and bud moth; it will also help to kill aphis eggs and case bearers.

European red mite will often build up during the summer even after a dormant spray. If this occurs, one of the phosphates, tetraethyl pyrophosphate (TEPP) or parathion, or one of the newer compounds such as "Dimite" should be used. If parathion is used in the cover sprays, red mite should not become a problem.

Apple Spray Program for 1952

Time of application	Materials and amounts per 100 gallons
Dormant (insecticide)	DN-289, Elgetol, or Krenite, 1 gallon
Dormant (fungicide)	DN-289, Elgetol, or Krenite, ½ gallon
Green tip	Liquid lime sulfur, 2 gallons
Closed cluster	Lead arsenate 2 lbs., and liquid lime sulfur, 2 gallons
Open cluster	Same as above
Calyx	Lead arsenate 3 lbs., or 15% parathion 1½ lbs., or 50% DDT 2 lbs. [1] and a micronized wettable sulfur 5 lbs., or ferbam 1-1½ lbs. These fungicides are also recommended for the cover sprays.
1st cover (about 10 days later)	Lead arsenate 3 lbs., or 15% parathion 1½ lbs., or 50% DDT 2 lbs. [2]
2nd cover (about 10 days later)	15% parathion 1½ lbs., or 50% DDT 2 lbs.
3rd cover (about 10 days later)	15% parathion 1½ lbs., or 50% DDT 2 lbs.
4th cover (about 10 days later)	lead arsenate 3 lbs., or 50% TDE (Rhothane) 2 lbs., or 15% parathion 1½ lbs.
5th cover (about 10 days later)	15% parathion 1½ lbs., or 50% DDT 2 lbs.

[1] Use 75% DDT at rate of 1⅓ lbs. per 100 gallons of water.

[2] If DDT not used in petal fall and oyster shell scale is a problem, add DDT.

NOTE: Do **not use parathion** or **DDT** with liquid lime sulfur.

Effect of Orchard Mulch

One of the primary effects of mulches is to conserve soil moisture, but mulches also affect the nutrition of the tree. The following data show how different mulching materials may alter both leaf and soil analysis.

Leaf Analysis (%)	No Mulch	Sawdust	Straw	Alfalfa
Nitrogen	2.52	2.58	3.23	3.30
Potassium	1.20	1.28	1.69	1.56
Soil Analysis (Lbs./Acre)				
Potassium	195	146	323	334
pH of the Soil	6.1	5.0	6.9	6.3

Alfalfa and straw apparently increase nitrogen and potash in the leaves and increase potash in the soil. Sawdust lowers the pH.

By A. L. Kenworthy, Michigan State College

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

OFFICERS — WISCONSIN BERRY AND VEGETABLE GROWERS ASSOCIATION

Pres., Harry Barlament, Green Bay; Vice Pres., Charles Swingle, Sturgeon Bay; 2nd Vice Pres., Chris Olson, Berlin; Sec.-Treas., E. L. White, Fort Atkinson.

Board of Directors: Mrs. Charles Braman, Waupaca; John Hauser, Bayfield; Roy Rasmus, Waupaca; F. W. Van Lare, Oconomowoc; Glen Swartz, Kenosha.

STRAWBERRIES AT BARLAMENTS

By Harry K. Barlament, Green Bay

My strawberries went into winter quarters in excellent condition. For the first time I used straw for winter covering. Due to flooded marshes, I was unable to obtain marsh hay. There has been some thawing, causing a few ice spots. This may result in some damage.

Plan to set out heavy on **Catskill** in 1952 with some **Thomas,** a few **Robinson** and some **Lindalicious** (Brigham, Utah). Although **Premier** have always been my old standby, I will plant only a few until I am able to find a better strain. Have grown Catskill for twelve years and have never had a failure in good blossoming or in wintering. Catskill usually end their growth in the fall with just the right number of plants in a row, especially with irrigation.

They blossom a few days later than Premier which helps in escaping late spring frosts. In some cases this means better pollination, as the bees are able to work then.

My 1951 crop of Catskill was the best I have ever had and they held their size throughout the season. At their peak they averaged eighteen (18) berries to the quart. The demand was tremendous. Our customers particularly like the Catskill for their excellent freezing quality. Our pickers so enjoy picking the Catskill.

This will be my first year in harvesting the Thomas, so I am looking forward to that part of the season, and hope that they are as nice as

those the Swartz's at Kenosha have, from whom I purchased the plants. I have tasted the Thomas, which are a little larger than the Catskill, yet not quite as dark a red, but a good-flavored berry.

FERTILIZERS FOR STRAWBERRIES

For many years we have been watching for reports from experiment stations in states having climatic conditions similar to Wisconsin for evidence that commercial fertilizers will increase the yield of strawberries on the kind of good soils one should use for growing strawberries. By that, we mean soils containing enough organic matter to hold moisture and provide good till for the relatively shallow root system of this plant.

With fertilizers at relatively high prices and not too plentiful, we should certainly ask ourselves rather carefully in what amounts and what kind would pay for their cost and time of application. It might be well, before applying commercial fertilizers, to have the soil tested. There is every indication that if a soil is not low in nitrogen, phosphorus or potash—has enough of these elements to grow a good crop of such vegetables as potatoes—additional fertilizers will not pay, for strawberries alone.

Here are some comments from experiment stations in the east on the subject.

From Massachusetts

In Massachusetts Extension Leaflet No. 29, "Strawberry Growing," the specialists say, "Commercial fertilizers have produced little response on medium loam soils well filled with organic matter. If sufficient phosphorus and potash have been used in the rotation to supply the needs of the other crops, there will be enough for the strawberries, while decomposing organic matter will take care of the need for nitrogen. On light soils there is evidence that applications of phosphorus and potash may be beneficial. More nitrogen will also be needed.

From New Jersey

Strawberries grown on sandy soils of New Jersey often require a spring application of fertilizer to maintain plant vigor and increase production. On the heavier, more retentive soils, spring fertilization does not seem to be necessary provided the plants were well fertilized during the previous season. Strawberries can be overfertilized during the spring of the fruiting year. Excessive fertilizer on the fruiting field will delay ripening, encourage rot and cause soft berries of poor shipping quality." (N. J. Hort. News, March 1950)

THE NEW RED RICH STRAWBERRY

The new Red Rich Strawberry. Question: Is the new Red Rich strawberry as good as it is reported to be in your experience?

Answer by Miss Freda Schroeder: "In our experience the fruit surpasses any strawberry I have ever eaten in firmness, sweetness, and color. It is a dark red berry all the way through. They make a fine row the first year, but the white grubs seem to like the roots and destroyed so many that we do not have a good report on yield. Superfection planted the same day in the same plot did produce more berries, but these plants were taken from our own planting and the Red Rich were dormant at planting time. Red Rich makes a strong healthy plant. Some of the leaves turned white, which the inspector thought was leaf curl.

"I do not feel that 1951 was a good year for everbearing strawberries due to the damp cold nights, but this variety should be tested in every nursery."

Grow Healthy Raspberries

Pests Are the Primary Cause of Failure

By E. L. Chambers, State Entomologist

Under favorable conditions, a raspberry planting, given proper care may produce profitably for as long as ten years. Plantings made on poor sites and receiving little care often run out in two or three years. Highest yields are generally obtained by renewing the plantings on fresh soil with clean plants every four or five years. While insect pests and plant diseases are the primary causes of bramble crop failures, their presence is encouraged by unfavorable cultural practices including poor drainage, allowing weeds to take over, planting in the same location on infected soil, and using insect infested and diseased plants. While it is not necessary to follow any definite spray schedule as is required for apple and other fruit trees, the grower must acquaint himself with the pests and apply control measures whenever needed. Certain diseases such as Crown Gall, Orange Rust, and Mosaic cannot be controlled by spraying. There are certain practices recommended, however, to aid in preventing these troubles:

1. Avoid planting stock where diseased plants have been recently grown.

2. Plant resistant varieties purchased from certified plantings.

3. Plant red varieties as much as 300 feet away from black varieties.

4. Rogue out diseased plants and burn when spraying would be ineffective.

5. At planting time, cut off old stubs of two year old nursery stock and "handles" of young purple and black raspberries.

6. Apply appropriate sprays as recommended when insect pests and plant diseases that can be controlled by these methods are discovered.

7. Renew and burn old fruiting cane immediately after harvest.

When necessary, the following spray schedule can be followed to effectively control all the more important insect pests and plant diseases attacking respberries.

RASPBERRY SPRAY PROGRAM

Kind and Purpose	Time to apply	Material in 50 gallons of water
I. Delayed Dormant for Anthracnose Spur blight Powdery mildew	About time the first buds show ¼ inch of green (Cover ground area also)	Lime-sulphur 5-6 gallons or 2 lbs. "DN"
II. Pre-Bloom for Anthracnose Spur blight Red-necked cane borer	1 week before bloom	Lime-sulphur 1¼ gallons or Fermate 1 lb. & 2 lbs. Arsenate of Lead and ¼ lb. skim milk powder
III. Additional Sprays for Raspberry fruitworm Red-necked cane borer	10 days after first blossoms appear. Repeat twice at weekly intervals if necessary.	2 lbs. Arsenate of lead and ¼ lb. of skim milk powder, or 1 pint 4.5% Rotenone or 2½ lbs. of Derris Root adding ¼ lb. skim milk *(Rotenone)

To facilitate spreading and sticking add ⅛ lb. Soybean flour to 50 gallons of spray.

While more likely to cause foliage injury Bordeaux 4-4-50 may be substituted for lime-sulphur sprays and with Bordeaux 1 lb. of the 50% wettable powder DDT can be substituted for Arsenate of lead.

*Where dusting is preferred, use a powdered derris root-talc dust containing 0.75 Rotenone.

THE STRAWBERRY CROP

From preliminary estimates, there will be in the U. S. about 150,850 acres of strawberries for picking in 1952. The crop will be about 7 percent smaller than the 1951 acreage, but 27 percent larger than the 1941-50 average.

The U.S. commercial strawberry crop in 1951 was almost 12 million crates, 6 percent larger than the 1950 crop and over a third larger than the 1941-50 average. Over a third of last year's crop was frozen by commercial manufacturers. With the increase in frozen food lockers and home freezers, more strawberries will be put up in frozen form by individual homemakers than has been the case in the past. This will have some influence on the demand for strawberries in the frozen state purchased from retail stores. In 1950, two-fifths of the commercial crop was utilized by manufacturers of frozen strawberries. Prices received by growers for last year's crop of strawberries averaged somewhat less than 1950, which was $7.48 per crate (24 quarts).

On January 1, 1952, there was a 50 percent larger supply of frozen strawberries on hand than the 1946-50 average for this time of the year.

Commercial Growers List of *Vegetable Varieties*

Recommendations For Wisconsin By The Dept. of Horticulture, U. W.

BEANS: Bush snap, green: Tendergreen, Contender, Rival, Topcrop, Plentiful, Bountiful, bush snap, wax: Round Pod Kidney, Pencil Pod Black, Cherokee.

BEETS: Early Wonder, Perfected Detroit, Detroit Dark Red.

CABBAGE: early: Golden Acre (Racine Market*, Resistant Detroit*, Resistant Golden Acre*); Jersey Wakefield (Jersey Queen*). second early: Marion Market*, Globe*. late: Wisconsin All Seasons*, Wisconsin Ballheads*, Bugner*. red Hollander*.

CARROTS: Red Cored Chantenay, Nantes, Imperator, Morse's Bunching, Imperida.

CAULIFLOWER: Early Snowball, Super Snowball, Snowdrift.

Celery: Golden Plume, Golden Self Blanching, Cornell 19. Summer Pascal for green.

CHINESE CABBAGE: Chihli, Michihli.

CUCUMBERS: Slicing: Cubit, Marketer, Straight Eight, Niagara (mosaic resistant). pickling: National Pickling, Yorkstate (mosaic resistant), Chicago Pickling.

LETTUCE: leaf: Simpson, Grand Rapids. head; Great Lakes, Cornell 456, Progress.

MUSKMELONS: Delicious, Milwaukee Market, Pride of Wisconsin, Iroquois, Craig, Schoon's Hard Shell.

ONIONS: seed: Early Yellow Globe, Brigham Yellow Globe, Rochester Bronze, Asgrow Y 40, Asgrow Y 41, Autumn Spice, Autumn Glory. sets: Golden Globe, Ebenezer. transplants: Yellow Sweet Spanish, Magnifico.

PEAS: American Wonder, Dark Podded Thomas Laxton, Freezonian, Pride, Teton, Laxton's Progress, Greater Progress, Little Marvel.

PEPPERS: Merrimack Wonder, Pennwonder, Early Pimento, Early California Wonder (Calwonder, Oakview Wonder), Golden California Wonder.

POTATOES: early: Irish Cobbler, Triumph, Red Warba. medium late: Chippewa. late: Katahdin, Red Pontiac, Sebago, Russet Sebago, Russet Rural, Russet Burbank, Ontario, Kennebec.

PUMPKIN: (summer "squash") Yankee Hybrid, Early Prolific Straightneck, Caserta, Dark Green Zucchini. (fall "squash") Green Table Queen. (pie) Small Sugar, Winter Luxury.

RADISHES: Cavalier, Lone Star, Cherry Belle, Early Scarlet Globe.

SPINACH: Long Standing Bloomsdale, Nobel, King of Denmark.

SQUASH: Buttercup, Green Gold, Sweetmeat, Golden Delicious, Green Hubbard, Blue Hubbard, Golden Hubbard, Butternut cushaw.

*Resistant or tolerant to fusarium yellows.

SWEET CORN: (early) Improved Spancross, Seneca Dawn, Sun Up, Golden Rocket, North Star, Marcross, Our Choice, Earligold. (second early) improved Carmelcross, Gold Rush, Wisconsin Golden 800, Lincoln. (main crop) Wisconsin Golden 804, Golden Cross Bantam, Iochief.

TOMATOES: (very early) Early Scarlet, Bounty, Sioux, Valiant. (early) Stokesdale. (second early) Long Red, Red Jacket, Wisconsin 55. (late) Rutgers.

Used to be that you just got a licking when you brought home a report card with low grades. Nowadays you get drafted. — The Hartford Times-Press.

1952 ALL-AMERICAN VEGETABLE SELECTIONS

Six new vegetables have received All-American Medal Awards for 1952, according to the Committee on Selections. They have shown superiority over other kinds, where they were grown and observed.

The varieties are:

Wade: An all-purpose bush snap bean. Received a gold medal.

Salad Bowl: A heat-resistant looseleaf lettuce. A gold medal.

America Spinach: A heat-tolerant variety from Holland. Silver medal.

Allneck Pumpkin: A heavy-bearing Cushaw with almost solid flesh. Silver medal.

Bronze medals were awarded to:

Vinedale Pepper: Early, sweet and bell-shaped. Recommended for the north.

Golden Delight Muskmelon: Very vigorous variety.

Stringless Hort Bush Bean: A very productive variety, which received honorable mention.

Comments On Varieties

Unfortunately we have not grown any of the vegetable varieties listed. I believe it fair to assume, however, that because of the widely distributed testing program conducted by the All-American Selections Committee these varieties would give commendable results under Wisconsin conditions.

It is always wise, of course to grow new varieties on a limited scale under any given set of growing conditions.— **O. B. Combs, Chm., Dept. of Hort., U. W.**

SEPTEMBER RED RASPBERRY

Described by the New York Experiment Station

The September red raspberry, a new autumn fruiting, a so-called Everbearing raspberry, was introduced by the N. Y. Agricultural Experiment Station in the fall of 1947. Prof George L. Slate describes the variety in part as follows:

"It is a cross of Marcy and Ranere, made in 1934. It begins to ripen early in September, or about a month earlier than Indian Summer, and continues until frost. The summer crop is as early as Indian Summer. The berries are medium-sized, or about as large as Latham. Bright red, firm, and not crumbly, but showing a tendency to cling until fully ripe. The quality is fair in summer and good in autumn.

Berry Plant Market

STATE CERTIFIED BERRY PLANTS

We offer strawberry and raspberry plants for sale: Gem, Streamliner, and Evermore Everbearing strawberries at $15.00 per 1000; $2.00 per 100.

Premier, Catskill, Fairfax, Robinson and Beaver at $15.00 per 1000; $2.00 per 100.

Dunlap at $12.00 per 1000; $1.75 per 100. All postpaid.

Latham raspberries at $5.00 per 100; $3.00 per 50; $1.75 per 25. Postpaid.

Viking raspberries at $25.00 per 1000, F.O.B. Bayfield. $3.50 per 100; $2.00 per 50; $1.25 per 25, postpaid.

John Krueger, Rt. 1, Bayfield, Wis.

STRAWBERRY PLANTS

State inspected strawberry plants. Large, healthy, well rooted. F.O.B., Baraboo. Improved Dunlap and Beaver: 100 @ $1.50; 250 @ $4.00; 500 @$6.00; 1000 @ $11.00. Premier and Robinson: 100 @ $2.75; 250 @ $6.00; 500 @ $8.00; 1000 @ $15.00. Catskill: 100 @ $3.00; 250 @ $6.50; 500 @ $10.50; 1000 @ $18.00. Sparkle, Fairland, Clermont; 100 @ $3.00. Everbearing: Superfection and Streamliner: 100 @ $2.75; 250 @ $6.50; 500 @ $10.50; 1000 @ $18.00. Charles W. Hein Nursery, 1134—4th St. Baraboo, Wis.

STRAWBERRY PLANTS

We offer the following varieties of strawberry plants for spring delivery. Fresh dug day of shipment. The old reliable Beaver. Premier; Catskill; Robinson; Senator Dunlap; Wisconsin Number 214 and 261. Also Everbearing: Gem, Minnesota 1166, and Streamliner. H. H. Pedersen, Fruit and Plant Farm, Warrens, Wisconsin.

Our country needs more men with cool heads and fewer persons with cold feet.—The Dorchester Clarion.

* * *

The glance that over cocktails seemed so sweet, may be less charming over shredded wheat.—The Bee.

STRAWBERRY PLANTS

Inspected and certified strawberry plants for sale: Beaver; Robinson; and Thomas. Write Eric Franke, Rt. 5, Sturgeon Bay, Wis.

BERRY PLANTS

Leading varieties of raspberry and strawberry plants. Often dormant as late as May 10th up here. Free descriptive circular. Bryan Nursery, Washburn, Wisconsin.

BERRY PLANTS

Lowest prices for highest quality Strawberry and Raspberry plants. Streamliner; Beaver; Premier; Walsh's Late; Fujiyama; Thomas and Wisconsin 537 strawberry plants.

Raspberry plants: Latham and St. Regis. Our plants are the finest strains you can buy. Circular free. Please order early. Variety Gardens, Mauston, Wisconsin.

STRAWBERRY PLANTS

Strawberry plants. Government inspected. Quantities to 500 shipped Parcel Post Prepaid. 1000 lots Express Collect, Beaver, Robinson, Premier at $2.85 per 100; $10.00 per 500; $17.50 per 1000. Gem Everbearing $2.85 per 100. Harvey Kamnetz, Cumberland, Wisconsin.

EXPECT STRAWBERRY PLANTS TO BE IN GOOD SHAPE

H. H. Pedersen of Warrens, Wisconsin writes: "It's rather early to tell if strawberry plants suffered winter injury last fall from the early frost. However, we had our plants well mulched before the frost and since then we have had, and still have, a nice cover of snow, so expect plants to come through in fine shape.

Optimism: A cheerful frame of mind that enables a steam kettle to sing though in hot water up to its neck.

* * *

Today is important. Tomorrow may be exactly one day too late.

STRAWBERRY AND RASPBERRY PLANTS FOR SALE

June Bearing Strawberries. Robinson: 100 @ $2.50; 500 @ $5.50; 1000 @ $10.00.

Premier, Tennessee Shipper, Fairland, Arrowhead, Superfection (Everbearing). 100 @ $2.75; 500 @ $6.50; 1000 @ $12.00.

Red Rich Everbearing. 25 plants @ $5.00; 50 plants @ $8.50.

RASPBERRY PLANTS. Early June; 25 @ $4.75; 50 @ $6.00; 100 @ $10.00.

Sun Rise, Latham, Indian Summer: 25 @ $4.50; 50 @ $5.00; 100 @ $8.50. Miss Freda Schroeder, c/o Krahn-Schroeder Nursery, Loyal, Wisconsin. (Not postpaid.)

STRAWBERRY PLANTS FOR SALE

Strawberry plants. Superfection and Streamliner everbearing Premier, Wis. 2-14, Wis. 537. Robinson and Beaver. Also Durham red raspberry. Al Kruse Nursery, 615 Effinger Road, Baraboo.

BERRY PLANTS

Latham raspberry plants. 100, $9.50. Cumberland, $7.50. Premier, Beaver, Dunlap, Robinson, Arrowhead strawberry plants. 100, $2.50; 200, $4.75; 500, $9.00; 1,000, $17.00.

Mary Washington Asparagus. 2 yr., 50, $1.75; 100 $2.95.

Fruit trees, ornamental shrubs and evergreens. Hall Nursery, Elmwood, Wis.

ASPARAGUS ROOTS

Finest 1-yr. Mary Washington, $2.50 per 100, postpaid in Wisconsin and upper peninsula. Order NOW. Thalman-Swingle Farms, 805 N. 5th, Sturgeon Bay.

From the Editor's Desk

HOW MANY APPLES FOR PIES

The United States Department of Agriculture made a study in the fall of 1949 to find out how many apples were used in the Chicago area for pies. They found that for the preceding twelve months more than 200,000 boxes of apples had been used for pies in that area alone.

Also in 1949 the American Baker's Association estimated that the pie industry used 115,500 tons of apples.

The studies also showed that pie bakers used local apples. High freight rates do not permit distant markets to compete with fresh pie apples.

How Many Pies

The USDA studies show that there were 6½ million pies baked in Chicago by 9 large and 74 small pie bakers. The large bakers used more than 195,000 boxes of apples compared to approximately about 20,000 boxes by 74 small bakers.

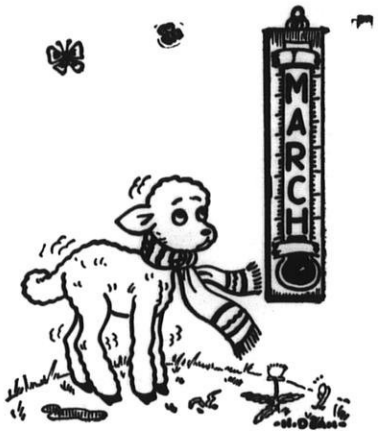
What Kind of Apples

In these studies it is found that pie bakers want their fruit for pies to have a little but not too much free juice. The fruit should remain in whole pieces, not mush up; to be tender and have a natural bright color. A few bakers wanted apples with a shade of green in the finished pie but some objected to this color.

Large bakers use 96% fresh apples and only 2% canned and 2% frozen. Small commercial bakers use 56% fresh, 25% canned and 19% frozen apples. Only one small baker used dried apples.

YOU CAN LANDSCAPE YOUR OWN HOME

The above is the title of a well illustrated booklet advertised in this issue that is really helpful for the home gardener in planning his landscaping. It illustrates with drawing quite well the various types of evergreens and how to use them in front of different types of homes. The price is $1.00, available from The Minnetonka Publishing Company, Long Lake, Minnesota. It is worth having.



MULTIFLORA ROSE PLANTS AVAILABLE FOR HEDGES

An important step toward restoring wildlife cover in Wisconsin would be taken if multiflora rose hedges could be made to flourish here as they do to the south of this state. This Wisconsin Conservation Department is looking for experimenters. **Multiflora grows in this climate but the canes may die back in winter.**

The Griffith State Nursery at Wisconsin Rapids has 1,200,000 multiflora seedlings it will supply at no charge except shipping costs to anyone who will plant them. No orders are taken for less than 500. Multiflora is being used in states south of us to make animal tight fences. Plantings should be a foot apart in **prepared seed beds with heavy mulching.** All other game food and cover plants are exhausted with the exception of some 20,000 crab trees.

WISCONSIN CONSERVATION BULLETIN

Published monthly by the Wisconsin Conservation Department, in the interests of conservation progress is a splendid bulletin, "Wisconsin Conservation Bulletin." Anyone interested in conservation may receive this bulletin on request.

A recent issue consisted of 40 pages. Here are some of the articles: The Case Against Cows; ABC's of Fox Trapping; Wisconsin's Eager Beaver; Watershed Responsibilities; News and Views on Shrews; Lessor Snowgoose; Fort Atkinson Scores Again; Get Your Northerns Here, and a dozen other articles. Highly recommended.

Address: Wisconsin Conservation Department, State Office Building, Madison 2, Wis. Its free.

COVER PICTURE
BUILD YOUR OWN GREENHOUSE

Here's a real greenhouse that you can build yourself for a total cost of about $14.00. Materials used can be bought from your lumber yard. About half the cost is for glass.

The secret of its low cost is that it fits against your basement foundation and you garden through your basement window. By standing on a chair, you can reach into all parts of the greenhouse. All the space is usable, since your basement serves as the aisle.

Approximately six feet long by two and one-half feet wide, the greenhouse holds nine standard size seed flats, enough to start flowers and vegetables for your own garden, and several of your neighbors too. It can be fitted to any type of foundation.

Dimensions of the greenhouse permit you to build it in your basement or workshop as a winter project. Two people can carry the completed greenhouse outside and set it in place.

In moderate climates, warm air from the basement will supply enough heat. In severe climates, electrical heating cable under seed flats or in the soil may be necessary during coldest winter months.

Complete plans which show 20 detailed drawings and five photographs are available for $1.00 from the Photo-Build-It Co., 618 Syndicate Bldg., Minneapolis 2, Minnesota.—Cut and article from the Minnesota Horticulturist, Minn. State Hort. Soc.

CONSIDER THE ROOTS OF THE STRAWBERRY PLANT

Strawberry plants have many fine fibrous roots which cannot penetrate compact heavy soil readily. That is why strawberries do best on light soils or heavy soils with lots of organic matter. On peat soils strawberry plants grow well and the root system is often tremendous in the number of fine fibrous roots. Peat soils, however, are not well adapted to the production of strawberry fruit.

All of this tells us that organic matter is very important for the strawberry plant; probably more important than any other factor is strawberry soil management. That is why growers who clear new land have such good results with strawberries for the first few years after the land is broken up and subdued. That is why dairy farmers who use lots of manure usually grow strawberries well.

Gems of wisdom can be gleaned by making a habit of listening to the other fellow.

MANITOWOC MEN'S GARDEN CLUB ELECTS OFFICERS

Mr. C. Otto Schmidt has been elected president of the Manitowoc Mens' Garden Club for 1952. Dr. Vollendorf is vice president and J. L. Hamilton continues as secretary-treasurer. The club holds monthly meetings the third Tuesday of each month.

Any home built at present prices is truly a home of the brave.

* * *

Actually, the so-called weaker sex is the stronger sex because of the weakness of the stronger sex for the weaker sex.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
JOHN GATES
Two Rivers

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

TREASURER
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

THE N.A.G.C. GLADIOLUS FORUM

Growers Discuss Problems of the Industry at Milwaukee Meeting

One grower summarized the problems of the gladiolus industry in this way: four things bother him; foreign competition; low prices; high overhead; and diseases.

Growers near larger cities seem to suffer most from the sale of imported bulbs which are being retailed through the large stores that buy in large qauntities. One grower told of Number Four bulbs being dumped on the market at ridiculously low prices. Some thought that Japan's re-entry into the market was unfair, but others who no doubt had good local connections considered the competition from foreign countries to be slight.

Belief was expressed that there is a need to advertise American bulbs. Skillful propaganda seems to have fostered the belief that anything foreign is of better quality than the home product. Some growers have already begun to promote American bulbs by publishing slogans such as "Buy American Bulbs—Best in the World" in their catalogues. More than 50 million bulbs of foreign origin were sold in this country according to a government report.

The group recommended that growers selling amateur gardners give adequate instructions for planting and disease control so that they might have success, and not to turn against gladiolus growing due to failure.

The question was raised, "Are the trial gardens helping to weed out inferior new originations?" There are 10 trial gardens in operation. Foreign importations are screened at the Valleevue Test Gardens in Ohio. The original purpose of the garden was to test Holland and Antipodes introductions but due to demands American and Canadian varieties are now being tested. There were 359 varieties tested in 1951, but only 3 recommended for introduction. This year only 100 varieties will be tested.

ANNUAL SPRING MEETING WISCONSIN GLADIOLUS SOCIETY

Medford Hotel, Milwaukee
Sunday, March 30

10 a.m. Business meeting, Board of Directors.

1:30 p.m. Colored movie, The Glad Story. Produced in Florida. Shows how they are produced in Florida and an expert demonstrates how to use the flowers.

2:00 p.m. The Road to Reno is Strewn with Gladiolus—a short play.

2:15 p.m. New findings on gladiolus insect and disease control. By Dr. James Torrie, Madison.

2:45 p.m. Minature gladiolus. Their value and how we grow them. By Glen Pierce, Villa Park, Ill.

3:30 p.m. Annual business meeting. Report: Plans for the Gladiolus Show at the Wisconsin State Fair, by Mr. Ted Osmudsen, Sturtevant, Superintendent, Horticultural Building.

MOVIE ABOUT GLADIOLUS

The sound moving picture in color, entitled, "The Glad Story," is available for your chapter and Garden club meetings from the LeRoy Crooks Productions, 750—37th Avenue, North, St. Petersburg, Florida.

The film was produced by Costal Glad Farm of Fort Myers, Florida, and is distributed free of charge for the benefit of the industry. The picture explains the entire glad industry and also a noted floral designer demonstrating methods of using glads in arrangements. It is a 16 mm. color motion picture with sound.

4-H GLADIOLUS PROJECT

By The Twin City Gladiolus Society

A total of 52 boys and girls from Marinette and Menominee County were given bulbs by the Society; 40 reports were received—a very good percentage.

The following were judged best:

Marinette County—tie for First; Comment by Joyce Hart, Route 1, Crivitz, Wis. (12 years old). "Thank you for the bulbs. I learned how to plant Glads, and that they have to be staked when the spikes get too heavy. I learned a lot about flower arrangement and color combinations. Most of all, I learned how beautiful the Glads are; I hope to have some all the time!"

Marinette County—tie for First; Comment by Wilma Ollila, Route 1, Peshtigo, Wis. "In the two summers I have been raising Glads, I have learned to love and appreciate their beauty. I have learned how to plant the bulbs, take care of the plants, and how to store the bulbs in the fall. I know now how to choose a spike suitable for exhibition. It is really worthwhile to raise Glads."

Menominee County—First Place; Comment by Carol Freis, Wallace, Mich. "I learned something I never knew before, I learned that flowers look very pretty in a vegetable garden. I was very anxious to see what color my Glads would be after learning those strange names. When they finally bloomed in September, I was afraid they would freeze. But luck had it, and they all bloomed. I wish to thank the Gladiolus Society for permitting a youngster like me to practice on such beautiful flowers. I hope they keep up the good work, as we need smiling Glads to brighten up the dark corners in our yards." **Report by Arnold Sartorius, Porterfield, Wisconsin.**

Gladiolus Insect Control

Discussion At Michigan Conference

At the Annual Gladiolus Conference at Michigan State College in February, entomologists reported developments on the control of insect pests and made the following recommendations:

Thrips: Use DDT, 10 per cent dust, on the corms immediately after drying and cleaning, plus a regular application every three weeks during the growing season. Three pounds of the 50 per cent or two pounds of the 75 per cent wettable powder to 100 gallons is effective. Chlordane, used as a storage treatment in large storages, provides a fumigating effect and reaches thrips that might not be hit by DDT. Gloves should be worn when planting if this material has been used. It can be used as a 5 or 7 per cent dust; in the field it can be used as a dust or as a spray. If used as a spray, mix three pounds of wettable powder to 100 gallons of water.

Tarnish plant bug: Use DDT or Chlordane.

Bulb mites and mealy bugs: Treat the bulbs when they come out of storage, using a dip at the rate of one pound to 100 gallons of 15 per cent wettable powder of Parathion.

Cutworms or grubs: Use Chlordane at the rate of 5 pounds per acre. Do not use Chlordane on soil on which vegetables are to be planted.

Wireworms: Apply Chlordane at the rate of five pounds per acre.

Aphis: Use Parathion.

New Insecticides

Two new insecticides mentioned as showing promise in the control of thrips were Aldrin and No 711. Aldrin is used at the rate of two ounces per hundred gallons of water; No. 711, at one ounce per hundred gallons. Neither material is availible on the market in the north as yet. Growers were warned that when they are available, both should be handled with rubber gloves.

"Did you see the stork that brought me, Daddy?"

"Only the bill, son,"—Menomonee Falls News.

MARATHON CHAPTER PLANS AUCTION AND SHOW

The Marathon County Chapter, Wisconsin Gladiolus Society, at its February meeting made plans for a bulb auction on **April 17th.**

Jay Brown was appointed chairman, assisted by Dr. R. H. Juers, Julius Birr, Edward Schaepe, and Archie Spatz.

Richard Jeske and Carl Janke were appointed co-chairmen of the picnic and judging school to be held in August.

Leslie Brown is to be chairman of the **annual gladiolus show in August,** assisted by Ed Howland, Albert Scholtz, Mark Splaine and Julius Birr.

A report of the annual meeting of the Wisconsin State Gladiolus Society held at Fond du Lac last November was presented by the new chapter president, Lloyd Prahl.

Other committees appointed were: program, Dr. Juers; publicity, Mrs. Ed. Kramer; refreshments, Mrs. Marvin Baeseman; auditing, Mr. Ed. Howland, Charles W. Porath, and Carl Janke; nominating, Henry Frickenstein and Fred Vetter; sunshine committee to visit the sick, Mrs. Norma Spatz, Schofield, Mrs. Elmer Sorges, and Miss Dorothy Prahl.

—By Mrs. Ed. Kramer, Pub. Chairman

Blueberries In Wisconsin

Commercial Production Held Possible In Northern Wisconsin

In Wisconsin wild blueberries have been known as a source of fruit. And up to the present time we have thought of the berries growing only on rather low, flat bushes of 12 or 18 inches in height. However, while hunting 2 years ago, Allan Troemmer of Friendship noticed bushes resembling blueberries, but which grew much taller and somewhat more vigorously. Later examination revealed the berries to be much like our native low blueberry.

The tall growing blueberry bushes are growing with native lowbush blueberries in the sandy soils of central Wisconsin. This area is subject to harsh weather conditions and cold winters where a minimum of 52 below zero has been reached.

Highbush blueberry clumps were found growing in a wet peat swamp in a mixed stand of Jack pine, birch and larch. The peat is quite coarse and raw, and is very acid, soil reaction being pH 4.0. Available phosphorus was only 30 - 40 lbs. per acre and potassium 140 to 280 lbs. Sphagnum moss makes a thick blanket on the swamp floor. Native lowbush blueberry and huckleberry were also doing very well here. No winter injury was found on these plants and little or no injury or freezing back has been observed on the highbush clumps which reach a height of 5 or 6 feet. It is hoped that further observation will tell us more about the tall growing type, and how it may resemble bushes growing in Michigan.

Commercial Culture of Blueberries at Three Lakes

In the Three Lakes News, for December 13, we find several articles on an article entitled, "Blueberry is Possible Crop. Vernon Goldsworthy, Three Lakes Cranberry grower well known to Wisconsin horticulturists as the former manager of the Fruit Growers Co-op and prominent in cranberry circles at Wisconsin Rapids, and a group of other growers have undertaken an experiment that seeks to develop the lowbush berry into a commercial product. He believes that the blueberry can be grown in the northern half of Wisconsin, utilizing

Allen Troemmer, Friendship, with Native Hi-Bush Blueberry Plant

land that has little commercial value at this time.

"He has selected 100 wild blueberry plants of good size and color, and next spring the plants will be dug up, moved and transplanted under commercial conditions.

"Mr. Goldsworthy says that blueberries require an acid soil and a high water table, both of these conditions being found in some sections of northern Wisconsin, especially in the marshlands. He does not believe

(Continued on Page 161)

THE EFFECT OF TEMPERATURES UPON GROWTH AND FLOWER DEVELOPMENT OF AFRICAN VIOLETS

From Experiments at the Ohio Experiment Station, Reported in the African Violet Magazine.

An experiment was designed to determine the response of African Violet plants when grown at temperatures higher than those usually used in commercial production. In this experiment three boxes enclosed with a clear plastic cloth were used. Two were equipped with automatic heating cables and ventilating devices to maintain constant temperatures within. One of these boxes was maintained at 80°F and the other at 70°F. The third box was under the usual greenhouse temperature conditions. (60°F night temperature.) The varieties grown in each treatment were: Mentor Boy, White Lady, Pink Girl, Amethyst Amazon and Redhead Girl.

Temperature Experiment
Flower Production

Average Flowers Per Plant to June 1, 1951

VARIETIES	60°F	70F°	80°F
Mentor Boy	18.0	34.4	39.4
White Lady	7.7	13.1	30.3
Pink Girl	11.3	24.3	29.4
Amethyst Amazon	2.9	5.8	10.8
Redhead Girl	12.1	16.8	22.3

From the experiment it would appear that the best growth, earliest flowering, and greatest flowering occurred at 80°F. However, the plants at 80°F produced flat, lighter colored leaves when compared to the other plants, and although measurements were not taken, it was quite apparent that the flower size was reduced at this temperature. It is felt that if this experiment had continued longer the data given in table 4 might have been different. In nearly every case the plants at 70°F were superior to the plants in the check plot (60°F night).

This experiment seems to indicate that the best temperature for growing Saintpaulias is about 70°F. It is interesting to note that this is about the temperature at which automatically heated houses are usually maintained during the winter months.

The Home Gardeners List of

Best Vegetable Varieties

Recommendation For Wisconsin Gardens By the Dept. of Horticulture, U. W.

VEGETABLE VARIETIES FOR OUR HOME GARDENS

Department of Horticulture, U.W.

One of the first requirements for successful **home vegetable production** is the careful choice of varieties. The following list is suggestive only and is confined to varieties known to be adapted to Wisconsin conditions. Other varieties may be substituted where local experience indicates satisfactory performance. Certain underlined varieties are suggested, especially for the northern portion of the state, which, for this purpose, is roughly considered as that area north of a line from St. Croix Falls to Marshfield to Marinette. These earlier varieties can be used in the southern portion of the state, but may not always give results equal to later varieties which produce satisfactorily farther south.

ASPARAGUS: Mary Washington.

BEANS: (bush, green) Tendergreen, Contender, Topcrop, Rival, Ranger, Idaho Refugee. (bush, wax) Brittle or Round Pod Kidney Wax, Pencil Pod Black Wax, Cherokee. (pole, green) Kentucky Wonder. (pole, wax) Golden Cluster Wax. (bush, Lima) **Henderson Bush, Clark's Bush,** Early Market, Fordhook 242, Triumph. (dry) **Michelite, Great Northern.**

BEETS: Early Wonder, Perfected Detroit, Detroit Dark Red.

BROCCOLI: De Cicco, Green Sprouting.

CABBAGE: (varieties **resistant** to yellows) Racine Market, Resistant Golden Acre, Resistant Detroit, Jersey Queen, Marion Market, Globe, Wisconsin All Seasons, Wisconsin Ballhead, Red Hollander. (varieties **not resistant** to yellows) Golden Acre, Jersey Wakefield, Copenhagen Market, All Seasons, Danish Ballhead, Mammoth Rock Red. All varieties listed in order of earliness.

CARROTS: (half long) Nantes or Coreless or Touchon, Red Cored Chantenay. (long) Imperator, Morse's Bunching, Imperida.

CAULIFLOWER: Early Snowball, Snowdrift, Early Purple, Super Snowball.

CELERY: Golden Plume, Golden

Self-Blanching, Cornell 19, Summer Pascal for green.

CHARD: Large White Ribbed, Fordhook Giant, Rhubarb.

CHINESE CABBAGE: Chihli, Michihli.

CUCUMBER: (slicing and dill) Straight 8, Cubit, Marketer, Niagara (mosiac resistant). (pickling) National Pickling, Chicago Pickling, Double Yield, Yorkstate Pickling (mosaic resistant).

EGGPLANT: Black Beauty.

KALE: Dwarf Green Scotch.

KOHLRABI: White Vienna, Purple Vienna.

LETTUCE: (leaf) Black Seeded Simpson, Grand Rapids, Oakleaf, Salad Bowl. (butter-head) Bibb, White Boston. (crisp-head) Great Lakes.

MUSKMELONS: **Delicious,** Milwaukee Market, Honey Rock, Pride of Wisconsin, Craig, Iroquois, Schoon's Hard Shell.

ONIONS: (sets) White or Yellow. (seed) **Early Yellow Globe, Asgrow Y 40,** Asgrow Y 41, **Autumn Spice,** Autumn Glory, Brigham Yellow Globe. (transplants) Sweet Spanish, Bermuda for late summer and early fall use only.

PARSLEY: Moss Curled.

PARSNIP. Hollow Crown.

PEAS: (dwarf) American Wonder, Freezonian, Pride, Teton, Little Marvel, Laxton's Progress, Greater Progress, Wando. (tall) Alderman.

PEPPERS: (mild) **Merrimack Wonder, Pennwonder, Early Pimento,** Early California, Wonder (Calwonder, Oakview Wonder), Golden California Wonder.

POTATOES: (early) Red Warba, Irish Cobbler. (medium late) Chippewa. (late) Katahdin, Russet Rural, Russet Burbank, Sebago (white or russet).

PUMPKIN: (summer "squash") Yankee Hybrid, Early Prolific Straightneck, Caserta, Dark Green Zucchini. (fall "squash") Green Table Queen, Uconn. (pie) Small Sugar, Winter Luxury.

RADISH: Cavalier, Lone Star, Cherry Belle, Early Scarlet Globe, White Icicle.

RHUBARB: McDonald, Canada Red, Valentine.

RUTABAGA: Laurentian, American Purple Top.

SALSIFY: Sandwich Island.

SPINACH: Long Standing Bloomsdale, King of Denmark, Nobel, New Zealand "spinach" for summer use.

SQUASH: **Buttercup, Green Gold, Sweetmeat,** Golden Delicious, Golden Hubbard, Green Hubbard, Butternut cushaw.

SWEET CORN: (early) Improved Spancross, Seneca Dawn, Sun Up, Golden Rocket, North Star, Marcross, Our Choice, Earligold. (second early) Improved Carmelcross, Gold Rush, Wisconsin Golden 800, Lincoln. (main crop) Wisconsin Golden 804, Golden Cross Bantam Iochief.

TOMATOES: (very early) **Early Scarlet,** Bounty, Sioux, **Valiant.** (early) Stokesdale. (second early) Longred, Wisconsin 55. (late) Rutgers. (yellow) Jubilee.

TURNIPS: Purple Top White Globe, Golden Ball, Shogoin or Seven Top for greens.

BLUEBERRIES

(Continued from Page 160)

that the highbush blueberry is hardy enough for Wisconsin conditions, nor does it have the delightful taste of the lowbush variety. He has concluded that wild blueberries do not bear heavily because of frost, insects and fire."

Garden Club News

FLOWER ARRANGEMENT SCHOOLS

Invite Everyone Interested In Flowers To Attend

The Dorothy Biddle Flower Arrangement Schools will be held as follows:

May 19, Monday, Milwaukee, Y.W.C.A. sponsored by the Milwaukee Region, Garden Club of Wisconsin.

May 20, Tuesday, Sheboygan, Episcopal Guild Hall, corner of North 7th Street and Ontario Avenue, sponsored by Sheboygan Garden Club.

May 21, Wednesday, Atheran Hotel, Oshkosh. Sponsored by Winnebagoland Region.

May 22, Thursday, Iola, Lutheran Church, sponsored by the Central Region.

Luncheon arrangements will be made for each meeting. Further details in our next issue.

REGIONAL MEETINGS

Milwaukee Regional Meeting On April 15.

The annual meeting and election of officers of the Milwaukee Region, Garden Club of Wisconsin, will be held at the home of Mrs. A. H. Knorr, Eastwood Lane, Brookfield, in Waukesha County, (Turn N off North Ave. on Hollyhock Lane—133rd St.) on Tues. April 15. The meeting will begin at 10 a.m. with a pot luck luncheon. There will be an excellent program and much to see.

The North Central Region will hold its annual meeting briefly during the Flower Arrangement School in Iola on May 22.

GARDEN TOURS

Is your garden club planning a tour this summer. If you desire help in selecting interesting places to visit, write the Wis. State Horticultural Society for suggestions.

The Society would also like to receive lists of gardens, parks, and interesting places open for visiting.

"The winds of March clearing away the debris before April can appear." —Cole

WAUWATOSA GARDEN CLUB

At the February meeting of the Wauwatosa Garden Club Mr. Warner Bartram, a man of many years experience with the Milwaukee County Park Commission, lectured while showing beautiful colored movies of animals and birds of our own Milwaukee zoo in Washington Park.

It was interesting to see how the lower animals, like man, have personality, and, how exacting nature is in painting both sides of birds alike. As to the variety of color, she practically exhausts her palette on the South American birds. What bird could be more beautiful than the prize blue parrot?

Mr. Bartram also told of the location and plans for the Milwaukee zoo of the future.

Six thousand miles of travel were covered by the Wauwatosa Garden Club at their meeting in January when they saw the South and West as shown with colored pictures taken by the Anthony Wuchterls.

It was the smaller towns and out of the way paths that attracted the party resulting in many unusual shots, some actually framed in themselves.

From Taos, New Mexico the party traveled to the Painted Desert—the narrow strip of brightly colored shale of red, yellow, chocolate and white.

The Petrified Forest, in the desert area, is a type of pine the cells of which having been filled with impurities giving the petrified wood the various colors.

—By Martha G. Koch.

IOLA GARDEN CLUB PROGRAM

The Iola Garden Club will conduct a bird study during spring months; in March, a study of conservation; in April, a study of annuals; and in May, vegetable gardening.

On May 22, we will have the Regional Meeting and the Dorothy Biddle Flower Arrangement School in Our Savior's Lutheran Church.

In June, we will have a Flower Arrangement Workshop, and on June 14th our 1952 Flower Show. In July, there will be a study in gardening; in August, a picnic; in September, a study on birds and a lecture on vegetables and berries; and, in October, winter feeding of birds and table decorations for the holidays. When weather permits, our meetings are held in the gardens of members.

—By Mrs. Arthur Kruse, Secretary.

SHEBOYGAN GARDEN CLUB CELEBRATES ANNIVERSARY

The Sheboygan Garden Club celebrated its 20th Anniversary in February with an anniversary banquet.

The club history, read by Francis Schmidtmeyer indicated many achievements over the years, including development of wayside projects and park improvements. Many tours have been arranged. Wildlife stamps were placed in the schools; exhibits were made at state flower shows, and interesting programs were arranged for regular meetings. Greetings were sent to the club by a number of garden clubs in the Sheboygan region.

THE BLUE SKY GARDEN CLUB—COLBY

The Blue Sky Garden Club of Colby is planning a "Bird-house Building Contest" for the school children in the Colby area. The houses will be displayed at the March meeting and will be judged. The club will give awards to the winners. We are planning a summer flower show in June, and a "strolling" flower show for August or September. We feel that our club is getting more popular in the community, and at present have 17 members, all active.—By Margaret W. Puhlmann, Secretary.

ZINNIA GROWING CONTEST ANNOUNCED

Plans are being discussed by the Garden Club Advisory Board of the Garden Club of Wisconsin and State Horticultural Society for a state zinnia contest to be carried on by clubs interested in growing flowers.

Have you heard that a "Zinnia Society of America" has been organized? When an organization is devoted to its culture and breeding, it indicates the improvement which has been made in this flower.

Mr. H. J. Rahmlow, secretary of the Wisconsin State Horticultural Society, plans to show affiliated garden clubs which he took at the Vaughan and Ball Seed Co.'s trial gardens near Chicago. Some of the varieties are almost as beautiful as dahlia flowers.

Special premium awards offered at garden club flower shows and also at the flower show to be held at the annual convention of the Garden Club of Wisconsin would make the project very interesting.

AFRICAN VIOLET SHOW MILWAUKEE, APRIL 18, 1952

The Milwaukee County African Violet Society will hold its first show on Friday, April 18, 1952, in the Wisconsin Room of the Atheneum at 813 East Kilbourne Avenue in Milwaukee, from 2:00 P.M. to 9:00 P.M.

Entries are open to all. Tickets are 35c tax incl. Entries will be received from 9:00 A.M. to 11:00 A.M. Mrs. Willard Harland, Pewaukee, Wisconsin, is show chairman.

NATIONAL AFRICAN VIOLET SHOW AND CONVENTION

Hotel Sherman, Chicago, April 24-26

The African Violet Society of America announces its 1952 annual convention, to be held in the Hotel Sherman, Chicago, April 24, 25 and 26.

In connection, a National African Violet Show will be held, which is one of the outstanding flower shows of the nation from the standpoint of attendance.

The show is open to the public. More details in our next issue.

THE 1952 CHICAGO FLOWER SHOW CONGRESS HOTEL CHICAGO

March 14-18, 1952

The rooms of the Congress Hotel in Chicago, will be filled with flowers and gardens from March 14 through 18. Cooperating with the Garden Club of Illinois, Chicago florists and flower growers will exhibit their choicest blooms. Flower arrangements will fill the rooms on the second floor. "Easter Along the Avenue," a group of interpretive compositions in shadow boxes will be a feature. There will be bouquets on chests, tables and mantels.

The objective of the Chicago Flower Show is to demonstrate the correct use of flowers, shrubs and trees in the garden and the effectiveness of flowers in home decoration. The show will open Friday, March 14 at 2:00 P.M. to 10:30 P.M. and on other days 10:30 A.M to 10:30 P.M. Tickets at the door will be $1.25.

That old wager—dollars to doughnuts—is now just about an even bet.—The Viola News.

A jury is a group of twelve men and women chosen to decide who is the best lawyer.—Ripon Press.

AFRICAN VIOLETS

New introductions such as Oros Dubonette, Azure Beauty, Sailor's Delight, Sea Foam Girl, White Boy Hybrid, Gorgeous Blue Wonder, Fantasy, Double Orchid Girl, Snow Girl, Rainbow Geneva, Lady Grace, Double Orchid Sunset, and others. Prefer selling from the greenhouse unless permitted to ship several at one time by express. MRS. O. F. ISENBERG, 433—3rd St., Baraboo, Wis.

Annuals For Summer Beauty

Try the All-American Varieties For 1952 In Your Garden

1952 All-America Flowers

Four new flowers, 1952 All-America Selections, are led by **Fiesta cosmos,** the silver medal winner. Honorable mentions go to **Ballerina petunia, Persian Carpet zinnia** and **Globe Mixed phlox.** All are popular annuals, easily grown from seeds.

Fiesta is an early Klondyke cosmos in the festival colors of its native Mexico, the royal colors of Spain. This is the first cosmos in which scarlet appears, with wide stripings of scarlet and gold lengthwise in each petal. Fiesta is the earliest cosmos to bloom, the easiest of flowers to grow in any sunny location and is a trouble-free garden subject for cut-flowers or border display.

The bushy plants reach about thirty inches height, their lacy and airy foliage a foil for many wiry-stemmed flowers over weeks of blooming.

Ballerina petunia delights us with glowing salmon-pink blooms from early spring until late fall. Belonging to the dwarf giant fringed class, the large flowers are daintily laced and ruffled for beautiful cut-flower arrangements as well as for a continuous garden show. Its hybrid vigor provides uniformity in strong, compact growth and steady production of lovely big flowers. Ballerina is well adapted to bedding, informal edging, pots and window or porch boxes.

New Zinnia

Persian Carpet is a most descriptive name for the oriental colorings in a new strain of **Mexican hybrid zinnias.** The plants grow a foot or more tall, with rather small flowers in comparison with the giant zinnias, but the two-inch flowers are fully double, borne in profusion over a long season and each plant seems to produce flowers of magically different coloring.

Colors cherished by the Latins and oranges, purples, golds, rich browns and hennas woven into the treasured rugs of Persia seem to come to life in this new strain of zinna. Small enough for porch and patio boxes, its even bushy habit and more attractive foliage than larger types, adapts it to beds and borders. It provides a wealth of cutting material, always in demand.

A New Annual Phlox

From Japan we have an entirely unique shape of annual phlox plant. **Globe mixed phlox** refers to the globe or dome-shaped plants. They are covered with regular sized flowers although the plants are only about six inches high and somewhat broader. The foliage is practically covered with their mounds of bloom, colorful for low bedding, ground covers, rock and wall gardens, pots, boxes and edging. Dominant colors are phlox red and white, with some pink and salmon shades present.

Seeds should be obtainable through any reliable seedsmen as long as they last this first season of distribution.

W. Ray Hastings,
Executive Secretary
ALL-AMERICA SELECTIONS.

TRY ANNUALS THIS YEAR

By Mrs. Marion Leer,
Iola Garden Club

The seed catalogs have been arriving in great numbers, and it is time to select seeds and plants for the coming year.

While glancing through pages of beautifully illustrated flowers and vegetables, the temptation comes to order more than one can take care of.

For my garden I like plenty of annuals. While the perennial borders furnish a profusion of bloom in spring and early summer, annuals are the standbys in late summer and fall and for our fall shows.

Following is a list which will give me plenty of cut flowers, also new varieties for interest.

Good Varieties

Cosmos—Sensation, Early Giants which include **Radiance,** a lovely rose and **Purity** for white. **Marigold**—Glitters, Goldilocks and Rusty Red. **Asters**—Burpeana and Princess. **Zinnia**—Burpee Hybrid, Persian Carpet and the baby Zinnias. **Cleome**—Pink Queen and Helen Campbell for white. **Snap Dragon**—Vaughn's Giant Rust Resistant and Burpee Double Hybrids. **Sweet Peas**—Cuthbertson. **Pansies**—Swiss Giants. **Petunias — Giant** Fringed, all double and singles. **Phlox** —Burpees Tetra Giant. **Calendula**—Giant. **Morning Glory**—Heavenly Blue. Portulaca (moss roses) to beautify the vegetable garden. Sunflowers and Bachelor Buttons, a treat for the little feather friends that visit my garden.

HOW TO GROW PETUNIA PLANTS

Petunia seeds are fine; so use care to avoid sowing too closely. For this operation, you will probably find one of the new vibra-seeders to be helpful. Close seeding results not only in a waste of seeds, but more damping-off as well. Although the seeds like a relatively cool growing temperature, you will probably obtain better germination at 60 or 65 degrees. Be sure to remove them from the heat as soon as they come through, however.

A word about sterilizing seed flats and soil is always in order, but it is particularly important with petunia seeds, which are prone to damp off. If possible, sterilize the soil right in the flats so that it does not have to be handled after treating. Sowing on shredded sphagnum moss is the writer's preferred method of handling these seeds. A half-inch layer on top of the seed soil will do the trick. Just sow the seeds in this material and do not cover. Keep the moss uniformly moist, and you will have little trouble of securing a good percentage of germination.

As for varieties, all of the following have shown up well: Victorious strain World Beauty, Silver Blue, Illumination, Amaranth Red, Nocturne Gaiety and Orchid Beauty; Pan-American strain all-doubles-Sonata, Caprice, Minuet and Allegro, and Canadian strain—Canadian Queen.

Of the dwarf giants, all of the following are good: Gaiety, Lace Veil, Setting Sun, Sensation, dark and light tones of the Ramona strain, Fringed Snowstorm, Bolero, Carmencita and Dwarf Ruffled Martha Washington.

—From the Florist's Review.

I wonder if our ancestors worried as much about us as we worry about posterity.—The Eagle Quill.

A Study of Amateur Preference

Which Is The Best Arrangement

"A Penny For Your Thoughts" Was Asked of Home Gardeners

By Elizabeth Stewart, West Allis

"What good are flower shows?" This was the provocative question recently raised by a garden editor. More educational exhibits and "take home ideas" were among his suggestions for the betterment of flower shows.

Just such a "thought provoking" exhibit was displayed at the 1951 Philadelphia Flower Show. The same type and amount of plant material was arranged in two identical containers to represent good and poor design. The exhibits were labeled accordingly and no other comments or criticisms were given.

Many of us have had the experience of pausing awhile to study an exhibit. At such times we most likely overheard many varied opinions of passersby as to its relative merits or faults. The comments may have been very flattering or downright insulting, by the way, if the exhibit happened to be one's own! Nevertheless, the conversation usually proved to be most interesting and enlightening.

A Test

We were not able to hear the comments of the visitors at the Philadelphia Show as they passed by the "good" and "poor" flower arrangement class. However, as an experiment we did bring this exhibit (by way of photograph) to various people for comment. Our selected "visitors" were flower lovers and gardeners, although none of them had ever studied flower arrangement. So that we would obtain an absolutely unbiased opinion we covered the "poor" and "good" placards and labeled them No. 1 and No. 2 respectively.

Now, let us pretend that we are standing beside the "poor" and "good" exhibit, doing a bit of eavesdropping as our "visitors" pass by.

Comments by Amateurs

Visitor No. 1: "No. 1 is not quite so crowded. The flowers in No. 2 are bunched in the center. I do not like the emptiness through the center of No. 1. It looks like two strata. The leaves in No. 1 are too heavy for the flowers."

No. 2: "No. 2 is a better arrangement, although No. 1 is more natural."

Which arrangement do you prefer? This demonstration proved so popular at the 1951 Philadelphia Flower Show it is planned to repeat it yearly as a regular feature. It is labled "The Right and Wrong Way to Use Flowers and Plant Material". The pictures were published in the bulletin of The Garden Club of America.

No. 3, aged 12: "No. 2 is better. No. 1 is too scattered."

No. 4: "I would prefer No. 1 if it had more material through the center. No. 2 is too packed."

No. 5: "No. 2 has more body. No. 1 is top-heavy, although it does have the naturalness of a tree. But a tree does not have a pot at the bottom."

No. 6: "No. 1 is more natural and less crowded. It's probably wrong because the stems show. I suppose No. 2 is better because the stems do not show, but I do not like the light flowers bunched in the center. It gives a 'bulls-eye' effect."

No. 7: "I like No. 2. It does not have so many stems showing. No. 2 looks much neater."

Like Uncrowded, Informal Effect

Has our experiment given us something to think about? Indeed it has! All of the seven persons who were interviewed agreed that the "poor" arrangement had definite weaknesses. Yet, in spite of these deficiencies, the natural, uncrowded and informal effect of this arrangement seemed commendable to five out of seven. Three out of the seven objected to the "bunching" of flowers in the center of the "good" arrangement.

Such an exhibit is, without a doubt, thought provoking. Yet, we think it's educational value could have been increased had comments been given about each arrangement. Then we would not have anyone leaving the show with possible wrong impressions such as "this is wrong because the stems show." Or, that flowers should be "bunched" in the center for a "cor-

rect" design. Neither would we have liked our visitors to think that there was only one way in which the plant material could have been satisfactorily arranged.

Speaking of the word "correct" brings another thought to mind. The Pennslyvania Show Committee placed placards of "poor" and "good" on the exhibit. They did not use the words "correct" or "incorrect," "right" or "wrong." An answer to an arithmetic problem is either right or wrong. But, can we say that the design of flower arrangement is either right or wrong? We cannot. Design cannot be resolved into a demonstrable right or wrong. While it is true that the unity of a design may be weak or excellent, the design most probably will possess both good and poor qualities to a greater or lesser degree. Who is to say an informal or formal design is right or wrong for our gardens? Our experiment brought out the fact that five out of the seven persons we interviewed expressed an appreciation for informal design in comparison to formal, styled pattern.

For Your Flower Show

Garden clubs seeking new educational exhibit ideas might consider a class for poor and good informal arrangements with identical containers and plant material. A separate class for formal arrangements could be carried out in the same manner. In order to avoid possible embarrassment we would advise that these projects be undertaken only by those clubs having experienced flower arrangers who would be capable of executing a really "good" arrangement.

Try This

For all clubs, regardless of experienced or inexperienced personnel there is another educational idea. If it were possible to secure a number of identical containers of good design, a very interesting class could include demonstrations of various ways to arrange flowers in the same container. Perhaps identical pyrex cake baking containers might be used. Or, flat rectangular or circular pieces of wood of the same size could serve as bases for any number of dried arrangements.

Undoubtedly the schedule committee of your next show will come up with many more interesting exhibits which will offer the community some take home ideas.

We Live and Learn About

Growing Roses

By Alfred Boerner, Milwaukee

Back in my old home town of Cedarburg, there was a saying, "Never let the same bee sting you twice." This came to mind after the terrific damage our roses suffered the first week in November when the temperature dropped to three above zero. This was a repetition of a similar cold wave we experienced in 1929, when the temperature on Armistice Day was below zero.

Early Covering

It has always been our belief that the fall covering is best done after the plants have gone into a dormant state. We have not changed our ideas about this, but in October, 1951, we had excessively wet and warm weather and the entire rose garden was growing and blooming as if it were June. When the cold hit, we picked a large bouquet of lovely roses to save them from freezing. Within two days, the canes were black. I am afraid some of the Hybrid Teas perished in mid-November. I sent two of my seedlings budded onto Multiflora to my uncle, Albert Boerner, a rosarian of Fort Lauderdale, Florida. In his last letter he wrote, he stated that two plants were not budding out and were apparently dead. I am waiting anxiously further news, since this would serve as an index to our own garden damage.

Mound Soil In Mid-October

Now that the horse has been stolen, I have locked the barn; the roses are covered for the winter. From now on, I intend to begin my covering in mid-October by mounding soil around the Hybrid Teas and Floribundas. If they want to go on growing and blooming, let them! But, if a killing frost (below 14° F.) does come along, we will have at least some protection for the bottom of the plants.

According to my observation, only Hybrid Tea plants were much damaged. Small and large flowered climbers and most of the Floribundas seem to have met the test most successfully.

No one will know exactly how much of each plant was damaged until next spring comes 'round. But, naturally, we hope for the best. Roses which were set with the union below ground will likely do better than those that have them flush with or above the general soil level.—**From Rose Tips, December, 1951. Milwaukee Rose Society.**

GARDEN CLUB DIRECTORY

NAMES NOT INCLUDED IN OUR FEBRUARY ISSUE

Brookfield Garden Club

Pres.: Miss Flora E. Harlos, Box 165, Route 8, Wauwatosa.

Sec.: Mrs. Fred Mueller, Route 4, Box 389, Waukesha.

Treas.: Miss Adela H. Harlos, Route 8, Box 165, Wauwatosa.

Fort Atkinson Garden Club

Pres.: Mr. Ray Breitweisser, 308 Edwards St.

Vice Pres.: Mr. Herbert Wisch, R.R. 2, Jefferson.

Sec.: Albert Witte, 337 Roberts St.

Treas.: Mrs. Herbert Wisch, R. R. 2, Jefferson.

Manitowoc Men's Garden Club

Pres.: Mr. Otto Schmidt, 850 N. 5th St.

Vice Pres: Dr. H. Vollendorf, 811 York Ave.

Sec.-Treas.: Mr. Jess L. Hamilton, 530 S. 31st St.

Proper Pruning Is Most Important In the

Maintenance Of Woody Plants

By G. Wm. Longenecker, Dept. of Horticulture, U. W.

Often the trees, shrubs and evergreens used in a landscape planting becomes overgrown and useless because of neglect.

Proper cultivating, fertilizing and pruning can do much to make an initial landscape investment a thing of lasting service and beauty.

Proper Pruning Important

Most people know how to water and cultivate shrubs and trees. The use of fertilizer is no longer the complete mystery it once was. Proper pruning, however, continues to be a problem. It must be so, otherwise, we wouldn't see the overgrown, poorly pruned landscape plantings in so many yards. Going right to the root of the trouble and removing a branch right down at the base or near the roots of the plant rather than just lopping off the end of an offending branch would do much to keep shrubs young and useful.

Many people seem to think that evergreens are among the "untouchables" and should not be pruned. Japanese Yews are among the most expensive of evergreens used for foundation plantings. They usually come from the nursery as well shaped plants but if left to grow as they will in a few years will become ragged, open branched and unattractive.

The Junipers

The Pfitzer Juniper, one of the commonly used Juniper is a vigorous grower and may soon become too wide for the space allotted at the base of a home unless it is properly handled. It is a common thing for upright arborvitaes and junipers to become too tall and perhaps too open branched if left to themselves. One does not have to go very far in any neighborhood to see the examples of such neglect. Proper pruning can add years of usefulness and beauty to an average planting.

Small leaved evergreens such as the arborvitaes, junipers and yews can and usually should be pruned occasionally when they are grown under homegrounds conditions. These small leaved types can be pruned back at

the ends of branches without worrying about the formation on new buds and new growth, as they form buds and new growth from so many places so easily that existing buds can be disregarded. The best time to prune these evergreens is when the new foliage is soft. Pruning back the soft growth and the ends of the branches of the yews will tend to thicken the foliage growth and prevent the plant from becoming too tall or too wide depending on how the cutting is done.

How To Prune Tall Evergreens

The foliage of tall growing evergreens such as the American Arborvitae; the Redcedar and their varieties can be kept thick by pruning the plants with a sharp knife in late spring or early summer. This can be done quite easily by making sweeping motions with the blade of the knife up along the edge of the tree removing the ends of the new growth which extends beyond the normal outline of the plants. Too frequent pruning of this type may give the evergreen a sheared unnatural shape which is not in keeping with the average home. Neglect, on the other hand, may necessitate the complete removal of a plant or such drastic pruning that it will take considerable time before the evergreens thus handled will be of much value.

Severe pruning or pruning large branches will usually expose considerable old wood which may be unsightly for some time. Fairly extensive renewal pruning however can be done if the field of operations is kept within the area of the green foliage. Cutting at the ends of twigs will stimulate new side growth on the branches cut giving a thicker foliage effect.

Wide spreading evergreens such as the Pfitzers and Savins Junipers can be kept in bounds if some pruning is done every year or so. If carefully selected, long branches can sometimes be removed at the base of the plant. If these branches are beneath other, but shorter ones, the upper branches will usually droop down to cover the scar made in removing the long branch and will fill in the spot so that it will not be noticed.

The Mugho Pine is in need of frequent pruning if it is to be kept in its compact form. The pruning is best done when the new candle-like shoots are fully grown but soft. This new growth should be shortened about two thirds of the way back to the old growth with a sharp pruning shears or knife.

Firs and Spruces

Firs and Spruces as a rule need very little pruning, but if trees tend to become too open they can be made to develop more foliage and thicker tops with proper handling. These trees, however, have to be treated somewhat differently than the small leaved types. The firs and spruces form side buds along the twigs. Pruning should be done in late summer, fall or winter when these side buds are present. The cutting should be done in such a way that some of these side buds are left to develop new growth.

In closing it is suggested that a little pruning of evergreens every year or two will prevent the necessity of a major operation at any one time. If evergreens are allowed to grow for several years without care it may be difficult or impossible to bring them back to the desired size and shape.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

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Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

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THIS BEEKEEKING BUSINESS OF OURS

Answers To Questions In Our Last Issue

By Henry Schaefer, Osseo

In the January issue, we proposed some questions of importance to beekeepers, and have had several replies. Boiled down, here are the answers.

Overproduction is our t r o u b l e, writes one beekeeper, while another writes we do not produce enough honey and he could sell 4 million pounds per year if he could get the honey. What's the answer here?

Sugar prices are too low, writes another; if sugar were 25c per pound we would get that much for honey. Another one; better prices for honey would be an incentive to better beekeeping. A better price for honey is what we all want, of course, but how can we get it.

One man blames outside competition while in the local market outside honey is selling at 33c per pound and local honey for 69c per 5 pound jar.

A consumer writes that the quality of the honey he buys is not uniform and that the flavor of honey is spoiled because of heating.

I wish to convey my thanks to the writers of these questions and will reply to them when we return from our vacation.

LEWIS W. PARKS

Mr. Lewis W. Parks of Watertown, a founder of the American Honey Institute and its guiding spirit, passed away January 21 of this year. Mr. Parks was President of the G. B. Lewis Company for many years. The G. B. Lewis Company began making high-grade beekeepers supplies in the early 1870's.

The American Honey Institute has issued a beautiful memorial bulletin giving the accomplishments and activities of Mr. Parks, and his interest in promoting the honey industry.

BEES

As far as I know
The bees never play
But always are busy
And work every day

As far as I know
They never have fun,
But work and just work
From sun to sun!

Considering this
I'm glad I'm me
And not an industrious
Honey bee.

Nona Keen Duffy
—The Beekeepers Magazine

HONEY IN THE SCHOOL LUNCH PROGRAM

The American Honey Institute has been furnishing a supply of recipes to all school lunch managers or superintendents of schools who ask for them.

A 30-page mimeographed booklet was prepared for this purpose.

Beekeepers can do a service to the industry and to the school by letting the manager know that these are available by writing the American Honey Institute, Madison, Wis.

HONEY AND BISCUITS

You will see very colorful magazine advertisements during the month of April which feature Biscuits and Honey.

The advertising manager of a well known ice cream company has asked that we cooperate with this company publicizing the combination of honey and ice cream during National Honey Week.—**From Amer. Honey Inst. News Letter.**

WHO KEEPS BEES IN WISCONSIN

Wisconsin today would seem to have about 41 owners operating over 200 or more colonies of bees. Six of these, however, have more than 1000 colonies.

If you have less than 200 colonies but more than 100 then you are in a group with 90 others of your class.

Should you find yourself with less than 100 but more than 50 you have about 220 more in the same group. While if you have less than 50 but more than 20 you are in a group of about 700.

Somewhere around 1123 beekeepers have from 10 to 20 colonies. This leaves about 8,000 having from 1 up to 10 with another 8 to 10 thousand having equipment; 50% of this group will have bees about every other year.

—By John F. Long, Madison, Wis.

TO USE SULPHATHIAZOLE TO CHECK A.F.B.

A number of Wisconsin beekeepers are using sodium sulphathiazole to check A.F.B. in colonies by feeding it in sugar syrup in regular spring feeding, or preferably by mixing it with sugar syrup for preparing soy bean flour cakes to feed during spring months. Here is some information for using sulphathiazole.

Use at the rate of 1 gram per 10 lb. pail of syrup—no more, preferably a little less.

One level t e a s p o o n f u l (scraped level) weighs just about 3 grams and is therefore the amount to use in 30 lbs. of sugar syrup.

One ounce of sulphathiazole weighs 28.4 grams.

The soluble sodium sulphathiazole should be used. It is used extensively in veterinary work and should be available in drug stores.

What Can We Do to Help

Our Bees In March

Inspection May Save Many Colonies

By H. J. Rahmlow

Someone has said that March is the month between winter and spring—we are hopeful that winter is over and looking forward to good weather. But during March we can have many disappointments. After some mild days, when it looks as if spring is really coming, the weather can settle down for several weeks of cold, sleet, and wind.

Are you one of those beekeepers that believes the only way to maintain brood rearing this month is to keep the bees well packed and snug—away from the cold of March, and that they should never be opened or looked at? If you are, you may nevertheless be one of those who has from 20 to 40 per cent loss, which is the state average in many winters. You can't maintain brood rearing or even keep the colonies from dying by outside packing.

Why is this so? To understand it, let us study what is taking place within our brood chambers during this month.

Brood rearing began in January, and it continued during February. Those of you who inspected colonies during February were no doubt impressed with the prosperous appearance of the colonies. The bees looked "sleek" and "well-fed", providing, of course, that they were able to feed on a "balanced ration" consisting of pollen and honey. There have been from 2 to 3 combs with good sized patches of broods, and the pattern of the brood was, in most cases, solid in appearance, without many empty cells. In the ideal brood chamber, there was honey and pollen in the combs above and near the brood.

APPEARANCE OF COLONY CHANGES IN MARCH

But now in March, let's look at them again. You may notice a change in both the appearance of the bees and pattern of the brood in a good percentage of the colonies.

What is happening? Just this: during active brood rearing in January and February the bees in many colonies used up the pollen that was inside of the cluster. During cold weather, they were unable to move onto combs that contained pollen, if such were present. Bees do not move pollen into the cluster area on mild days, as they do honey. Consequently, they can only feed on the pollen that is kept warm by the cluster. Even then, in cold weather there is very little movement within the cluster as indicated by our statement in the February issue that colonies sometimes starve on one side of the brood nest if honey is not available, but may live on the other side if they are covering honey.

What happens to the bees that are unable to eat pollen? There must be a "nutritional deficiency", the way they appear. They try to maintain brood rearing even though they do not have a balanced ration, drawing upon their body reserves, and that may well account for their difference in appearance.

Inspect Colonies Now

So we again urge all beekeepers' to inspect colonies now for two important reasons: first, to see if there is honey within the cluster area, because we may have a week or two of such cold weather that the bees cannot move onto the honey at the side of the hive or bring it in to the cluster from other parts of the hive. Second, we should inspect the brood chambers to see if there is pollen available within the cluster and also in other parts of the hive. Frames of pollen, if available, can now be placed next to the frames of broods, providing, of course, there is also honey available. Sometimes the brood area is so large the bees can no more than cover it during cold weather, and it is then very important to have combs of honey and pollen adjoining the brood.

Must Maintain Bee Population

The most important reason for maintaining brood rearing is to replace the bees that die normally with young bees that are being hatched almost every day from February on. If brood rearing stops, there will be a decreasing population or what we call "spring dwindling". There may also be other causes for this, one of the most serious being nosema.

Feed Pollen Supplement Now

Begin to feed soy bean flour, preferably mixed with one-fourth pollen as soon as you notice that pollen is not available within the winter clusters to maintain brood rearing and the health of your bees. If combs of pollen can be found and placed within the cluster that is just as good.

The soy bean flour should be mixed with sugar syrup made the same as winter feed (thin syrup will ferment). **Place the cake on top of the comb** because the nurse bees cannot feed on it unless it is warm and available within the cluster, so it must be directly over the combs containing brood. Inspect colonies once each week. If they are not eating the cakes check them. There may be something wrong with the colony.

Many beekeepers will find it most convenient to purchase the prepared soy bean flour supplement from bee supply dealers.

HONEY AND BEESWAX PRODUCTION—1951

Honey production in 1951 totaled 259,006,000 pounds, 11 percent more than in 1950 and 17 percent more than the 1945-49 average, the U.S. Bureau of Agricultural Economics reported January 25th. Honey production per colony was 46.5 pounds, the highest yield since 1941, compared with 41.5 pounds last year and the average of 39.0 pounds. In mid-December producers had about 71 million pounds of honey on hand for sale which is about 28 percent of the total production. Beeswax production in 1951 was 4,705,000 pounds compared with 4,275,000 in 1950. The 1951 honey crop was produced by 5,572,000 colonies of bees, 1 percent less than in 1950.

The 10 leading honey producing States in 1951 were California, Minnesota, Florida, Wisconsin, Ohio, New York, Iowa, Michigan, Idaho and Texas.

A BIT OF HISTORY

About the Wisconsin Beekeeper's Association

It was in the fall of 1933 that the Wisconsin State Beekeepers's Association voted to affiliate with the Wisconsin State Horticultural Society and adopt Wisconsin Horticulture as the official organ. The first article of greetings to Wisconsin Beekeepers appears in the January 1934 issue of this magazine. At that time A. H. Seefeldt of Kewaskum was president; George Jacobson, Kaukauna, vice-president; and, B. G. Howard of Milwaukee, treasurer. On the Executive Committee were John Kneser of Hales Corners; William Sass of Fond du Lac; and E. W. Puhl, Chippewa Falls.

In March of 1934 Mr. E. W. Puhl wrote an article which appeared in the magazine—he said, "I will never forget the delight that shown in Mr. E. S. Hildemann's eyes at the last State Convention when it was made manifest that all were in favor of affiliation with the Wisconsin State Horticultural Society. As I see it Mr. Hildebrann grows many varieties of flowers and as I am a lover of flowers, I can understand this completely.

"After receiving two issues of Wisconsin Horticulture, since affiliation, I am more than pleased. In fact, I have lost myself in the pages of this magazine. * * * * * Now that we have a magazine in which the culture of flowers as well as bees has been brought together there are more "happy days" ahead. Truly, flowers and bees are a very happy combination."

DANE COUNTY BEEKEEPERS ASSOCIATION ORGANIZED

With an attendance of over 35 small and large beekeepers the Dane County Beekeepers Association was organized at Verona, on February 12. Speaker was H. J. Rahmlow, Madison, who told what to do with bees during the next two months. Officers elected were: Pres.: William Judd, Stoughton; Vice Pres.; Harry Hayes, Madison; Sec.; Earl Blizard, Verona; Treas.: Glenn Dunn, Madison.

The Association plans regular monthly meetings.

POLLEN CONSUMPTION INCREASES THE LENGTH OF LIFE OF HONEYBEES

From an experiment conducted in Switzerland and reported in **The Bee World—England**, the following conclusions are drawn from an experiment on the influence of pollen feeding and brood rearing on the length of life of the honeybee.

With newly emerged bees kept in captivity, pollen consumption causes development of the pharyngeal glands and fat body and an increase in the length of life. Pollens from different plants differ in their biological effect on the bees.

In a queenright breeding colony in the summer, newly emerged bees feed intensely on pollen during the first phase of their lives, by which means the pharyngeal glands, and in part also the fat bodies, are developed; moreover their prospect of longer life is increased compared with that at the time of emergence. With the onset of brood rearing their stored protein reserves gradually become exhausted; the bees age and are transformed into short-lived "summer flying bees" with exhausted pharyngeal glands and underdeveloped fat bodies.

If brood rearing ceases (through queenlessness, sterility of the queen, swarming, limitation of brood in unfavourable weather, etc.), then provided that adequate supplies are available, the protein reserves in the bees' bodies rise, the pharyngeal glands and fat bodies attain full development, and the length of life increases: they become in fact long-lived "winter bees."

POLLEN FEEDING AND NOSEMA INFECTION

With young healthy bees the inclusion of pollen in the food increased the length of life. The increase was greater with pollen which had been 'processed' by the bees (pollen pellets, pollen taken from cells in the comb) than with fresh pollen from hazel (Corylus avellana). Pollen increased the length of life of Nosema-infected bees also, though these always had a shorter life than healthy bees. Bees artificially infected with Nosema and fed with 'processed' pollen lived longer than healthy bees fed with sugar syrup only.

Experiments with pollen feeding over limited periods of time show that the addition of pollen to a diet of sugar syrup must be made at the latest when the bees are 10 days old if it is to be effective. Supplementary pollen feeding during the first 6 days gave the greatest increase in the length of life over a diet of sugar syrup only. All the bees fed with pollen lived longer on the average than bees fed only on sugar syrup. Experiments with a number of pollen substitutes showed that dried milk and yeast did not increase the length of life either of healthy or of Nosema-infected bees. The results from soya flour were contradictory. Experiments on complete colonies were interrupted by the war and need to be repeated and extended. **By Beutler, R. & Opfinger, E., Zoologisches Institute, Munchen, Germany. In the Bee World, England.**

A man is known by the company he keeps, but a whole lot better by the dollars he keeps.—Mineral Point Democrat Tribune.

* * *

The reason you never see a man angel pictured with a beard is because men who go to heaven get there by a close shave.—The Ettrick Advance.

DISTRICT BEEKEEPERS MEETINGS
WISCONSIN STATE BEEKEEPERS ASSOCIATION

Affiliated with the Wisconsin State Horticultural Society

March 18, Tuesday, Fox River Valley District Meeting, City Hall, Chilton, pot luck luncheon. Bring a dish.

April 9, Wednesday, North Central District Meeting, Marshfield, Wis. Central State Bank, basement room. Corner of Third and Main Streets. Bring a dish for lunch. Coffee and cheese-buns furnished by the Marshfield Manfg. Co.

April 18, Friday. Southwestern District Meeting. Court House Sparta. Restaurants near by for noon meal.

May 7, Wednesday. Northwestern District Meeting. Legion Memorial Hall, Bloomer. Pot luck Luncheon.

THE PROGRAM

See the February issue of Wisconsin Horticulture for a detailed program.

All meetings start at 10:00 a.m. Forenoon program devoted to Beekeeping Management problems by H. J. Rahmlow, Sec. Wis. Hor. Soc. Annual Business Meeting at 11:30 a.m.

12:00 noon, luncheon. See luncheon arrangements mentioned after the date above. Bring a dish if there is to be a pot luck luncheon or stay and pay 75c for which additional food may be purchased.

Afternoon program begins at 1:30 p.m. Discussion by County Home Agent, County Agent, and a local banker.

What we have learned about nosema will be discussed by John Long, and This Beekeeping Business of Ours, by Henry Schaefer, of Osseo. Mr. Art Kehl will give a report on the Advertising Committee Program.

Wisconsin Horticulture

April, 1952

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- S-W Flo-Mulsion (Dormant oil spray)
- S-W Karbam Black (Ferbam)
- S-W Karbam White (Ziram)
- S-W Mulsoid Sulfur (Micronized sulfur)
- S-W Sulfix Sulfur (Microfine sulfur)
- S-W Safe-N-Lead (Zinc safener)
- S-W Spralastic (Spreader and sticker)
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- S-W Summer Mulsion (Summer oil spray)
- S-W Stop Drop (Naphthalene acetic acid)

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WISCONSIN HORTICULTURE

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USED ORCHARD SPRAYER WANTED

Want to buy used orchard sprayer—any size—50-200 gallon tank. State price, model, etc. Victor V. Voigt Rt. 2, Reedsville, Wis.

The Effect Of

Chemical Thinning On Apples

Good Results Were Obtained On Some Varieties

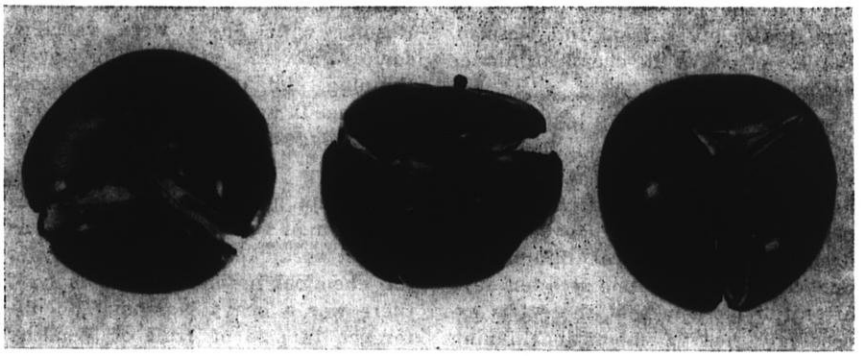
By B. Esther Struckmeyer and R. H. Roberts,
Dept. of Horticulture, U. W.

Variable results using App-L-Set or any of the other chemical thinners have been observed in our own experimental work among growers of the state and between different sections of the country.

One important reason for variability in results is that App-L-Set (Naphthalene acetic acid) does **little thinning of blossoms on vigorous wood.** The last two years have indicated that App-L-Set is **more effective in thinning apples on weak spurs.** The vigor and length of growth in the trees is a factor in determining the extent of thinning.

The variety of apple should be considered when using blossom thinning sprays. Varieties as McIntosh and Delicious which set lightly would probably be better off unsprayed, particularly if weather conditions were not satisfactory for cross-pollination. If chemical thinning seems necessary, the concentration should be kept low, as that used as a harvest spray.

The amount of blossoms on a tree also may account for variable results. In some years varieties may have a small amount of blossoms. These trees may be located near other varieties that have a heavy blossom. Provided one is using the chemical thinning spray with the regular spray, there appears to be little danger of over-thinning the trees with a light amount of blossoms. **It is therefore possible to use the chemical thinning spray with the regular spray and go through the entire orchard.** This was evident from an experiment conducted last spring. Clusters on Wealthy were hand thinned to two blossoms, others to three blossoms and all blossoms were allowed to remain on others. App-L-Set was then applied at twice the concentration of the normal harvest spray. Clusters thinned to two fruits and sprayed showed little thinning. This might be explained by the fact that the nutritional competition of the cluster was reduced by reducing the number of flowers at an early stage.



The Effect of Color-set 1004 On Maturity. Treated fruits were highly colored, but sometimes they were over-mature resulting in considerable cracking of the fruit.

Amount of Spray Used Effects Results

Another factor responsible for variability appears to be the amount of spray material used per tree. The grower who makes heavy applications on the tree has a much heavier drop than the one who gives only a light spray. One method of determining whether chemical thinning is effective is to watch the amount of set on the trees. A satisfactory crop is one that has one fruit every fourth or fifth spur. If there appears to be a heavier set than this, more thinning should be done.

Weather conditions play an important role in the amount of chemical thinning. When the weather is cold, rainy and cloudy during the full blossom period, bee activity is suppressed and pollination is below normal. This would apply to Delicious as well as other varieties that require a close source of pollen for cross-pollination. Weather conditions at full blossom should be watched, so that one might determine if a heavy or light set might be expected as a result of bee activity and pollination. Should there be evidence of frost damage during the blossom period, the use of chemical thinners should be used with caution. Should full blossom be early for the season and a fear of frost still likely, chemical thinning can be delayed until the 10 day spray. One advantage of using chemical thinners is that they are effective ten days to two weeks after full blossom and by that time one can determine if the natural drop is sufficently heavy to result in a good commercial crop, or if additional thinning is necessary.

Effect of Chemical on Blossoms

It has been possible to determine what the chemical does to the blossoms and fruit. It was found that the first effect of chemical thinning sprays was the setting of fruit. Trees sprayed had a much heavier set than unsprayed ones. However, a week or ten days after the treatment, sprayed trees showed a very heavy drop. The first effect of the chemical is the setting of fruit and then because of the nutritional competition the drop on the treated trees is much greater than for the control trees. Six days after spraying, the control trees had 191 fruits per 100 blossoming spurs, whereas trees sprayed with App-L-Set had 452 fruits per 100 blossoming spurs. At the time of harvest the controls had 54 fruits per 100 blossoming spurs and the treated trees had 34 fruits per 100 blossoming spurs showing the thinning effect with the use of chemicals.

Late Applications Less Effective

App-L-Set applied at calyx stage thinned Cortland to a good commercial crop, but when sprayed two weeks after calyx with Parmone there was little thinning effect. This is not because of the difference in the chemical, but the greater the interval of time that elapses from full blossom, the less effective the chemical thinner becomes.

Results with Jonathan indicate that it is easily thinned and should be watched carefully so that over-thinning does not occur. **McIntosh appears to make a sufficient natural drop so that chemical thinning is unnecessary.** Unless one sees ten days after full blossom that the set is exceedingly heavy, chemical thinning for this variety is not recommended. The same is true for Delicious in some cases. At least that was the experience with Delicious and Starking the past season. **Both pruned and unpruned trees of Starking were too heavily thinned at any concentration of Naphthalene acetic acid.**

Good Results on Some Varieties

Dudley appears to be quite sensitive to chemical thinning, so that the proper timing and concentration should be considered for Dudley. Good results were obtained with some of the early varieties as Melba, Early McIntosh, Early Red Bird and Milton. Results with Snow were variable, some growers experiencing over-thinning and others a satisfactory thinning. It appears that there is not much danger of over-thinning Golden Delicious.

Wealthy sprayed with three times the normal concentration used as harvest spray responded favorably to the chemical hormone particularly if there was a heavy blossom. The difference in size of fruit of Wealthy for both twice and four times the normal concentration was almost one-half inch greater in diameter than the control.

The Pre-harvest Sprays

Color-set 1004 is a salt of 2,4-5 trichlorophenoxy propionic acid and appears to give better results as a pre-harvest spray than naphthalene acetic acid, as its effectiveness from one application is considerably longer. This material also appears to improve the color of some varieties. This past summer some work was done with Color-set 1004 by Mr. Langord. Color-set 1004 was sprayed on McIntosh trees three weeks before harvest, and a repeat spray was applied to some trees. It was observed that fruit drop was prevented. Furthermore the sprayed fruits also were more highly colored than the unsprayed ones. One disadvantage of using this chemical was the cracking of a considerable number of fruits that had been sprayed. The fruit was soft and over-mature and the cracking was apparently due to this over-maturity.

The photograph shows the effect of Color-set 1004 on maturity. The treated fruits were highly colored, but sometimes they were over-mature resulting in considerable cracking of the fruit.

WISCONSIN APPLE INSTITUTE BOARD OF DIRECTORS MEET

The Board of Directors of the Wisconsin Apple Institute met at the Retlaw Hotel, Fond du Lac on April 3rd to discuss plans for the coming year.

A new edition of the very popular recipe bulletin "Wisconsin Apples—44 New Ways to Use Them" is being planned. Many copies have already been ordered in advance. Homemakers have been especially anxious to get copies for distribution to members of homemaker's clubs for their topic "Use of Fruit in the Diet."

A graduate from the Department of Home Economics Journalism with experience in radio and newspaper work will be employed full time this summer to revise the recipe book, to prepare programs for use on radio stations and in daily newspapers.

A full plan of cooperation with the County Home Agents, County Agents, Publicity Department of the Wisconsin College of Agriculture and University is being worked out by the Board. The health value of apples in the diet will be stressed this year.

All apple growers are invited to join the Wisconsin Apple Institute. Send your dues at $5.00 membership plus 50c per acre of bearing orchard to Mr. Armin Frenz, Route 2, Cedarburg, Wisconsin.

NITROGEN FERTILIZER DOES NOT AFFECT RED COLOR IN BUD SPORTS SERIOUSLY

Workers at the U. S. Department of Agriculture Experiment Station at Beltsville, Md., have given the report of an experiment to determine if high nitrogen fertilizer applications will affect the color of red bud sport varieties of apples. The conclusions are as follows (condensed):

"It has long been known that sufficient red color could not be obtained on our standard apple varieties when high nitrogen fertilization was the practice. This is especially true under Eastern conditions where climatic factors are not so so conducive to the formation of red color as they are in the Pacific Northwest. The fact that nitrogen applications have to be lower in Eastern orchards may be one contributing factor to our lower per acre production.

"With the increased use of color sports the question of the effect of high nitrogen applications arose.

"The figures for percent color would seem to indicate that there had been a slight reduction in color development in the fertilized plots. This reduction, however, is so small that it is not felt that it would be commercially significant. This agrees with the unpublished data of A. Lee Schraeder, of the University of Maryland, who found that color development in Starking was not seriously affected by high nitrogen fertilization. It also agrees with our own observations at the Plant Industry Station where many red sports of Stayman, Winesap, Delicious and Rome Beauty have been grown for several years without noticeably affecting color development when the nitrogen was maintained at such a level that color development on the standard varieties was seriously retarded."

PLANTING THE YOUNG FRUIT TREE

By C. L. Kuehner

Every year hundreds of fine young fruit trees fail to grow well because they are improperly planted. The planting begins with the hole in the ground where the tree is to be planted. Roots need room. For this reason, the hole should be wide enough so the roots can be spread out without cramming, and deep enough so that the **graft union of the tree will be an inch or two below the surface of the ground**

How to Prune Roots

It is usually advisable to prune the roots. This should be done with the smallest amount of removal possible, for the roots contain stored plant food which helps the tree to get a new start after planting. Small fibrous roots may be thinned out if they are heavily matted and shortened enough to make good planting possible. If well planted, these shortened roots soon develop small rootlets at the points where they were cut and help the tree to become reestablished. The larger roots, particularly the injured ones, should be cut back just enough to give the end of the roots a fresh clean cut. As far as practical, these cuts should face down after the tree is set into the hole, for this assures closer contact with moist soil and this also encourages good root development along the edge of the cut.

How to Plant The Tree

Slanting the tree may be desirable where it will be exposed to strong prevailable winds. They should slant into these winds. The slant should be moderate.

When planting the tree, it is important that the entire root system make intimate contact with the soil. For this reason, fine soil and proper firming is necessary for each individual root. Complete soil contact with the entire surface of each root can be best accomplished by putting in small quantities of fine soil at a time, pressing it firmly around each root until all of the roots are well covered. After this, add enough more fine soil to fill the hole nearly full and then tramp it down.

If water is used, it is a good plan to fill the hole and allow the water to soak into the ground before the final filling with loose soil.

Hundreds Attend Meetings Of County Fruit Growers Associations

Good attendance and excellent interest in the program marked the meetings of 10 County Fruit Growers Associations in the state February and early March. Professor Conrad Kuehner was the principal speaker, giving very interesting talks on the use of chemicals for apple thinning and the 1952 spray program. An excellent sound movie on apple culture produced by the Appalachian Apple Service was shown. H. J. Rahmlow spoke on Increasing Apple Sales and the 1952 program of the Wisconsin Apple Institute. All counties continued or increased their contributions to the work of the Institute and many expressed appreciation for the recipe bulletin "Wisconsin Apples, 44 New Ways to Use Them." County Agent Earl Skaliskey of West Bend suggested members of Washington County Association order copies in advance to help the Institute print a new edition and received orders for 1500 copies from those present at the meeting. (Price $4.00 per hundred).

Special Actions Taken

The Racine County F. G. A. will plan an orchard tour next fall if conditions are favorable, decision to be left to the officers.

Milwaukee County F. G. A. was holding its 22nd Annual Meeting. Mr. Alfred Meyer said he had been secretary during that entire time. They are clubbing orders for orchard material.

The Manitowoc F. G. A. voted to advertise Manitowoc County apples and voted $25.00 to pay for the first advertising.

Ozaukee County F. G. A. gave $25.00 for premiums on apples at their county fair. County Agent Carl Gillman said that originally they had 14 spray rings but there were only 4 left due to the growers purcnasing their own equipment.

The Outagamie County F. G. A. is one of the largest in the state—with more than 100 members—a credit to the officers and County Agent Fred Magnus, in the organization of a number of successful spray rings.

Association Officers

The following officers were elected or re-elected at the meetings.

RACINE COUNTY F. G. A.: Mr. J. Schelling, Racine, President; Mr. M. DeSmidt, Racine, Vice-President; Mr. Ben Ela, Rochester, Sec.-Treas.

MILWAUKEE COUNTY F. G. A.: Board to elect officers.

WAUKESHA COUNTY F. G. A.: Mr. J. Lyon, Waukesha, President; Mr. W. Basse, Waukesha, Vice-President; Mrs. L. Tans, Waukesha, Sec.-Treas.

OZAUKEE COUNTY F. G. A.: Mr. A. Barthel, Thiensville, President; Mr. R. Nieman, Cedarburg, Vice-President; Mr. A. Frenz, Sec.-Treas.

OUTAGAMIE COUNTY F. G. A.: Board to elect officers.

WASHINGTON COUNTY F. G. A.: Mr. J. Morawetz, West Bend, President; Mr. J. Kopp, West Bend, Vice-President; Mr. E. Skaliskey West Bend, Sec.-Treas.

CALUMET COUNTY F. G. A.: Mr. E. Winkler, Brillion, President; Mr. P. Woefel, New Holstein, Vice-President; Mr. M. Buboltz, Sec.-Treas.

JEFFERSON COUNTY F. G. A.: Mr. W. Leonard, Fort Atkinson, President; Mr. W. Boese, Fort Atkinson Vice-President; Mr. C. Krippner, Fort Atkinson, Sec.-Treas.

SHEBOYGAN COUNTY F.G.A. Mr. A. Meyer, Waldo, President; Mr. H. Wunsch, Sheboygan, Vice-President Mr. B. Halbig, Sheboygan Falls, Sec.-Treas.

MANITOWOC COUNTY F. G. A. Mr. A. Mueller, Mishicot, President Mr. K. Weigand, Cleveland, Vice President; Mr. E. Tuma, Cato, Sec.-Treas.

All of these organizations aga n affiliated with the Wisconsin State Horticultural Society. In additio , W had the partial affiliation this yea of the Shawano County F. G. A.

* * *

Yesterday—The tomorrow tha g away.

* * *

Up to the age of 16 a lad is a b scout. After that he's a girl sc ut— The Lena Star, Ill.

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and FRUIT WORM

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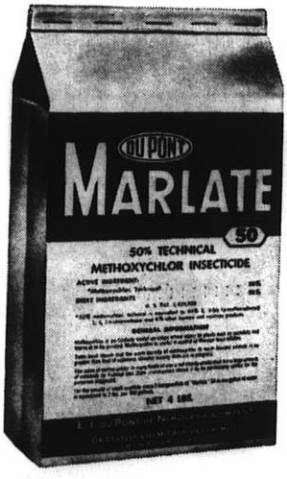

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The Future For Fruit Growers

Some Requirements For Success

By Sam Fraser, Sec. International Apple Association

"Adressing the Virginia State Horticultural Society and American Pomological Society, Samuel Fraser, Rochester, N. Y., secretary of the International Apple Association, said, 'To succeed, the apple grower of the future will have to be a better scientist, a more capable businessman, and a keener student of plant life. Competition will be keener in other foods —vegetables and fruits, but when an individual plants a young orchard and gets it into production, he enters into the keenest competition with himself.

" 'To meet this, each unit of orchard, each tree, will be on a performance record, both from a return and cost basis. Old men do not win races, nor do old trees make the dollars.

Spray Costs

" 'Sixty years ago I did not spray; 50 years ago we did little; 40 years ago we regarded $3.50 an acre as a fair cost, and it soon rose to $12 an acre.

" 'Today material may cost $60 an acre and $30 to apply it, but I am not spending that money. If it continues to rise on this rate of progression I will question our ability to pay.

" 'Some shortcuts are overdue.

Number of Trees

" 'The United States has shown a reduction in acreage of apples which has averaged over 2 percent a year for 15 years.

" 'The economical life of the trees may be 35 years, of which ten years are used in bringing the tree into bearing. The trees should be amortized by 30 or 35 and it may be wise to plant a new acreage every five years and amortize that way, carrying the young trees as part of the operating costs of the year.

" 'The cycle is long, usually 25 to 30 years. If trees come into good bearing when the price ranges are good, the experience is much more pleasing than in a decade geared to declining prices. One should choose a good time to be born and the right grandparents. Thrift on the part of a grandparent is a distinct advantage.

" 'Mechanized harvesting must come. What the hand of man can do, a machine can do as well or better. This then is a trend which threatens us and our industry, but I expect it will be met and solved.

" 'Labor and other costs are inflexible.

" 'Better use of the labor is the only way out, if we are to continue business.

Diversification

" 'It has been almost axiomatic all through my lifetime that the owner of an apple orchard should have another source of income in order to weather the gale.

" 'As a boy a farmer I worked for told me: "Always have something to sell." It might be a hog, sheep, cattle, hay, vegetable; carry at least five income producing lines and feed the land and the land will feed you. No cattle, no manure. No manure, no crops.' "—**From The Packer.**

FRUIT TREE POPULATION IN WISCONSIN

From the 1950 U.S. Census of Agriculture, Wisconsin ranks much higher in the number of apple trees in proportion to other states than our commercial crop production would indicate.

Wisconsin, according to the census, has 1,195,310 apple trees of bearing age and 369,868 non-bearing trees. We rank 12th in the United States in tree population.

Oddly enough, Michigan, which usually has about 7 times our commercial production, has only about 3 times the number of bearing trees. Even the state of New York, the second largest commercial producing state in the United States—Washington state being first—has less than 4 times the number of trees.

The reason for all of this is the way in which the commercial crop is reported. According to a peculiar law passed in the 1940's, the U. S. Department of Agriculture can report only the commercial crop grown in commercial counties; in Wisconsin, there are only 7 commercial counties. The commercial crop was 710,000 bu. with an additional 36,000 bushels reported as not sold, wasted or processed. That is an average of about ⅔ bu. per tree for all trees in the state.

There are probably more apples grown on farms not considered commercial in Wisconsin than in any other state. Studying these figures, we can begin to appreciate the tremendous effect of a year of adverse weather conditions on the total Wisconsin crop. During a season when scab and other pests are difficult to control, the tremendous number of unsprayed trees in the state will produce practically no salable apples.

However, in a year of favorable weather when trees in cities and in small orchards on dairy farms produce good apples without spraying, it might easily be that the average production per tree would come to 1, 2, or even 3 bushels per tree, giving us a crop of two or three million bushels.

We still believe it would be very helpful to the industry in planning its marketing program to have more reliable information on the total production in Wisconsin as well as other states. Why shouldn't we know the condition of apples on trees in cities and on farms and how it will effect the commercial crop.

Oddly enough, the law passed by Congress in the early 1940's was at the insistence of commercial apple growers in several sections of the United States who wished to make information available only on the total commercial crop. We hold that only by knowing all the facts can any industry work to the best advantage.

From the census, we find Wisconsin has the following number of fruit trees other than apples:

Peaches—1,764 trees of bearing age. 3,733 of non-bearing age.

Pears—23,185 of bearing age. 13,362 of non-bearing age.

Cherries—768,513 trees of bearing age. 249,783 of non-bearing age.

Plums and prunes—83,242 trees of bearing age. 24,910 of non-bearing age.

Plums and prunes—83,242 trees of bearing age. 24,910 of non-bearing age.

Grapes—79,920 of bearing age. 32,035 of non-bearing age.

Are the census figures accurate? It would seem that they would be accurate as far as a minimum number of trees is concerned—that is, a person is likely to report the number of trees he has or a few less rather than more than he has.

NIP SCAB IN THE BUD!

KOLODUST IN THE RAIN...

Timely Protection When It Counts

The surest way to control scab is to *dust in the rain* with Kolodust when scab spores are shooting. This Niagara planned operation is most effective because Kolodust is the only material that penetrates the rain drops and adheres to foliage, buds and fruit both during and after the storm.

Kolodust is *safe*. Being non-caustic it permits foliage to function in a normal manner. You benefit from larger leaves, smoother fruit finish and more fruit buds for next year's crop.

Remember, you can Kolodust when ground conditions bog down sprayers; time applications "on the nose" for maximum kill of scab spores.

This year follow the pattern of better growers everywhere. *Kolodust in the rain!* You'll harvest a bigger crop of finer finished fruit.

BE "JOHNNY-ON-THE-SPOT" WHEN SCAB SPORES ARE SHOOTING

Niagara INSECTICIDES, FUNGICIDES AND ORCHARD DUSTERS

Niagara Chemical Division
FOOD MACHINERY AND CHEMICAL CORPORATION
Middleport, N. Y., Richmond, Calif., Jacksonville, Fla., Tampa, Fla., Pompano, Fla., New Orleans, La., Greenville, Miss., Harlingen, Tex., Pecos, Tex., Canadian Associate: NIAGARA BRAND SPRAY CO., LTD., Burlington, Ontario.

WHEN YOU BUY Niagara YOU BUY PROTECTION
fmc

EXCLUSIVE Non-caustic Kolodust contains fused sulphur adsorbed into Bentonite by an exclusive Niagara process. The end result is a highly penetrating dust that sticks to foliage and fruit through prolonged and heavy rains.

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

BERRY AND VEGETABLE GROWERS MEETING STURGEON BAY, JULY 1, 1952

The annual summer meeting and tour for berry growers—members of the Wisconsin Berry and Vegetable Growers Association, will be held at Sturgeon Bay on July 1.

A splendid program and tour is being planned. There will be much to see at the Branch Experiment Station north of Sturgeon Bay, where experiments on berry growing are now under way. Two or three of the larger berry farms near the city will be visited and tests of varieties, chemical weed control methols, irrigation and other cultural methods will be discussed. All berry growers are invited to attend.

CULTIVATE TOMATOES CAREFULLY

Probably more fields of tomatoes do not produce the maximum yield because of improper cultivation than any other single factor. Cultivation is performed for three distinct reasons, namely, control of weeds and grass, to introduce oxygen from the air into the soil, and prevent erosion and leaching. This has to be accomplished of course without injury to the root system of the plants. Poor cultivation results when the shoes are not properly set and the root system is destroyed. Many types of cultivator shoes, teeth, sweeps, and hoes are available to accomplish proper cultivation.

Before cultivation is attempted, the location of the root system of the plants should be determined so that the cultivator can be adjusted properly to accomplish the job without destroying roots.

Crop rotation is important in stable agriculture.—By Jackson B. Hester, Soil Technologist, Campbell Soup Co., in New Jersey **Horticultural News.**

When a girl gave up looking for the ideal man she married her husband.

Mr. Allan Kruse of Baraboo, is a a successful strawberry and raspberry grower. Here he stands in his patch of Durham red raspberries in the month of September. Note that the berries are produced on the tips of new canes of the current season's growth.

THE DURHAM, FALL BEARING RASPBERRY

By Al Kruse, Baraboo

The Durham raspberry was introduced by the University of New Hampshire as a fall bearing variety. The old canes may be cut off in the fall or spring and new canes will bear fruit the following fall. Cutting out old canes early will prevent some diseases such as spur blight. It can also be grown as an everbearer by leaving the old canes for June and July bearing. If this is done and there is a good early crop, the fall crop may be lighter.

Durham produces good quality berries. Planting and cultivation is the same as for any other raspberry.

Develop Peat Marsh

"Three Lakes may be the big center of the United States in a few years," is the optimistic report in the Three Lakes News. The article states that Vernon Goldsworthy and two partners have made an investment of $50,000 to process, pack and ship peat from the large deposits along the Thunder Lake area. The peat will be packaged in amounts of from 1 to 50 pounds and also be shipped in bulk.

FERTILIZERS FOR STRAWBERRIES

Prof. George L. Slate of the New York Experiment Station, writing in the Rural New Yorker on "Essentials in Strawberry Growing," has this to say about fertilizers for strawberries and weed control.

Fertilizing Strawberries

Generally speaking, strawberry beds on fertile soils are more productive than those on less fertile soils. The best fertilizer treatment for strawberries is not known. Many fertilizer experiments have been conducted, but with conflicting results. Certainly stable manure provides an excellent foundation for the strawberry bed. Probably the ploughing under of a well-grown legume crop would do equally well. Of the chemical fertilizers, nitrogen is most apt to be profitable. Most soils probably contain phosphorus and potash for strawberries. The grower should experiment for himself as no recommendations can fit all cases. An application of nitrogen, either as sulphate of ammonia or ammonium nitrate, in late August just before the fruit buds are formed sometimes proves worthwhile.

Strawberries of vigorous varieties growing on fertile soils often produce far too many runner plants and these compete with each other for plant food and moisture to the point where fruit production is substantially reduced. In experiments, comparing the cropping of strawberries in unthinned rows with thinned rows, where each plant is at least five or six inches from its neighbor, the results have greatly favored the thinned rows. The thinning out of the surplus plants should be done as soon as the rows are filled out to a width of about 18 inches with the runners spaced about six inches apart.

How To Use Crag Herbicide For

Weed Control In Strawberries

By E. L. Denisen, Iowa State College

Controlling weeds in strawberries is a serious problem because of the high labor requirements. Much of the weed removal has been done by hand hoeing, consequently chemical control of weeds can be a great aid to strawberry production.

Crag Herbicide 1 as a weed killer in strawberries. (Chemical name—Sodium 2,4 dicholorphenoxy ethyl sulfate.)

A. Mode of action.

1. This herbicide is sprayed on the soil and is presumably made active by the soil. The exact reaction in the soil is not known.

2. The active herbicide in the soil kills germinating weed seeds.

3. Weeds over ½ inch in height at the time of application are not killed consequently it should be applied after cultivation.

4. The effect of the herbicide "wears off" in about 1 month in the early summer and a second application is needed. This may hold down the weed population for the remainder of the season unless there is unusually heavy rainfall.

B. Effect on strawberries.

1. No visible effect on the foliage.

2. Runner set is reduced somewhat due to a slight retardation of roots attempting to penetrate the treated soil.

3. No significant reductions in yield were obtained with applications up to 8 pounds per acre on Dunlap strawberries.

4. Yield increases were obtained with four everbearing varieties sprayed once at 4 pounds per acre and once at 8 pounds per acre.

Treatment (Two Applications)	Percent of rooted runners compared to check	Percent reduction in man hours of hoeing required
check	100	
2 lbs./A. Crag Herb. 1	83	47
4 lbs./A. Crag Herb. 1	79	76
6 lbs./A. Crag Herb. 1	46	81
2 lbs./A. 2,4-D ester	37	28

Yields will be taken in the spring of 1952.

D. Precautions in using Crag Herbicide 1.

1. Be certain that the ground is free of weeds at time of application.

2. Do not apply until after plants are established. Allow 1 month from time of planting.

3. In established beds it may be applied before blossoming and again after the picking season is over.

4. Spray evenly. 4 pounds per acre seems to be about the best rate. A leeway of about 1 to 2 pounds per acre generally is not injurious.

5. Repeat the spray when the effect of the previous spray has worn off. A second spray about 1 month after the first one will usually keep the bed quite free of weeds unless the season is wet.

6. Handle it as a chemical. Wash the material off the hands and do not allow it to get into the eyes. It may cause skin irritation for some people.

7. Do not spray on the fruit. It does not seem very toxic to humans but it pays to be cautious.

8. Do not apply to the vegetable and avoid spray drift to other crops.

E. Concentrations of spray 4 pounds per acre.

1. On an acre basis. From 50 to 100 gallons per acre.

a. Determine per acre gallonage of sprayer.

b. Use four pounds of Crag Herbicide 1 in amount of water to be sprayed on 1 acre.

2. On a small plot basis.

a. 1000 square feet—1¼ ounces or 5 LEVEL tablespoons in 1 gallon of water.

b. A 100 foot row 4 feet wide—½ ounce or 2 LEVEL tablespoons in 1 gallon of water.

c. Spread as evenly as possible over the area with a knapsack sprayer or a three-nozzle boom lawn sprayer.

COMMENTS ON WEED CONTROL IN STRAWBERRIES

Dr. Charles F. Swingle of Sturgeon Bay, Vice-President of the Wisconsin Berry and Vegetable Growers Association, called at the office in March enroute home from a trip through the mid-west, south and east. He was enthusiastic about the use of Craig Herbicide to reduce hand weeding operations in strawberries, as demonstrated to him by workers in Maryland, Kansas, and Iowa. He is planning to use this on a full scale basis on his extensive strawberry plantings near Sturgeon Bay (The Thalman-Swingle Farms, Little Sturgeon). They will have about 15 acres in strawberries, raspberries, and asparagus under irrigation this year. He recommended the publication of the article in this issue on weed control in strawberries.

STRAWBERRY YIELDS REDUCED BY SPRING APPLICATION OF NITROGEN IN KENTUCKY TESTS

Strawberry yields can actually be reduced by certain practices, and growers will do well to study soil types and methods of handling to avoid mistakes. It has, for example, been proven that uncovering the plants too late in the spring will reduce yields because the leaves are affected adversely by spring shading of the mulch.

In a recent bulletin (No. 562) by C. S. Waltman of the University of Kentucky at Lexington, he gives a summary of work done in the state as follows:

"With all varieties except one, during the 3-year period, the application of nitrogen in the **spring of the fruiting year** reduced the yield of fruit below that of unfertilized plots. The

(Continued on page 193)

Berry Plant Market

NEW EVERBEARING RASPBERRIES TESTED

Mr. Edward Stry of La Crosse, Wis., is quite pleased with his results with the new September variety of raspberries, an everbearing type, and writes about it as follows:

"In the spring of 1949 we bought one dozen September raspberry plants from the New York State Fruit Testing Association of Geneva, New York, in which we have maintained membership. They were planted along with some Marcy, Sodus and New Cumberland. The September grew vigorously, best of any we planted, but due to rabbits, we lost some. They re-established themselves in the summer of 1950 and that fall seemed to have considerable merit in bearing. They came through the winter of '50-'51 very well and bore fruit last summer.

"It appears that the new canes that come up in the spring begin to bear at the tips in the fall. Then these same canes live through the winter and send out laterals which bear the following June, after which they die, as do other red raspberry plants. The first berries were picked last August 30th, and from then on, berries ripened almost daily in each of the clusters. The berries were large and we considered them of good quality. They proved excellent in the freezer. We picked better than 12 quarts from the area covered by the original 12 plants through the month of September.

"There were some unripe berries on the canes when frost came. Of course, younger canes come into flowering right up to frost, but in this respect they are ahead of Indian Summer, which, we found did not start to ripen until just about the time the late September frost came. This coming summer we will have a far better test of their June bearing ability.

BERRY BOXES

For Sale: Berry Boxes and Crates. For price List write Ebner Box Factory, Cameron, Wisc.

RASPBERRY PLANTS FOR SALE

Raspberry plants. Latham, $6.00; Washington, $4.00. State inspected. John Griffin, Rt. 1, Hales Corners, Wisconsin.

BERRY PLANTS FOR SALE

Strawberry and raspberry plants. Premier; Wisconsin 2-14; Wisconsin 537; Robinson and Beaver June Bearing. Superfection and Streamliner Everbearing. Also Durham fall bearing red raspberry. All plants freshly dug. Al Kruse Nursery, 615 Effinger Rd., Baraboo, Wis.

BERRY PLANTS

Lowest prices for highest quality Strawberry and Raspberry plants. Streamliner; Beaver; Premier; Walsh's Late; Fujiyama; Thomas and Wisconsin 537 strawberry plants.

Raspberry plants: Latham and St. Regis. Our plants are the finest strains you can buy. Circular free. Please order early. Variety Gardens, Mauston, Wisconsin.

STRAWBERRY PLANTS

Strawberry plants. Government inspected. Quantities to 500 shipped Parcel Post Prepaid. 1000 lots Express Collect, Beaver, Robinson, Premier at $2.85 per 100; $10.00 per 500; $17.50 per 1000. Gem Everbearing $2.85 per 100. Harvey Kamnetz, Cumberland, Wisconsin.

STRAWBERRY PLANTS

We offer the following varieties of strawberry plants for spring delivery. Fresh dug day of shipment. The old reliable Beaver. Premier; Catskill; Robinson; Senator Dunlap; Wisconsin Number 214 and 261. Also Everbearing: Gem, Minnesota 1166, and Streamliner. H. H. Pedersen, Fruit and Plant Farm, Warrens, Wisconsin.

A child is the one that stands halfway between an adult and a television screen.

BERRY PLANTS

Latham raspberry plants. 100, $9.50. Cumberland, $7.50. Premier, Beaver, Dunlap, Robinson, Arrowhead strawberry plants. 100, $2.50; 200, $4.75; 500, $9.00; 1,000, $17.00.

Mary Washington Asparagus. 2 yr., 50, $1.75; 100 $2.95.

Fruit trees, ornamental shrubs and evergreens. Hall Nursery, Elmwood, Wis.

STATE CERTIFIED STRAWBERRY PLANTS

All orders filled promptly with fresh dug, well rooted plants. Wis. 2-14, Wis. 537, Premier, Catskill: 50 @ $1.75; 100 @ $2.50; 250 @ $5.25; 500 @ $8.75; 1000 @ $14.00. Senator Dunlap, Robinson, Temple: 50 @ $1.60; 100 @ $2.00; 250 @ $3.85; 500 @ $6.25; 1000 @ $11.00. Also Everbearing Superfection, Gem, Evermore or Minnesota 1160, Streamliner: 25 @ $1.25; 50 @ $2.00; 100 @ $3.00; 250 @ $7.00; 500 @ $12.00; 1000 @ $20.00. Write for complete price list and description to The Zimmerman Nursery, 1015-2nd St., Baraboo, Wis.

STATE CERTIFIED BERRY PLANTS

We offer strawberry and raspberry plants for sale: Gem, Streamliner, and Evermore Everbearing strawberries at $15.00 per 1000; $2.00 per 100.

Premier, Catskill, Fairfax, Robinson and Beaver at $15.00 per 1000; $2.00 per 100.

Dunlap at $12.00 per 1000; $1.75 per 100. All postpaid.

Latham raspberries at $5.00 per 100; $3.00 per 50; $1.75 per 25. Postpaid.

Viking raspberries at $25.00 per 1000, F.O.B. Bayfield. $3.50 per 100; $2.00 per 50; $1.25 per 25, postpaid.

John Krueger, Rt. 1, Bayfield, Wis.

From the Editor's Desk

STUDIES IN FROST PROTECTION BY IRRIGATION

Studies in Germany on frost protection by irrigation have shown irrigated plots 7 degrees Fahrenheit higher than unirrigated when temperatures dropped to 23 degrees F. Only low rates of application were suitable for this purpose—about 1/16 of an inch an hour. If rotation types of sprinklers are used, rotation must be rapid—only intervals up to 130 seconds between one fall of water and the next prevented frost damage. Also, the angle of application must be low enough so that water does not freeze in the air, and be high enough so that water freezes on the plants before reaching the soil.

—H. B. Tukey, Michigan State College.

WHY BLUEBERRIES REQUIRE AN ACID SOIL

Writing in Farm Research, a bulletin of the New York Experimental Station at Geneva, John Cain gives this explanation of why blueberries require an acid soil:

"An acid soil is usually considered a necessity for blueberries. A soil pH of 4.0 to 5.2 should exist for the prevention of iron deficiency and the maintenance of nitrogen in the ammonia form. The use of ammonium sulfate fertilizer and a heavy organic mulch is frequently sufficient for this purpose. Sulfur may be used to increase soil acidity if applied the year before planting. Sulfur should be used very sparingly, 50 to 100 pounds to the acre after plantings are established.

Under acid soil conditions well supplied with organic matter, nitrates are converted into ammonia nitrogen and are thus utilized by the plant. As the soil becomes less acid (above pH 5.5) nitrifying organisms predominate and ammonia nitrogen is converted into nitrates which are less easily utilized by the plant, as well as being more easily leached out of the soil. Thus it becomes more difficult to maintain adequate nitrogen for the plants."

WISCONSIN HORTICULTURE'S COVER

It is Maple Sugar time again, but the sugar-making scene on this month's cover was photographed last August, not last Spring, when visitors at the Flower Show of the 1951 State Fair saw this exhibit of a typical Wisconsin sugar bush. The display was arranged by the Antigo Maple Sugar Co-op, and visitors at the Fair were amazed and delighted to find, in a March snow setting, what appeared to be a typical sugar bush with the trees tapped and the sweet sap running, being gathered, and boiled down into maple syrup. The complete sugar-making equipment seemed in operation, with red lights in the fire box and an amber-colored liquid boiling up frothily (by air pressure) and being skimmed off from time to time. Even the aroma of maple sugar was present, coming from syrup boiling on a concealed hot plate in the back pan. Ashes and charcoal spilled around the fire box door, and a wood smoke smell (produced by burning punk) all contributed to the realism of the scene.—**By E. L. Chambers.**

EASTERN MAGAZINE PRAISES OUR PHOTOGRAPHS

The Eastern Fruit Grower, a magazine serving the eastern apple and peach industry used as a cover picture on its February issue, our cut of 12 individual photographs of apples showing damage by apple pests, which we produced for Wisconsin Horticulture and loaned to them. They compliment the work very highly. We thank you.

HORTICULTURE AT THE WISCONSIN STATE FAIR

Mr. Ted R. Osmundsen of Sturtevant, Superintendent of the Horticultural Building at the Wisconsin State Fair, writes:

"There will be little change in the management of the Horticultural Building at the State Fair. I feel that Mr. E. L. Chambers worked very hard to bring the show to its high standard of perfection and it will be hard to improve upon it. However, I will strive to stage a good show.

"The Horticultural Society can rest assured that we will do all in our power to uphold the prestige of the Horticultural Building and the show. Many contacts with various exhibiting groups have been made."

AN ERROR

Senator Byrd Didn't Grow 5,000 Bushels Per Acre

In the March issue of Wisconsin Horticulture we reported the apple production of Senator Harry Byrd of Virginia, stating that he produced 1,033,000 bushels of apples on 2,000 acres, yielding roughly 5,000 bushels per acre. Probably it was a little cold the day the article was copied from the original. It should, of course, have read 500 bushels per acre. We immediately received notes from fruit growers about it, and we are gratified to know that they do read the magazine.

Of course, we also know readers multiplied 2,000 acres by 500 bushels per acre which gave them 1,000,000 bushels so they knew it was an error. But perhaps it's a mark to shoot at. If you can crowd 100 trees on an acre and then get each one to produce 50 bushel you'd come up with 5,000 bushel, wouldn't you. Or don't you think it can be done?

ORCHARD FOR SALE

FOR SALE: 18 acre bearing orchard of good commercial apple varieties, and roadside market—just South of Baraboo on Highway 12. Good farm buildings and storage cellars. Modern convenience. L. B. Irish Orchards.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
JOHN GATES
Two Rivers

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

TREASURER
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

Chemical Weed Control In Gladiolus Plantings

By LeRoy G. Holm and Gail E. Beck

The use of chemicals for the control of grasses and broad-leaved weeds in gladiolus plantings has been studied by several workers during the past few years. The experiments conducted in Michigan, North Carolina, New York, and Illinois have emphasized the effectiveness of 2, 4-D, dinitro compounds, and TCA (trichloroacetic acid) for this purpose.

Our work at Wisconsin has attempted to measure the efficiency of these and other chemicals as herbicides, but we have given particular attention to the problem of grass control. The greater portion of our work, however, has been concerned with the effect of the chemicals on the gladiolus plants themselves.

In each of the two years the tests were conducted on a heavy soil. Growing conditions were excellent. The varieties White Gold, Lady Jane, Ethel Cave Cole, and Snow Princess were used. We have found that 2,4-D at two pounds per acre will control 75 to 80 per cent of the broad-leaved weeds during the early part of the growing season. An amine form of the chemical is satisfactory. The treatment should be made before the crop is up at 30 pounds pressure or more in 40 to 50 gallons of water per acre. There appears to be no benefit from the use of greater amounts of 2, 4-D.

Dihitro at 6 to 9 pounds per acre, applied as above will give good weed control but will prove much more expensive. It will perhaps not hold the weeds back for as long a period as does 2, 4-D.

TCA at 10 to 15 pounds per acre will control 75 to 85 percent of the annual grasses when applied as described above. This chemical has proven to be very effective here and in other crops and will not hurt the gladiolus. At 20 pounds per acre and above, however, we have been able to detect what appears to be a very slight reduction in the rate of growth of the gladiolus.

Another chemical, Endothal (or Niagarathal) has proven very effective against grasses. Since this material will not be commercially available for a year or two, it will not be discussed further.

The chemicals at the rates prescribed above have resulted in no delay in flowering. This was determined by calculating the number of blooms cut from each plot at the time the peak harvest had just passed. Total spike production was not reduced by any of the treatments.

The numbers and weights of corms produced in the plots treated with the above chemicals exceeded in all cases the yields from control plots which were kept from weeds at all times during the growing season. The yield of cormels was not reduced significantly by any of the chemicals.

Many more chemicals have been tried than are reported here, but those set forth above have been by far the most promising and will give adequate control of the particular weeds. All of these applications have been made on our observation plots which included cormel plantings. No detrimental effects were evident. Further detailed work such as that described above is now called for on stock grown from cormels.

ANNUAL MEETING WELL ATTENDED

Members Appreciate Excellent Program

More than 50 members of the Wisconsin Gladiolus Society attended the Annual Meeting in Milwaukee on March 30th. The program was excellent and a vote of thanks is due the speakers, Dr. James Torrie, Madison, Mr. Glen Pierce, Villa Park, Illinois, Ted Osmundsen, State Fair Horitcultural Superintendent, Mrs. Gordon Shepeck, Green Bay, and Mr. E. B. Stiefvater, Milwaukee, for their participation.

Annual Show at State Fair Aug. 16

No invitations have been received for the 1952 show and it was suggested the State Show be held the first three days of the Wisconsin State Fair, opening Aug. 16. A committee consisting of Dave Puerner, Walter Krueger, and Charles and George Melk were appointed to work with Mr. Osmundsen on the problem. Members from Two Rivers extended an invitation to hold the 1953 show in their city.

MADISON GLADIOLUS SOCIETY ELECTS OFFICERS

At the regular annual meeting of the Madison Gladiolus Society in February, the following officers were elected: President, H. E. Halliday; Vice-president, Gerald Wilke; Secretary-Treasurer, Miss B. E. Struckmeyer, all of Madison.

The meeting followed a dinner, with an interesting program of colored slides of gladiolus varieties. Mr. Roger Russell showed pictures of varieties of 10 years ago and compared them with modern varieties. Slides furnished by Mr. John Flad were also shown.

SHEBOYGAN CHAPTER HOLDS MEETING

By Walter Kurtz, Chilton

The Sheboygan Chapter of the Wisconsin Gladiolus Society held its Spring Meeting and Bulb Auction at Chilton on March 9th at the City Hall Auditorium.

Entertainment was provided by the Sunshine 4-H Girls of Hilbert. A large crowd of flower growers and gladiolus fans from Sheboygan, Manitowoc, Brown, Outagamie and Calumet Counties attended. There were talks on growing glads, soil management, fertilizers and disease control. Colored slides of prize winning gladiolus were shown. A summary of the talk—How to Grow Gladiolus, together with formulas of sprays and dips were passed out to all present. A large assortment of popular varieties of bulbs were offered at the auction. The bidding was lively and close to $150.00 was realized for the chapter. After a short business meeting a pot luck supper was served and colored movies were shown. The film, Wildflowers Native To Wisconsin, was very nice, as was the film entitled, Hunting in the Wilds of Africa with a Camera. A large crowd attended due to the publicity received through news items and radio by our good member Orrin Meyer, Calumet County Agent at Chilton.

BEST 1951 INTRODUCTIONS OF GLADIOLUS

The Symposium Committee of the North American Gladiolus Council has compiled a list of favorite varieties including 1951 introductions. The 10 1951 introductions receiving the highest number of points and their total points are as follows. (3 points were given for a first place vote, 2 for second and 1 for a third).

King David, purple	97
Gold, dark yellow	51
Blue Devil, deep violet	42
Catherine Beath, yellow	30
Leah Gorham, light red	30
Sierra Snow, white	27
New York, deep rose	26
The Rajah, purple	26
Elmer's Rose, light rose	24
Peach Glow, buff	17

CONTROL OF INSECTS AND DISEASES OF GLADIOLUS

By James H. Torrie, Madison

Many new insecticides and fungicides are now or soon will be available for the control of insects and diseases of gladiolus. For the past few years our standard for the control of gladiolus thrip both in the field and in storage has been D.D.T. For field control D.D.T. is applied at the rate of 2 pounds of technical D.D.T. per acre in the form of either 4 pounds of 50% wettable D.D.T. as a spray or 40 pounds of 5% D.D.T. as a dust. The term technical refers to an insecticide in a 100% pure form. Thus 4 pounds of 50% D.D.T. equals 40 pounds of 5% D.D.T. and 2 pounds of technical or 100% D.D.T. Chlordane is effective for the control of thrips when applied either as a spray or dust at the rate of 1 pound technical per acre. Other still newer chlorinated hydro-carbons are Aldrin (¼), Toxaphene (1½), Lindane (¼), and Dilan (½). The number in brackets refers to the pounds per acre of technical recommended for thrip control. The last four insecticides are quite new and more research is needed to evaluate them in relation to D.D.T.

For control of thrips during the storage period the corms can be either dusted with D.D.T. or dipped in wettable D.D.T. Recent work has indicated that Chlordane is effective in the control of thrips during storage.

(Continued on next page)

Aphids And Red Spider

With the increase in the use of D.D.T. there has been an increase in the number of aphids and red spider in gladiolus plantings. Aphids are frequently spreaders of virus diseases, hence their control is important. Parathion or E.P.N.-300 gives good control of aphids when applied at the rate of ¼ pound technical per acre. If the weather is warm it is quite effective against red spider. Precautions should be used especially with Parathion since it is toxic to humans. E.P.N.-300 is less toxic to humans than Parathion. Parathion does not last long on the foliage, hence has to be applied at regular intervals.

Two new sulphur base insecticides, Aramite and Dimite, applied at the rate of 2 teaspoonfuls per gallon are very effective for the control of red spider.

D.D.T. dust is best for the control of blister beetle. D.D.T., Chlordane, Aldrin and Toxaphene still give good control of the tarnish plant bug. Cutworms and wireworms in the soil can be controlled by a soil treatment of either 2 pounds of Aldrin or 5 pounds of Chlordane per acre in upland soils. For muck soils a heavier application is necessary.

Disease Control

Disease control for our purpose can be divided into 5 classes, namely: 1) corm treatment; 2) foliage treatment; 3) insect control; 4) rogueing of diseased plants and corms; 5) rotation.

Until quite recently the recommended practice in corm treatment was to dip them prior to planting. More recently the emphasis has been to treat the corms after digging or after cleaning, followed by a pre-planting dip.

The method is: after washing the corms, dip them for a few minutes in a solution of wettable D.D.T. plus Arasan or Spergon, and then **dry rapidly for 24 to 48 hours at a temperature of 95 degrees F.** For smaller lots, this can be accomplished by dusting the corms with a mixture of D.D.T. and Arason or D.D.T. and Spergon after cleaning. This will aid in the control of diseases which are surface borne but not latent infection such as often occurs with fusarium, which is one of our major diseases.

For the control of foliar diseases, many of which later effect the corms, such as scab and botrytis, regular spraying with fungicides such as Dithane and Parzate help considerably. These fungicides come in both liquid and wettable powder form. Since they are compatible with the wettable powder insecticides the two can be mixed and applied in one application. For 100 gallons of water, 2 quarts of liquid or 2 pounds of wettable powder of the fungicide plus ¾ pounds of zinc sulphate plus 4 pounds of 50% D.D.T., plus 3 to 5 oz. of Triton spreader is recommended. For a 3 gallon sprayer, ½ cup of fungicide, plus 3 tablespoons of 50% D.D.T. plus ¾ tablespoonful of zinc sulphate plus 1 teaspoonful of Triton is recommended.

For the application of both insecticides and fungicides it is very important to follow the directions of the manufacturer regarding the rate of application and any precautions necessary to observe.

Insect control, especially aphids, is important in the control of virus diseases. Since many viruses are transmitted by aphids, sanitation methods such as the destruction of diseased plants and corms as well as proper rotation have a place in both disease and insect control.

BEST EXHIBITION VARIETIES OF GLADIOLUS

The Symposium Committee of the North American Gladiolus Council compiled a list of favorite varieties and we list here the best exhibition varieties they selected for 1951 in the various color classes.

WHITE. Florence Nightingale; White Goddess; Silver Wings.

CREAM: Leading Lady; Connie G; Salman's Glory.

LIGHT YELLOW: Aureole; Golden Flute; Crinklecream and Lodestar.

DARK YELLOW: Spotlight; Sundance; Gold.

BUFF: Patrol; Sun Spot; Pactolus.

ORANGE: Daisy Mae; Orange Gold; Circe.

LIGHT SALMON: Picardy; Polynesia; Pharoah.

DEEP SALMON: Boldface; Dolly Varden; Chinook.

SCARLET: Red Wing; Dieppe; Red Cherry.

LIGHT PINK: Evangeline; Tivoli; Phantom Beauty.

DEEP PINK: Spic and Span; Cotillion; Boise Belle.

LIGHT RED: Mid-America; Leah Gorham; Royal Windsor.

DEEP RED: Red Charm; Mighty Monarch; Firebrand, and 552 Royal Flush.

BLACK RED: Black Cherry; Mrs. R. G. Errey; Ace of Spades.

LIGHT ROSE: Noweta Rose; Miss Wisconsin; Elmer's Rose.

DEEP ROSE: Burma; New York; Boulogne.

LAVENDER: Elizabeth the Queen; Bridal Orchid; Parthiena.

PURPLE: King David; Lancaster; Sherwood.

LIGHT VIOLET: Ravel; Blue Beauty; Blue Bonnet.

DEEP VIOLET: Abu Hassan; Blue Lagoon; Blue Devil.

SMOKY: Stormy Weather; Sandman; Dusty Miller.

ANY OTHER COLOR: Vagabond Prince; Buckeye Bronze; South Seas.

WHY GLOXINIA BLOSSOMS DO NOT DEVELOP

Question: I have had some trouble with my Gloxinias. The plants seem to grow all right, but when the blossoms are ready to open they blast, that is, just turn brown and never produce nice flowers. What is the trouble?

Answer by G. E. Beck, Extension Specialist in Floriculture, U. W. "One of the most common reasons for the failure of gloxinia buds to develop satisfactorily is **ununiform moisture** conditions in the soil. When the young buds are in the small stage of development, it is very possible that they will blast (dry out) if the plant and soil are allowed to dry. When the plant suffers from lack of sufficient moisture, the first part to be destroyed is the young developing buds. For this reason I would suggest that you **check the plant daily** to determine if it has sufficient moisture. If the soil tends to be dry then I would suggest that you water it thoroughly.

"Although these plants require a good uniformly moist soil, care should be taken to avoid overwatering which will result if the plant is allowed to stand in water or not given free drainage.

NITROGEN FERTILIZER AND STRAWBERRY YIELDS

(Continued from page 186)

average reduction for all varieties was 26.76 per cent and the range was 47.13 to 14.4 per cent.

"The reduced fruit yields on spring-nitrated plants occurred as a result of increased vigor, greater new plant growth, a greater number and larger leaves, a greater demand for moisture, greater shading of fruits and poor air circulation through the plants.

"Yields from several of the individual plots gave evidence that fall nitrogen treatment was beneficial and showed that varieties varied in their response to this practice.

"Varietal vigor, planting distance, water supply, and the plant-forming ability of varieties were important factors in determining the response made by a variety to fall fertilization."

Nitrogen Beneficial Under Certain Conditions

At the Wisconsin Experiment Station it has been shown that on light, sandy soils spring applications of nitrogen may be very beneficial if the plant leaves are yellowish in color, indicating nitrogen shortage.

Leave Check Rows

With high labor costs as well as high cost of fertilizers it will certainly pay growers to be very careful in all practices in order to obtain maximum yield. Since commercial fertilizers may not always be beneficial, it is well for each grower to leave check rows when making any type of fertilizer application in order to determine whether the practice adopted is beneficial or not. One way to save money is not to apply fertilizer that will not increase yields, and that can only be determined by leaving rows unfertilized for comparison.

Garden Club News

REGIONAL MEETING AT JEFFERSON

K. C. Hall, Wednesday April 30th

Region 1, Garden Club of Wisconsin, will hold its regular Regional Meeting at the K.C. Hall in Jefferson, following a 6:00 p.m. Pot-luck supper, with the Green Thumb Garden Club of Jefferson and Lake Mills as hosts.

Mrs. Gilbert Schlaugenhauf of the Green Thumb Club will demonstrate and talk on dried material for bouquets. There will be a program of music, followed by a colored motion picture with sound. and a garden forum conducted by H. J. Rahmlow, Secretary of the Wisconsin State Horticultural Society.

These meetings are always very enjoyable and a good attendance is expected. All interested garden club members in the Rock River Valley are invited. Bring a dish for the potluck supper.

THE ELK CREEK LAKE GARDEN CLUB OF EAU CLAIRE

Our little garden club was organized 1½ years ago, and we have an enthusiastic and interested group. We all live in a beautiful scenic area of virgin timber, near a small lake and enjoy our homes in the country. We all have gardens and because of the variations in landscape and soils, we have a wide variety of flowers, for so small a group. We all have feeding stations for our feathered and furry friends. At our meetings we study nature and gardening, and have shown films on related subjects. In December we had a Christmas dinner party, and during the summer months we meet for brunch in members gardens, or picnic around our outdoor fireplaces. We attend all flower shows in a group and our members exhibit at the Chippewa Fair. We enjoy Wisconsin Horticulture and Mr. Rahmlow's garden talks over the state station and his lectures at Eau Claire.

During the coming season we will concentrate on lilies. We will try out different varieties of lilies and study their growth and adaptability to our soil and exposure. **By Mrs. C. E. Brill, President.**

THE NEXT BIG EVENT FLOWER ARRANGEMENT SCHOOLS

Dorothy Biddle of New York, Lecturer

May 19, Monday. Milwaukee, Y.W.C.A. sponsored by the Milwaukee Region, Garden Club of Wisconsin.

May 20, Tuesday. Sheboygan, Episcopal Guild Hall, corner of North 7th Street and Ontario Avenue, sponsored by Sheboygan Garden Club.

May 21, Wednesday. Athearn Hotel, Oshkosh. Sponsored by Winnebagoland Region.

May 22, Thursday. Iola, Lutheran Church, sponsored by the Central Region.

PROGRAM

(Note: The program will vary slightly at each school.)

Lecturer: Dorothy Biddle,

9:00- 9:30 a.m. Registration.

9:30-10:30 a.m. Basis Ideas In Flower Arrangement.

10 minute recess.

10:40-12:00 a.m. Color In Flower Arrangement.

12:00 M. Luncheon. A luncheon has been arranged for each school.

1:30- 3:00 p.m. Adventure in Table Setting. Discussion of combining dishes, fruits, flowers, etc.

10 minute recess.

3:10- 4:15 p.m. Forum. Questions and answers about flower arrangement and table setting.

FILMS AVAILABLE FOR GARDEN CLUB PROGRAMS

The following 16 mm motion picture films with both sound and color are available for garden club and other organization programs.

How to Grow Beautiful Roses.

How to Grow Beautiful Fuschias and Begonias.

Mysteries of Plant Life.

For these films write the California Spray Chemical Corporation, Box 29, Janesville, Wisconsin. Make arrangements at least a month in advance in order to avoid conflict.

MRS. GEORGE WILLETT IOLA, WIS., APPOINTED MEMBER GARDEN CLUB ADVISORY BOARD TO THE SOCIETY

Mrs. Vernon Rosholt of Rosholt, elected a member of the Garden Club Advisory Board to the Wisconsin State Horticultural Society last October, resigned recently due to ill health.

Mrs. George Willett, of Iola, has been asked to fill Mrs. Rosholt's unexpired term by the President of the Central Region, Mrs. Marlin Steinbach, Clintonville.

FLORAL ARRANGEMENT STUDY CLUB ORGANIZED

A group of women members of the Oshkosh Horticultural Society recently organized the Floral Arrangement Study Club. At present there are 12 members with membership open to any member of the Oshkosh Horticultural Society. The meetings will be held the third Tuesday of each month in the homes of members and two members will bring seasonal arrangements to each meeting. The culture of the flowers used in each arrangement will be studied. Outside activities such as garden tours, in and out of the city, will be planned. Refreshments will be served by the hostess. Officers of the club are Mrs. M. R. Cook, President; Mrs. John Rasmussen, Secretary; and Miss Bessie Pease, Program Chairman. **By Mrs. John Rasmussen.**

NATIONAL AFRICAN VIOLET SHOW OPEN ONLY A LIMITED TIME

The Annual Convention and National Show of the African Violet Society of America which will be held in the Hotel Sherman in Chicago, April 24-26, will only be open to the public, or non-members, on Saturday, April 26, from 8:00 a.m. to 12 noon. Admission will be $1.00. The commercial exhibit is only open to members of the National organization. Programs are open only to members.

Since we announced the show in our last issue, we thought it well to mention the time it is open to the public. That is such a limited time.

HOW TO GROW SWEET PEAS

Sweet peas grow better in the cooler parts of Wisconsin than in the southern half of the state due to the fact that they do not like hot weather.

1. The seed. Use the Cuthbertson or the usual Spencer type of sweet pea seed. Plant the seed very early, just as early as possible in order to get crop before hot weather.

2. Moisture. One of the reasons for failure is lack of moisture. If the roots once dry out, the crop is ruined.

3. How to plant. Some experts advise digging a trench 6 inches deep, mix fertilizer in the bottom of the trench, then fill in and plant the seeds about 4 inches deep. First cover them with only an inch of soil and fill in the trench gradually so that the roots will be kept cool and moist.

Plant the seeds about 3 inches apart. Sweet peas branch heavily and should not be planted close together like garden peas.

Mulching will help conserve moisture and keep the ground more cool.

Provide support as soon as the peas show above the ground. The plants are slow to start, but will branch out and grow quite tall.

4. Insects and diseases. Sweet peas are troubled with aphids and mildew. Dust with sulphur early. Use a combination of sulphur and rotenone or D.D.T. to control aphids — the sulphur will control the mildew.

We've always heard that the rolling stone gathers no moss—but why is it that the wandering bee is the one that gets the honey?

HILLCREST GARDEN CLUB PROGRAM

The Hillcrest Garden Club has an excellent program arranged for 1952. There will be discussions on these topics. New seeds planted for 1952. Spring flowers in the garden. How to plant and care for roses. Care of geraniums. Book review on pines. Flower arrangements by each member. Tour and lecture at Whitnall Park—lecture on amaryllis and gloxinia. Movie on Mexico. Demonstration and proper settings for house plants. Paper on tuberous rooted begonias. Study of Wisconsin State Parks and Forests. Each month a study of plant names—pronunciation and spelling. **By Mrs. H. Krueger, Secretary.**

BIRD FEEDING PROJECT AT WEST ALLIS

Mrs. R. E. Stoll, Mrs. Martin Miholic and Mrs. W. I. Buckeridge, near neighbors at the west end of Venice Park Road, are members of the West Allis Garden Club. They are all bird enthusiasts. Each has put out about 120 pounds of sunflower seeds this winter to date, for the birds, besides suet and other food. On the last day of February, in fairly cold weather, I heard the purple flinches singing near their homes. These birds will stay in the same neighborhood winter after winter, if properly fed. This is their sixth consecutive winter near the Stoll home.

What is the proper feeding? All the food they need, every day, set out at sunrise, and again later in the day if needed. Besides the purple finches, there were cardinals, titmice, brown creepers, white breasted nuthatches and chickadees. This winter, for the first time, two red breasted nuthatches put in an appearance. They are so tame that they will almost feed from the hand. The chickadees give their low soft whistle, and the purple finches sing even in the coldest weather.—**By Mrs. Henry Mood, Sec. West Allis G. C.**

A SHORT PLAY AVAILABLE FOR YOUR CLUB PROGRAM

"A Gardener Old and a Gardener New, meet and give you each ones view." That is the slogan of a play that has been sent to us by Professo Victor H. Ries, of the University o Ohio, and which is available to affil ated organizations.

In the play, a gardener of long ag meets a modern gardener, and the discuss what they know of gardening The gardener of long ago thinks tha tomatoes are "pizen".

The play could be used at a garde club meeting or at a special program Write the Wisconsin State Horticu tural Society if you want to see i

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ABOUT ROSES

Did you know that:

The year 1867 is an important one in rose history; it was in that year that the first Hybrid Tea, La France, was created by crossing the Hybrid Perpetual, Mme. Victor Verdier with the Tea Rose, Mme. Bravy.

Polyantha roses are descendants of R. Multiflora. The small-flowered Polyanthas and their hybrids were formerly called Baby Ramblers. Floribunda is a name now often given to some of the large-flowered varieties.

The Turks considered roses sacred and never allowed one to lie on the ground.

Henry Van Dyke says: The best rose bush after all is not that which has fewest thorns, but that which bears the finest roses.

It's very easy to grow old when you stop to consider the alternative.

Favorite Iris Varieties

Judges of the American Iris Society Choose Their Favorites

For the 12th consecutive year, judges of the American Iris Society have selected the 100 best tall, bearded iris. This year, 262 judges, all top experts on iris, participated in the voting, according to Harold W. Knowlton, vice president and awards chairman of the American Iris Society.

The judges vote only on iris which they have seen growing in well-established clumps, and which have already received an honorable mention award or better in past years. The judges live in various parts of the country and are in a position to see the varieties perform under different soil and climatic conditions.

We list here the 50 top varieties. The date following the name denotes the **year the variety was introduced;** the figure in parenthesis indicates its **standing in the 1950 iris symposium.**

1. Blue Rhythm '45 (2).
2. Amandine '46 (11).
3. Blue Shimmer '42 (4).
4. Cherie '47 (19).
5. Helen McGregor '46 (3).
6. Lady Mohr '44 (6).
7. Chivalry '44 (1).
8. Master Charles '43 (5).
9. Ola Kala '43 (HF).
10. New Snow '46 (12).
11. Cascade Splendor '45 (10).
12. Bryce Canyon '44 (9).
13. Pink Cameo '46 (20).
14. Elmohr '42 (14).
15. Solid Mahogany '44 (13).
16. Great Lakes '38 (HF).
17. Lady Boscawen '46 (16).
18. Azure Skies '43 (21).
19. Ranger '43 (27).
20. Spanish Peaks '47 (45).
21. Mulberry Rose '41 (25).
22. Chantilly '45 (34).
23. Minnie Colquitt '41 (65).
24. Blue Valley '47 (24)
25. Sable '36 (HF).
26. Dreamcastle '43 (15).
27. Berkeley Gold '42 (7).
28. Argus Pheasant '48 (37).
29. Black Forest '45 (36).
30. Snow Flurry '39 (8).
31. Desert Song '46 (44).
32. Rocket '45 (29)
33. Sylvia Murray '44 (30).
34. Cloud Castle '44 (30).
35. Pinnacle '49.
36. Katherine Fay '45 (62).
37. Garden Glory '43 (22).
38. Distance '46 (17).
39. Chamois '44 (39).
40. Casa Morena '43 (40).
41. Cloth of Gold '45 (38).
42. Fantasy '47 (71).
43. Extravaganza '46 (26)
44. Tiffanja '42 (18).
45. Pink Formal '49.
46. Amigo '34 (HF).
47. Grand Canyon '41 (61).
48. Wabash '36 (HF).
49. Lynn Langford '46. (78).
50. The Admiral '41 (35).

In the remainder of the list of 100 we recognize such older varieties as the Red Douglas, Prairie Sunset, Gudrun, Missouri, Los Angeles, Sierra Blue, Ormohr, Shining Waters, Tiffany and Daybreak.

FOR YOUR BREAKFAST

Cut apples into a bowl. Add chunks of peanut butter, brown sugar or honey, with milk or cream. It makes a delicious breakfast. By Norman Koelsch, Jackson, Wis., Washington County F.G.A.

SPRING

The Time Of Fulfillment, Promise And Hope

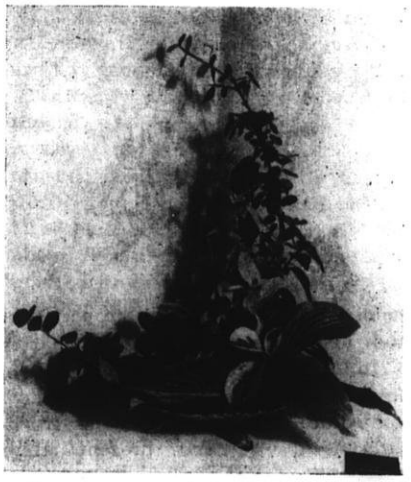
By Elizabeth Stewart, West Allis

The lesson nature teaches us in the spring is a beautiful, yet powerful one. Seemingly weak, fragile, pale green stems break through heavy earth. They sense their role in the drama of the season. We are reminded of the passage from Ecclesiastes which reads, "To everything there is a season, and a time to every purpose under the heaven; a time to be born and a time to die—."

Spring is a time of fulfillment. We see the glory of blossoms where, many months ago, we planted plump brown bulbs. A sense of wonderment comes over us with the realization that the mourning doves have returned once again to nest in the same Colorado blue spruce. Winter weary hearts are cheered by the music of countless other birds that have winged their way back to us.

A small brown seed is dropped in moist, warm earth. This tiny seed holds a promise of fulfillment. There will be an orderly progression of growth, a step by step unfolding cycle from seed to blossom, fruit to seed.

Thus, we see the never failing miracle of spring not only as a time of fulfillment but one of eternal promise and hope. Its light shines through the haze of confusion, giving us a glimpse of a triumphant, orderly world and our faith is renewed.



An arrangement for spring, by Mrs. Victor Schmitt of the West Allis Garden Club. Exhibited at the West Allis Flower Show last May 26-27.

THE GARDNER'S TROUBLE SHOOTER

Professor Victor H. Ries, Extension Professor of Floriculture at the Ohio State University has written a new book, The Gardener's Trouble Shooter; or How to Keep Your Plants Healthy and Yourself Happy. It is published by Sheridan House, 257 Fourth Avenue, New York 10, N.Y. (Price: $3.50)

In his work, Professor Ries has been listening to the troubles of gardeners for 23 years. In this book, he writes a series of chapters on the effect of soil, fertilizer, water, light, temperature, wind, and climate on your plants.

GARDEN BOOKS FOR YOUR HOME OR LIBRARY

The following is a list of some garden books which we have in the library of the Wisconsin State Horticultural Society to which we refer many times for information. We list these because we feel they are practical, not too expensive, and of value to gardeners.

The Book of Annuals, by Alfred C. Hottes ($2.75). A very complete and practical book on this subject.

All About African Violets, by Montague Free ($3.50). Written for amateur gardeners who want to know how to grow African Violets.

The New Flower Arrangement for Everyone, by Dorothy Biddle and Dorothea Blom ($3.50). A basic book on arrangements for the home, church or flower show.

Tuberous Begonias, by Worth Brown ($2.75). A book on how to grow these beautiful flowers.

Handbook of Attracting Birds, by Thomas P. McElroy, Jr. ($3.00).

Garden Flowers in Color, by Daniel J. Foley ($2.95). More than 350 flowers in actual color.

Herb Growers Complete Guide, by Rosella F. Mathieu ($2.50). How to grow and use over 100 herbs.

All About House Plants, by Montague Free ($3.95).

Iris For Every Garden, by Sidney B. Mitchell ($3.50).

Lillies for Every Garden, by Isabell Preston, ($2.50). Tells in plain language how to grow lilies successfully.

The Book of Perennials, by Alfred C. Hottes ($2.75). Full information on the general principals of growing, selecting and propagating perennials.

How to Increase Plants, by Alfred C. Hottes ($3.00). A comprehensive book on the propagation of plants written for the amateur.

Roses for Every Garden, by Dr. R. C. Allen, ($3.50).

The Book of Shrubs, by Alfred C. Hottes ($4.00). A most complete book on Shrubs.

Table Setting For Everyone, by Dorothy Biddle and Dorothea Blom ($2.75).

The Book of Trees. by Alfred C. Hottes, ($4.00). A book on the care and culture of trees.

The Tomato, by Paul Work ($1.75). A practical book on growing tomatoes.

These books may be purchased from DELAMARE GARDEN BOOKS, 448 West 37th Street, New York 18, N. Y. It may be possible to obtain most of them from the Traveling Library, State Capitol Annex, Madison, Wisconsin, in case you wish to study them before purchasing them. A card to the DELAMARE COMPANY will bring a catalogue with the description of many other good garden books. Your local book store will get them for you.

Pepper Plants

Question: I have never had any luck with Christmas pepper plants that I received for Christmas because the fruits drop off in a short time. How can I care for them so they will last longer?

Answer: Given full sun and a moist soil, Christmas peppers will be one of the best keeping little Christmas plants available. They need free drainage but don't expect the plant to last over a week if it is allowed to dry out.

Organic Gardening

Some Facts To Consider

By L. H. MacDaniels, Cornell Univ.

(condensed)

On my desk are a number of pamphlets on organic gardening. These have come from various sources in England, New Zealand and the United States. One of them had printed in bold black letters on the cover, "Will there be a second black death?" The inference is that the plague and black death during the Middle Ages were caused by depleted soils and that unless we now began to practice organic gardening, we are headed for another such plague. This is surprising since the facts are that "black death" is the bubonic plague and this is a virus disease that is spread by fleas which are carried by rats. There is no direct relationship between this disease or its spread with anything in the soil either organic or inorganic.

Truths

The truth in organic gardening is basic and important. Agronomists agree that organic matter in the soil is indeed an indispensable, or at least a very valuable ingredient. It improves soil tilth through granulation of the soil particles, increases water holding capacity and through its decay, releases nitrogen and other nutrients. Carbon dioxide from decaying materials helps bring minerals into solution and so makes them available to plants. These are only a few of the primary and secondary benefits or organic matter in soil.

Half-Truths

A half-truth comes in when it is either stated or implied that the use of composted materials without having chemical fertilizers is enough to build up the organic matter in soils over any large area or to solve the problems of nutrition of crops under present conditions. Over the wide area of the earth's surface where food is produced in quantity there is no possibility of accumulating enough plant refuse to compost in piles and thus increase the organic matter. The most economical and effective way at the present time of

immediately increasing crop yields and also increasing organic matter is to use chemical fertilizers which, on these impoverished soils will show immediate results. It can be truthfully said at the present time that without the use of chemical fertilizers even a rich country like the United States would soon find itself in a position of food shortage.

Another hulf-truth is that organic gardening will have any direct effect on disease and insect control. It is true that with some disease a plant that is not growing thriftily may show the effect of disease more than one that is growing rapidly. On the other hand, the exact opposite is true with many diseases, namely the more rapidly the plants grow and the more succulent they are, the more they are attacked by disease.

Home gardeners everywhere should be encouraged to save plant materials and vegetable refuse, if they have a convenient place to do it. Building a compost pile is a straightforward procedure in which any kind of vegetable matter is used. Basically what happens in the compost pile is the rapid decomposition of the plant materials by bacteria which produce decay. In order to make sure that these bacteria are present, it may be advisable to scatter a few shovelsful of soil over the compost pile as it is being built. Sods are particularly valuable. To assure the decay organisms adequate nitrogen and other elements for their growth, the addition of chemical fertilizers on each layer is recommended.

DON'T START TOMATO PLANTS TOO SOON

Don't start tomato plant seedlings too soon. Six to eight weeks before plants can be set in the open ground is soon enough to begin. Too early seeding will mean long, spindly seedlings that transplant poorly.

Timing is important for disease control also. In 1950, losses from curly top were serious. This disease is caused by a virus that is passed on to the plants by plant lice or aphids. The leaves look narrow and pinched. Production is cut sharply.

Sprays to control the aphids are useless, since a single stab by an infected plant louse will do the damage. Scientists working at the research center of Vaughan's Seed Company in Western Springs, Ill. have found an effective control in delayed planting.

Aphids hatch very early in Spring and multiply rapidly because of a dearth of natural enemies. Later, when air temperatures go above 60 degrees, their natural enemies hatch in large numbers and wipe out the aphids. These enemies, the lace wing fly, lady bird, praying mantis and the insidious plant bug, need heat before they appear.

By delaying planting until these natural enemies have completed their work, the chance of infection is sharply reduced. The trick is in knowing when to plant. Vaughan workers have observed that when the peonies are in bloom or when the apple trees have shed their last petals, the weather is warm enough to hatch the natural enemies of aphids. This is approximately two weeks later than the normal transplanting time in most sections. However, the late plantings usually catch up so there is no real difference in fruiting time.

Scientists warn against confusing curly top with other tomato diseases, such as are best controlled by planting disease-resistant varieties. No variety in commerce today has any resistance to curly top. Even when disease-resistant varieties like Garden State, Wisconsin 55, Rutgers, Pritchard and Marglobe are used, late planting is advisable.

—From Vaughan's Garden Research Center Bulletin.

IT'S EASY TO

Grow Lilies From Seed

By Mrs. Lars Egeberg, Orfordville

Growing lilies from seed has been my most rewarding experience in gardening. The cost of a collection is very small compared with the purchase of bulbs. Equipment any enthusiastic gardener has at hand is all that is needed.

Lilies are as easily grown from seed as most perennials, providing healthy live rooted bulbs for planting at the proper time.

Small amounts of seeds are sown in pots, larger amounts in flats, provided with good drainage. Dusted with Spergon and Hermodin powders they are covered with about one half inch of finely sifted soil mixture, composed of equal parts of compost, sand, garden soil and peat moss. Labeled and covered with burlap they go into the cold frame, when care is taken to keep them moist, but not wet.

Plant Seeds In May

Most seeds are planted in May, with smaller plantings made anytime seed is available from the garden or growers. A limited number are grown indoors during the winter months.

Species in the quick germinating group generally appear in four to six weeks. Covering is removed when the first green spears appear. Partial shade is provided and careful watering becomes most important. Shade is removed on cool, cloudy days and water is withheld, unless absolutely necessary, to prevent "damping off". After the second leaves have developed a little Vigoro is given, repeated at monthly intervals.

When cool autumn days arrive glass is placed on the frame to keep growth continuing. In late October the pots are sunk into the soil in the frame and peat moss tucked around the flats. When the ground freezes the frame is filled with dry leaves and the sash left raised a little for ventilation. A covering is placed over the sash to keep the sun from heating the frame, and the bulbs are ready for winter.

Late in the winter the flats are watered. The covering is usually removed by early April.

Transplanting Seedlings

After the spring rush is over the transplanting begins and continues whenever it is convenient. Some bulbs are left growing in the flats and moved directly to permanent places in the fall. Many go into open frames made of ten inch boards. A layer of crushed clinkers is generally used in the bottom for drainage and the soil level built up inside the frame with about five inches of enriched, friable planted in furrows across the bed, soil containing peat moss. Bulbs are spaced six or more inches apart. Bare rooted bulbs are dusted again with disinfectant and hormone preparations. A covering of one or two inches of soil is given depending upon the size of the bulb. When growth stops in the fall another inch or two of soil is added. After the ground freezes, the frame is filled with mulch held in place with boards or other materials. Part of the covering is left on in the spring for a summer mulch. Most bulbs are left in the frame until they flower.

Spraying with nicotine for aphis and Bordeaux mixture for blight, started when bulbs are small, continues along with other general care.

Good Varieties

My collection of quick germinating species and hybrids, grown from seed now includes: amabile, amabile luteum, centifolium hybrids, concolor, Crow's hybrids, Dauricum var Wilsoni, longiflorum, Davidi, formosanum, Green Mt. hybrids, Henryi, Princeps, regale hybrids, Sargentiae, tenuifolium, Golden gleam, and Wonder. Most of these require three years to produce blossoms.

These Bloom In Two Years

The few that have bloomed for me two years after sowing include: tenuifolium, regale, Davidi, Crow's hybrids and princeps. Seedlings of Wonder lily flower in late summer, when less than two years old. Resembling formosanum, it is not listed in specialist's catalogs. Seed was secured from a Wisconsin seed company. So far this lily has been the most satisfactory of all. Beginning after the regals, it continues blooming with protection, as late as the middle of October.

Propagation From Scales

Propagation of the Madonna lily have been from scales. While diseases are not carried in seeds, scales are likely to transmit any disease infecting the bulb. With the exception of bulbils, this method seems the easiest way of increasing lilies and many kinds can be grown this way. Some of the outer scales are broken from the bulb after flowering, dusted with Hermodin powder and placed in a pan with fine dry sand to cover. The place to keep them and no more attention is needed for a month or so. By that time bulbets will be found top of the water heater in the basement laundry has proven a good growing at the base of the scales. When roots have also developed they are planted in pots of soil remaining in the basement until top growth is noted. Moved to an upstairs window to grow until spring, many will be large enough to be planted directly into the garden.

One of nature's ways to propagate some lilies is by the growth of bulbils in the axils of the leaves. On plants of Sargentiae and Green Mt. hybrids I have found bulbils with roots as well as leaves developed. They were planted in flats to continue growth.

SWEET POTATOES IN WISCONSIN

By Ervin Roelke of Waupun, Wisconsin

We tried to grow sweet potatoes here in our garden two different years, but like the peanut, the sweet potato needs a lot of hot weather. In Wisconsin we do not have long sustained hot weather such as is normal below the Mason-Dixon Line. Our largest potatoes weighed 8 ounces, but by far the bulk of them needed at least another month of hot growing weather than they were able to have before frost. In short, we think our growing season is too short for growing sweet potatoes.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

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APRIL WORK IN THE APIARY

The most important job during April will be to check all bee colonies to see whether or not they will build up into profitable honey producing colonies. Only by keeping all of our high priced equipment filled with profitable colonies can we hope to make a profit on present honey prices and labor and equipment cost.

It is our experience that a colony that has been dwindling since February is an unprofitable one regardless of the appearance of the queen. We have tried requeening such colonies only to find they continue to dwindle in population. Eliminate such colonies in whatever way you choose, and install in the equipment a new package of bees and queen.

How To Install Package Bees

Complaints have been heard that package bees die even though installed in several different ways. Whenever a package or a colony of bees dies suddenly, **look for just one thing—starvation.** If installed in the hive during a period of real cold weather, the bees may form a cluster over empty combs, or away from the honey and starve to death before the weather turns warm enough to break the cluster.

The Spray Method of Introduction

The best method for installing package bees is the spray and direct release method. Here are the steps.

1. Prepare a sugar syrup by mixing equal parts of sugar and hot water. **While warm,** pour into a sprayer with a nozzle that will provide a coarse spray. If syrup turns cold, heat it.

2. Spray the package bees on arrival and again just before being taken to the apiary, so the bees will become gorged with food.

3. With the hives in place, remove 4 center combs. Spray the package again so the bees cannot fly. Open the package and shake bees into the hive. Keep the queen warm—perhaps put her in your shirt pocket while the bees are being shaken. Spray her with the warm syrup and release her carefully among the bees. Replace the frames, watching the queen to see that she is not injured.

4. Close the hive. Provide a small entrance and close it with grass which the bees can remove.

Be sure to provide plenty of honey or sugar syrup and pollen so that the bees can build up rapidly. Remember that the bees in a package are good for only one thing—to raise brood.

On about the third day, we inspect the packages to see if the queen is alive and laying. It is well to have a few additional queens on hand in nuclei or in storage in a nuclei, so that if a package is without a queen, it will not be lost but can be requeened immediately.

Installed by this method, most good queens will begin laying in less than 2 days.

STUDIES ON THE INFLUENCE OF POLLEN FEEDING AND BROOD REARING ON THE LENGTH OF LIFE AND THE PHYSIOLOGICAL CONDITION OF BEES

Newly emerged bees were kept in cages and fed with 28 different kinds of pollen. Some pollens stimulated the development of the brood-food glands, fat bodies, and ovaries, but others did not.

When for any reason, brood rearing stops in a colony which is well supplied with pollen, the brood-food glands and fat bodies of the bees develop, their longevity increases, and they attain the physiological condition of "winter bees." This can happen at any season: queenlessness, or even a short interruption of egg laying at swarming time, produces bees which approach this condition. Genuine winter bees differ from queenless bees, however, in that the ovaries of the latter also develop.

The results indicate that the longevity of bees is controlled mainly by their pollen consumption and brood rearing, and only to a lesser extent by their forging work.—By A. Maurizio. Reported by C. R. Ribbands in The Bee World.

HOW TO INSTALL PACKAGE BEES BY THE SPRAY METHOD

The pictures shown on the next page should be studied by every beekeeper. They show how to successfully install the bees according to directions by the Central States Bee Culture Laboratory, Madison.

Advantages of the Method

(1) As shown by tests with a great many colonies by the Central States Bee Laboratory, the queen starts egg laying much sooner when introduction is by this method than where the cage is placed in the hive.

(2) If the queen is **not released at once when left in the queen cage** under other methods, there is considerable danger of drifting bees because the queen is confined.

Study The Pictures

Reading downward in the first column of pictures, we have:

(B) On arrival the packages should be sprayed so as to be gorged with food. Spray on all sides of the package several times. It doesn't hurt to wet the bees thoroughly. Use a thin sugar syrup of equal parts of sugar and water, **and feed it warm.**

(D) Set out combs to allow space for shaking the bees. If at all possible, give combs containing honey and pollen; otherwise feed must be provided. Use the deep bottom-board to allow room for bees to spread under the frames, but reduce the entrance to the smallest opening. This should also be plugged loosely with green grass

or thin paper.

It is best to wait until evening if the weather is warm to avoid robbing.

(E) Spray the package thoroughly to quiet the bees and prevent them from flying just before shaking into the hive.

(F) Jar the bees into one end of the package. Remove the queen cage and also any cluster strips.

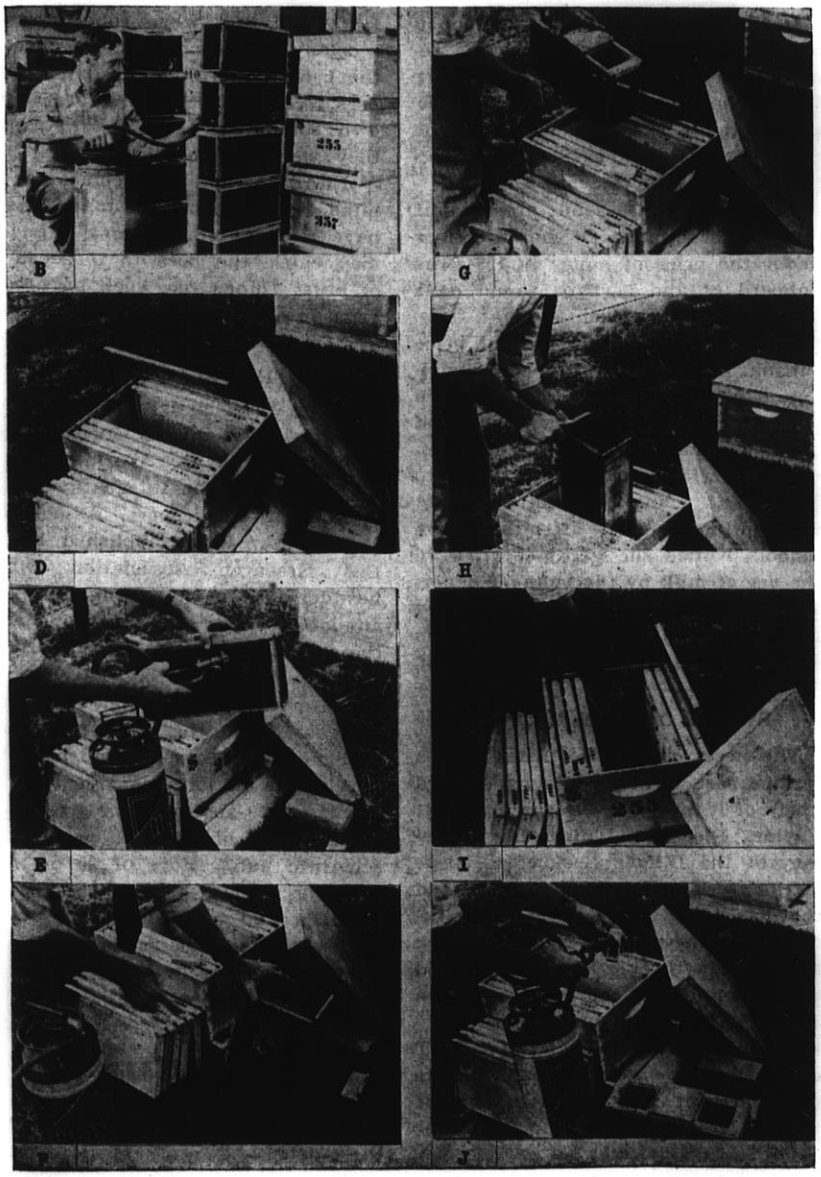
(G and H) Pour the bees into the hives. Dislodge remaining bees with a blow of a mallet or the fist.

(I) If the bees have been thoroughly sprayed they cannot fly and can be spread out over the bottom-board with a hive tool to prevent mashing of bees with frames.

(J) Spray the queen with warm sugar syrup to prevent her from flying. Carefully rip off the screen, slowly shake the queen onto the clustered bees. Watch her so that when the frames are put back she will not be injured.

If combs of honey and pollen have been given, nothing more need be done, and in two days time the queen will have started egg laying. If empty combs are given, of course feeding must be continued until nectar is available from the field.

If a sprayer cannot be obtained, a fruit jar with holes in the cover may be used to shake syrup onto the package, but it is not as convenient and takes much longer. Dipping packages is a messy job.



WANTED—BEES FOR POLLINATION

We need hundreds of colonies of bees to pollinate the fruit trees in Door County during the blossoming season in late May. We can make satisfactory arrangements with beekeepers who can rent their bees for pollination.

Here is chance for the beekeeper as the fruit grower to profit. For full details write to Reynolds Brothers, Inc., Sturgeon Bay, Wisconsin.

FEDERATION ADOPTS HONEY MARKETING AS MOST IMPORTANT PROJECT

"The American Beekeeping Federation recognizes honey marketing as the number one problem of the beekeeping industry and will give major attention to that problem until it has been relieved."

Such, in concise wording, was the decision of the Executive Committee of the Federation at their meeting in October.

There are many problems connected with marketing that need to be solved. There is the problem of quality, flavors, containers, labels; the kind of honey to be sold as table honey and as commercial honey. The matter of government price support, exports, and imports, new commercial uses of honey. There is the problem of watching legislation in the various states and by the Federal government; to support favorable laws and prevent the enaction of those unfavorable.

Then there is the problem of honey promotion to the consumer. That is being done by the American Honey Institute. The Institute has a fine record over many years and has established a high reputation among the editors of food pages in magazines and newspapers. We cannot afford to lose what has taken so long and so much to establish. We can, however, urge the industry to adopt a program which will lead the Federation and the Institute to work closely and harmoniously for the benefit of the beekeepers. It can be done, so let's do it.

No man who is enjoying life can be termed a failure.

UNORTHODOX TWO QUEEN COLONIES

By Marvin W. Kosanke, Ripon

Much has been written and said about two queen colonies. Authorities have proved their advantage in honey production and many progressive beekeepers have put this theory to good use.

But many beekeepers have not realized that they may have a considerable number of two queen colonies of the unorthodox type, namely mother and daughter queens in their apiaries.

During the past it has been my opportunity to observe a number of these colonies. This past season it was my privilege to do so again.

In the early part of May when I was clipping queens I found two colonies in my apiary that contained mother and daughter queens. Both of the old queens were active so I did not remove them. When I made my next inspection in ten days and every inspection thereafter I made it a special point to locate them and observe their actions. Upon every inspection throughout the months of May, June and until the 20th day of July both of the mother queens were observed in the hives. After the 20th of July I dispensed with all inspections and made no further attempt to locate the old queens. During this entime time both of the mother queens apparently were laying well along with the daughter queens. Just before the honey flow one colony contained eighteen frames with brood and the second one contained twenty-three frames with brood.

I am inclined to believe that many of our populous colonies contain two queens at one time or another but we are not conscious of the fact. When we are inspecting our colonies in the spring to locate queens, we do not look any further in the hive after we have found a queen. We take it for granted this is the queen that heads the colony and move on to the next one. This is a very natural conclusion and has been my own on many occasions. But sometimes when I have been curious about a colony with an unusually large amount of brood and bees I found this situation of mother and daughter queens exisiting in a number of instances. It is another of the many phases of beekeeping, one occupation that never lacks in interest and where the unusual is with us at all times.

MARKETING IS AN OLD PROBLEM

Sometimes we forget that our problems are not new but that they have existed for many years and that others before us have tried to solve many of them. So it is with this problem of marketing and honey prices. Back in the February, 1934, issue of this magazine, in the Beekeeping Section, we find this paragraph.

"Unfortunately, marketing has become such a serious problem that much of the job in keeping bees has been lost in recent years by the more serious study of how to get more money for our crop. We should not lose track of the other side of it, however, at our meetings and conventions."

PRICES IN 1934

In the same magazine is an item in which E. L. Badger of Janesville reported very little demand for Number I comb honey which is selling at 15c per section. He also reported the chain stores in Janesville selling extracted honey for 49c per 5 lb. pail.

Since that time, some progress at least has been made. Of course, a floor under the price of honey in 1934 was unheard of and perhaps would have been termed Socialism at that time. But the floor does help prevent price cutting, and the government's distribution of honey in the School Lunch Program is more valuable than most of us realize—it keeps our children in touch with honey. They learn to eat it, and many of them no doubt will continue to eat it after they leave school. Notice the great increase in the use of milk by the younger generation, due, we believe in large part to the School Lunch Program and its emphasis on the health value of milk.

SWEET CLOVER WEEVIL

The sweet clover weevil has been a serious pest. While we haven't heard much of it in a year or two, Mr. Hoyt Taylor, Pleasant Plains, Ill., secretary of the Illinois Beekeepers Association, writes that in a 20 acre field that has never grown sweet clover before and where there was no known field within three miles, "the ground was crawling with the weevils, as soon as the plants were 2 or 3 inches high." He made one application of DDT when, through observation, the insects were present and working on the plants. It did the trick and the clover made a fine growth.

NARCOTIZING BEES

"Narcose" Tablets Used in Germany to Subdue Bees

An article by Hans Geng of Germany in the January issue of the **Beekeepers Magazine** (Michigan) tells about a "Lachgas" and ammonium nitrate preparation, which is used in Germany by placing a tablet in a burning smoker and applying 5 or 6 puffs to the entrance. After a minute the bees in the hive are fully narcotized and subdued.

The narcotizing is used for the following purposes: 1. For introducing new queens. 2. For moving hives a short distance. 3. For uniting weak colonies. 4. For filling bees into small mating nucs. 5. For removing honey from cross bees. 6. To stop robbery. It is said that when robbers attack a colony they apply narcose and move the bees a short distance. When the bees recover, the robbers forget their own colony and stay in the colony they were robbing.

(Ed.) The question comes to our mind, however, that the material may have a more far-reaching effect—it may cause the bees to forget a lot of other things too, such as how to bring in nectar and how to rear brood.

THE BEE WORLD

Valuable Beekeeping Magazine From England Available to Our Members

The magazine **Bee World** is the official organ of the International Federation of Beekeepers' Associations and is now being published by the Bee Research Association, whose headquarters are in England. The annual cost of membership, including the monthly magazine, **Bee World**, is $5.60 per year.

The organization promotes research into many of the still unanswered problems of beekeeping and publishes the results in its magazine. It also reports by abstract important articles in all of the bee papers and scientific publications of 30 or more countries. These articles are on new methods and new discoveries.

Checks should be made payable to the Bee Research Association, Ltd. Send to Director, Dr. Eva Crane, 55 Newland Park, Hull, Yorks, England.

The most exquisite folly is made of wisdom spun too fine.—By "Poor Richard."

DISTRICT BEEKEEPERS MEETINGS
WISCONSIN STATE BEEKEEPERS ASSOCIATION

April 18, Friday. Southwestern District Meeting. Court House Sparta. Restaurants near by for noon meal.

May 7, Wednesday. Northwestern District Meeting. Legion Memorial Hall, Bloomer. Pot luck Luncheon.

THE PROGRAM

See the February issue of Wisconsin Horticulture for a detailed program.

All meetings start at 10:00 a.m. Forenoon program devoted to Beekeeping Management problems by H. J. Rahmlow, Sec. Wis. Hor. Soc. Annual Business Meeting at 11:30 a.m.

12:00 noon, luncheon. See luncheon arrangements mentioned after the date above. Bring a dish if there is to be a pot luck luncheon or stay and pay 75c for which additional food may be purchased.

Afternoon program begins at 1:30 p.m. Discussion by County Home Agent, County Agent, and a local banker.

What we have learned about nosema will be discussed by John Long, and This Beekeeping Business of Ours, by Henry Schaefer, of Osseo. Mr. Art Kehl will give a report on the Advertising Committee Program.

ARTIFICIAL FOUNDATION

A group of Russian beekeepers sought a substitute for wax, and in 1948 tried celluloid, since it was cheap. Photographic negatives were passed through a stamping machine and then were plunged into melted wax. Unfortunately the cellulose buckled. In 1950 they made some combs and the bees drew out the combs and the queen laid in them. The beekeepers concluded that if celluloid could be covered with a very thin sheet of wax then there would be a saving in wax used in foundations.—Reported by M. Simpson in The Bee World, England.

Wisconsin Horticulture

May, 1952

WISCONSIN HORTICULTURE

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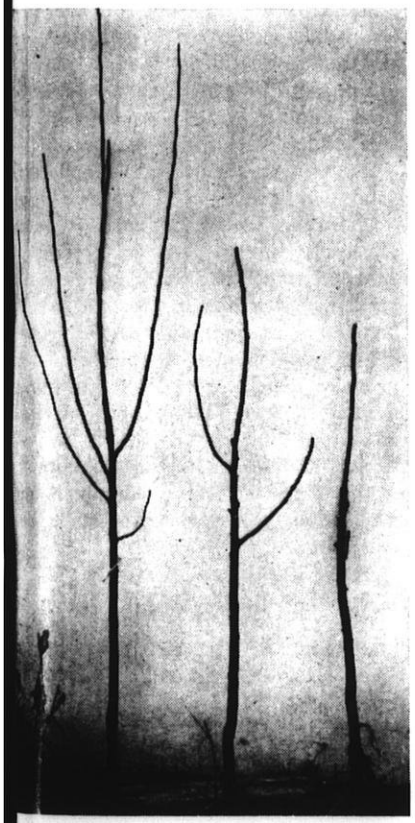
Subscription by membership in the Wisconsin State Horticultural Society. Annual dues are $1.25 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

At Planting Time It's Important To Properly

Prune The Young Apple Tree

By C. L. Kuehner

Under Wisconsin conditions, a low tree head is desirable. If possible, the first branch should be 24 to 30 inches from the ground. The low branches protect the southwest side of the tree trunk from the sun and they shade the ground, thereby conserving soil moisture. The main aims in pruning the young tree at planting are to: a) establish the proper height of the tree head; b) start a good frame work of foundation branches; c) control the height of the tree; d) keep the tree balanced; and e) eliminate narrow crotched branches.



Pruning the 2-year-old Apple Tree at Planting Time.

Tree at left: A fine 2-year-old tree. At planting time reduce number of branches as shown in center tree.

Center Tree: Prune to 2 well crotched foundation branches and leader. Leader about 18 inches long; side branches 12 to 14 inches long.

Right Tree: Had only very narrow crotched branches, not suitable for good foundation. Pruned to whip and leader reduced to 12 to 16 inches of 1-year-old growth.

Pruning the One-Year-Old Whip

To establish the tree head at the desired height, the one-year-old whip should be cut off at about 30 to 36 inches from the ground. This applies to most apple and pear trees when planted as one-year-old trees.

Pruning One and Two-Year-Old Branched Trees

Cherry and plum trees form branches during the first year, and should be pruned about the same at planting as the two-year branched apple and pear trees. To develop a well-shaped tree there are a few general rules to follow.

Establish the tree head. Select, if possible, two or three strong branches having wide angled crotches as the initial foundation branches. The lowest of these should be at least 24 to 30 inches from the ground on the southwest side of the tree if this is readily possible. The next branch chosen as the second foundation branch should preferably start approximately from the opposite side of the trunk and should be at least 6 to 8 inches higher upon the trunk than the first branch.

If a third branch can be left, it too should be spaced a similar distance above the origin of the second branch. The direction of the third branch should be more or less at right angles to the first two branches to provide good distribution of branches around the trunk. In cherry and plum trees, the spacing may be somewhat closer. With these trees it is usually possible to leave from three to four foundation branches at planting.

Balance the Foundation Branches. To develop a well balanced tree top,

How to Repair a Very Young Girdled Tree

Another way to repair a very young girdled tree consists of cutting off the tree above the girdle, then when the sprouts have grown out from the stump, remove all but one and train it the same as a young tree at planting time. This method applies to young trees of 1 to 1½ inch diameter, when the girdling occurred from 3 to 12 inches above the ground.

Elephants and horses can sleep while standing up—not to mention the father of a three-month-old son.

foundation branches which are approximately opposite each other should be nearly alike in their amounts of growth and height. If they are unequal, the larger one should be cut back enough to balance with its companion. It is usually desirable to leave these foundation branches from 12 to 14 inches long.

A branch of small diameter which is the companion of a larger diameter branch, on the opposite side of the tree, should be left relatively long so that its extra length may compensate for its lack of diameter. When so treated, all branches will tend to make more nearly uniform amounts of growth resulting in a better balanced, more symmetrical tree top.

Select a leader and regulate its height. Usually the highest, most central shoot or branch should be selected as the leader. Its purpose is to furnish additional foundation branches the following year. It should be left from 6 to 8 inches longer than the formation branches. If the leader is left much longer than the foundation branches, it is likely to form its next set of branches too far above the previous foundation branches. The result will be that the tree head develops height at the sacrifice of spread.

However, in the case of some varieties like the McIntosh and in the cherry which do not readily make strong leaders, it is desirable that the leader be 8 to 12 inches longer than the foundation branches. In this way it is not so likely to be suppressed to the extent where it may fail its purpose of furnishing additional foundation branches.

Remove all branches which have narrow V-shaped crotches, and cut away undesirable branches in the spaces between the selected foundation branches.

How to Prune Undesirably Branched Two-Year-Old Trees

A two-year-old tree which has no pronounced leader should be pruned so that one of the more upright branches may develop as a leader. To accomplish this, the branches near it should be entirely removed or they may be cut back so the branch selected for a leader may grow more strongly and thus become a good leader.

If all branches are lower than 24 inches from the ground, it is usually best to remove all of them except the one selected as the leader. This leader should then be cut back as suggested in the case of a one-year-old whip.

Concentrate Spraying

Experiences In Indiana. Scab Not Controlled at High Concentrations

Concentrate spraying will be one of the popular considerations for reducing the cost of fruit production in 1952. However, as reported at state meetings and in Hoosier Horticulture over the past four years, Purdue workers have not had satisfactory control of apple scab with 4X, 6X, and 8X concentrations of fungicides against apple scab. Due to experimental work and unsprayed checks, we have been working each year against a heavy carry-over of scab on the orchard floor. Each year our 2X plots have given scab control equal to or nearly as good as conventional spraying and insect control on 4X, 5X, 7X, and 8X plots has been satisfactory in all years of our work.

Concentrate spraying is a completely new method of applying fungicides and insecticides. There are many different types of applicators being offered for sale. As in the case of chemical thinning, there is not enough long-time experimental evidence available to set up definite directions which are entirely dependable. Our suggestion for 1952 is NOT TO REDUCE GALLONAGE to less than one-third of the amount per tree that you have been in the habit of using with conventional spraying. A "3X" would then be 3 X 8 or 2 pounds of wettable sulphur at one-third your normal gallonage per tree.

Scab Control

Do not depend on, say, 8 gallons of liquid lime sulphur to 100 applied at one-fourth normal gallonage per tree to burn out established scab infections. In our experience it acts as a protectant, the same as wettable sulphur. If scab infection on the spur leaves shows up after petal-fall, our experience has been that it requires a minimum of 1½ gallons of liquid lime sulphur to 100, applied at no less than ¾ normal gallonage per tree to burn out established scab (about 12 gals. for a two-side spray on mature trees). If care is taken to apply such a spray from 9:00 A.M. to 4:00 P.M., with a breeze and in sunny weather if possible, no foliage burn of consequence will result.

We would like to suggest that growers using the concentrate spraying method in 1952 apply at least one tank per spray with a conventional, high pressure rig for comparison, using the same chemicals and the same aged trees as in their concentrate block.

Travel Chart for Tractor in Concentrate Spraying

Miles per hour	1 m.p.h	1½ m.p.h	2 m.p.h	2½ m.p.h
Feet traveled per minute	88	132	176	220

Calculating Required Nozzle Delivery—Concentrate Spraying

1. 3X desired at 1½ mph tractor speed.
2. 6 gals. required for one-side cover—conventional
3. 3X equals ⅓ of 6 or 2 gals. concentrate for one-side cover.
4. Planting distances 35x35. Av. tree spread 30 feet.
5. 132 divided 35 equals approximately 4 trees passed per minute.
6. 4 trees x 2 equals 8 gallons.
7. BUT 20 feet out of every 132 feet is open space.
8. Therefor 8 gallons is only 112/132 of the total required delivery per minute or 9.4 gallons.

—By Sharvelle and Burkolder in Hoosier Hort.
(Condensed)

The beautiful Cyclamen was given the name of Sowbread in its native Persia, where it is plentiful, because its roasted tubers were fed to pigs.

FRUIT & VEGETABLE GROWERS SUPPLIES

It is Now Time to Order Your Requirements for 1952

WRITE NOW FOR PRICE LIST ON MATERIALS

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Sulphate of Ammonia
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Sheep Manure

Pruning Supplies—

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Tree Seal
Prunners
Pole Prunners
Tree Wound Paint

Spray Materials—

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Lime Sulphur (Liquid)
Lime Sulphur (Dry)
Kolofog
Kolospray
Sulfronx
Fermate
Ferradow
Carbamate
DN289
Chlordane
Toxaphine
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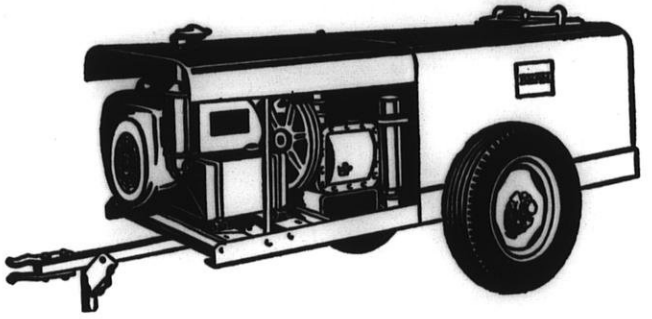
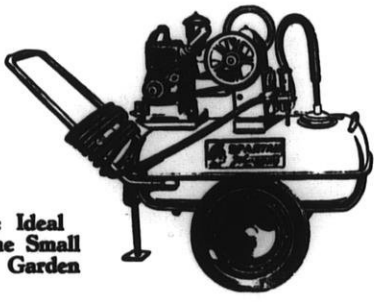
SPRAYERS

Orchard - Row Crop - Estate - Pest Control & Hand. All Models & Sizes.

See and read about the new Speed Aire attachment for high pressure sprayers. You can save time, labor and material with one of these pieces of equipment. You get full coverage from ground to the top of trees with full penetration for thorough coverage. The Speed Aire is the answer to the need for a lower cost air-type sprayer. It gives you true John Bean quality and performance. Write for prices and literature.

JOHN BEAN SPRAYERS





Spartan—the Ideal Sprayer for the Small Orchard and Garden

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NOTE—If your Sprayer or any other Equipment need Repairing, bring them in NOW.

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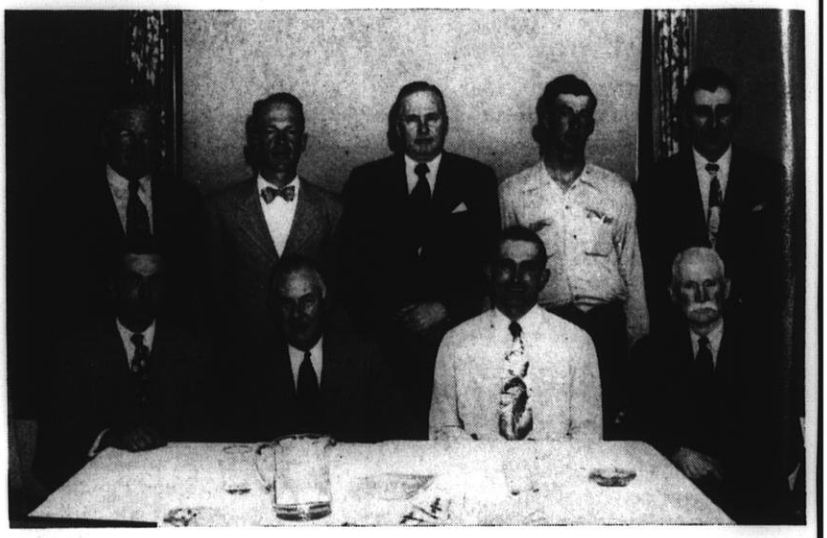
Wisconsin Apple Institute News

THE HONOR ROLL
GROWERS WHO HAVE JOINED THE WISCONSIN APPLE INSTITUTE

The following are growers who have paid their dues in the Wisconsin Apple Institute. Their contributions will carry on the program of promotion of apples throughout the state for the coming year. Any apple grower in Wisconsin who wishes to join, should send dues to Mr. Armin Frenz, Route 2, Cedarburg, Sec.-Treas. of the Wisconsin Apple Institute. Dues are $5.00 plus 50c per acre of bearing orchard. A regular bulletin is sent to all members at frequent intervals.

William H. Basse, Waukesha; O. Bolliger, Bayfield; Arthur Brunn, West Allis; Phillip Dell, Waldo; Frenz Orchards—Armin Frenz, Cedarburg; Arthur Halbig, Sheboygan Falls; Hall Enterprises, Casco; Kickapoo Orchard Co.—H. J. Schubert, Gays Mills; Arthur Kittinger, Caledonia; The Larsen Company, Green Bay; Henry Mahr, Caledonia; Milwaukee County Fruit Growers Association, Sec. Alfred J. Meyer, Milwaukee; Joseph Morawetz, West Bend; Earl McGilvra, Baraboo; Nieman Brothers Orchards, Cedarburg; Donald Otting, Cedarburg; Ozaukee County Fruit Growers Association, Armin Frenz, Sec., Cedarburg; Mearl B. Pennebecher, Waupaca; Aloys W. Pfeiffer, Racine; Racine County Fruit Growers Association, Ben Ela, Sec., Rochester; Sacia Orchards, Galesville; Sheboygan County Fruit Growers Association, Bernard Halbig, Sec., Sheboygan Falls; Ski-Hi Fruit Farm—A. K. Bassett, Baraboo; Ed. H. Stoeber, Madison; C. J. Telfer, Green Bay; Albert A. Ten Eyck, Brodhead; Willard O. Wagner, Cleveland; Washington County Fruit Growers Association, County Agent Earl Skaliskey, Sec., West Bend; R. L. Waehler, Lomira; Wisconsin Orchards, Inc.—R. H. Roberts, Gays Mills; and Oswald Baehman, Thiensville.

Some women have as much trouble finding a husband after they are married as they did before.



BOARD OF DIRECTORS WISCONSIN APPLE INSTITUTE PLANS PROGRAM FOR 1952

Seated from left: Armin Frenz, Cedarburg, Sec.-Treas.; H. J. Schubert, Madison, Pres.; Henry Mahr, Caledonia, Vice-Pres.; Albert Ten Eyck Sr., Brodhead, Guest. Standing from left: Marshall Hall, Casco; Albert Ten Eyck, Brodhead, Gilbert Hipke, New Holstein; Harold Steffen, Cedarburg; and Mearl Pennebecker, Waupaca. H. J. Rahmlow, Cor.-Sec., took picture.

A MAJOR PROBLEM

What Can The Grower Do If Consumers Want Fruit Early

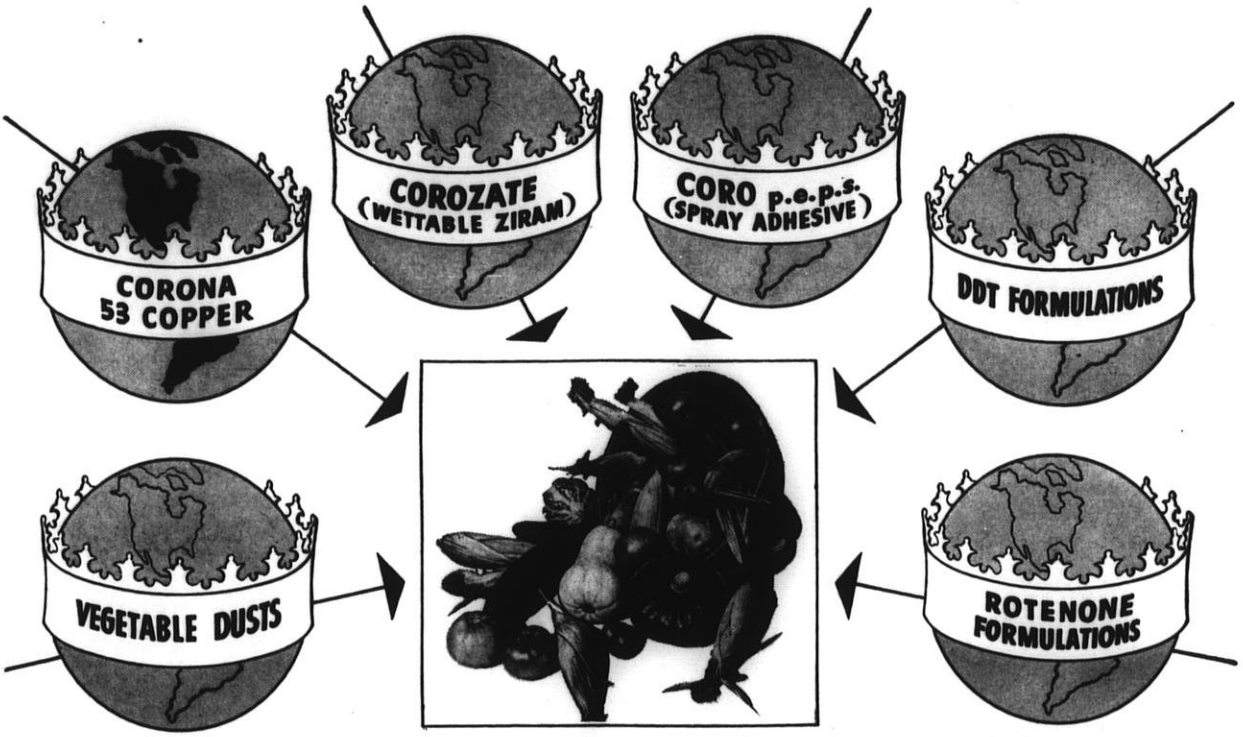
A letter from Mr. C. W. Haake of The Larsen Company, Green Bay, states: "I was interested in the resolution adopted by the Board of Directors of the Wisconsin Apple Institute concerning the picking and selling of immature fruit. How are we going to stop orchardists from continuing this practice? The very early market is very inviting to growers who want some "early" income. If the consuming public wants and will pay for immature fruit, how can we stop satisfying that demand. It's a major problem, isn't it?"

Yes, indeed it is. The problem has been considered by Horticultural Societies and Apple Institutes all over the nation. It has been solved in states such as Washington where the picking is under the supervision of inspectors who do not permit growers to pick the fruit until they have tested it for maturity. That practice means that when the fruit arrives on the market it will have its very best quality. We will be glad to hear from Wisconsin growers on this problem.

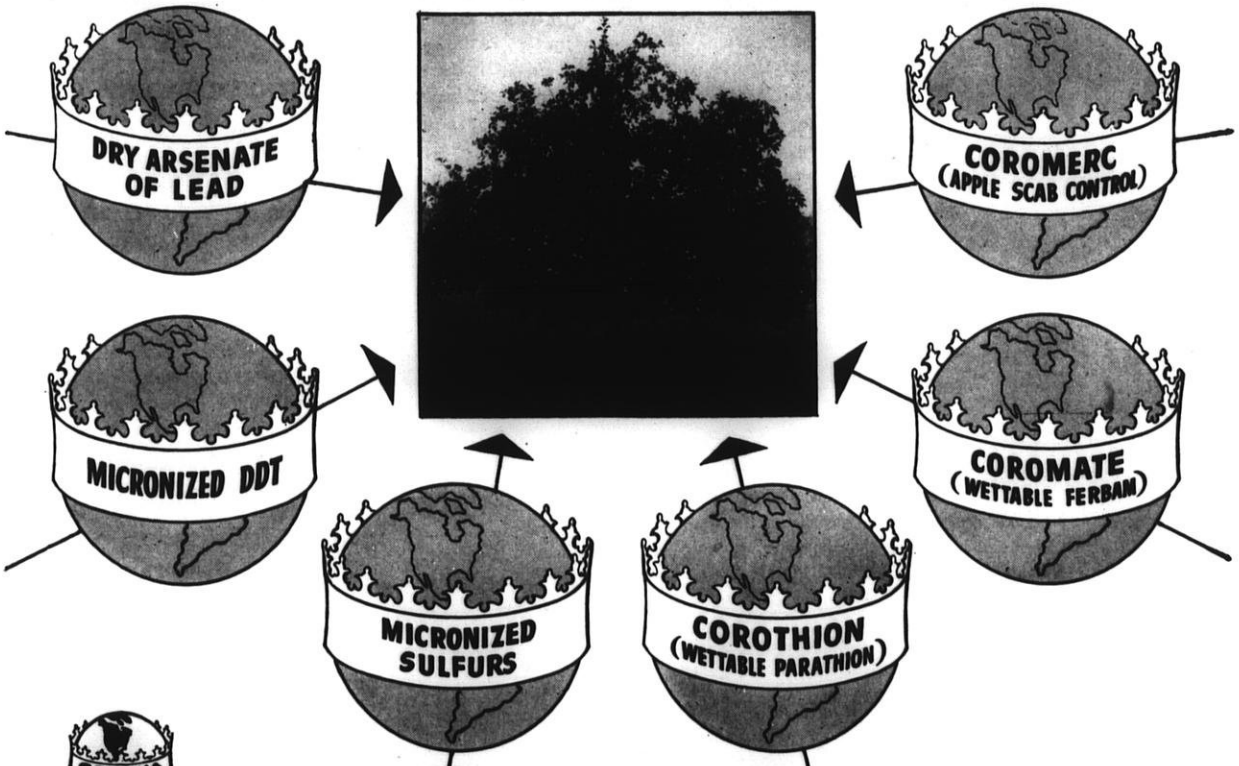
BEWARE OF CODDLING MOTH

"Codling moths overwintered exceptionally well this past winter," states Dr. C. L. Fluke of the Department of Entomology, U. W. "In checking quite carefully in early April in the Western part of the state we were unable to find a single dead larva. This indicates that the moths wintered in good shape and there is a possibility that the first brood may be larger than usual. Of course, much will depend upon the type of weather during the month of June and early July."

Conscience is that inner something that impels a man to tell his wife certain things before somebody else does.



Your Insurance for BETTER CROPS!



CORONA

CORONA CHEMICAL DIVISION

PITTSBURGH PLATE GLASS COMPANY

MILWAUKEE, WIS. MOORESTOWN, N. J.

Orchard Question Box

Answers by Dr. R. H. Roberts
Dept. Horticulture, U. W.

(Editors Note): These questions were asked by members of the Board of Directors of the Wisconsin Apple Institutite at their Spring meeting to be answered by Dr. Roberts.

Dwarf Apple Trees In Wisconsin

Question No. 1: Are there any dwarf varieties of apples recommended for commercial planting in Wisconsin?

Answer: This question takes a long answer as it involves both theory and practice. I do not recommend a dwarf commercial orchard. In the first place, our trees in Wisconsin are semi-dwarf as compared to some other sections. This is particularly true in the northern areas. In the second place, it costs too much to start a dwarf orchard because of the great number of expensive trees per acre. Pruning, fertilizing, spraying,and even harvesting of dwarf trees requires experience and counsel that no one I know of is in position to provide. I see no gain in dwarf trees beside height, and much more can be done by judicious topping than is commonly practiced now.

All common varieties can be obtained on dwarf stocks. No single stock is found to influence any two varieties alike. Nor do they react the same on different soils. There is consequently no blanket answer as to what the best stock is.

We have a small block of 7-8 year McIntosh on 6 Malling stocks in the University orchard. The trees on Malling IX are very small, have borne three "crops" and are now biennial. The others have the size of standard trees. Some are starting to bear and some appear to be several years away from good production.

I suggest that someone who is interested plant a **trial acre.** This could be started for somewhere between $575.00 and $750.00 and should only take a few seasons added care before bearing.

What piece of modern spray equipment would be used with trees planted about 12 feet apart?

Bees For Pollination of Apple Trees

Question No. 2: How important are bees in pollinating apple blossoms? How many colonies of bees do you recommend per acre? Should they be scattered throughout the orchard, or several placed in one spot?

Answer: Bees of some kind are essential in pollinating apple blossoms. A minimum number of colonies would be one per acre. I suggest scattering the hives as it appears that the bees which are freshly moved into an orchard start to work near the hives and spread to a greater distance after the blossoms have been "worked" near the hives. In a season of little good weather there would be an advantage in having the hives scattered.

Replanting Gall Infected Orchards

Question No. 3: Is it advisable to replant an old orchard site on which there were old trees badly infected with gall on the roots? How long a period should elapse before replanting young trees after the old trees have been removed?

Answer: An answer to this question depends upon what caused the galls. Send in samples. Dr. A. J. Riker, Plant Pathologist, says there should be a three year period before replanting if the trouble was the hairy-root type of "gall".

BEES BRING RESULTS IN THE ORCHARD

Grower Believes Bees Should Be Brought In During Blossoming And Taken Out Afterwards For Best Results

Mr. R. W. Hartwell of Madison, who operates orchards in Dane County and North Freedom, has some definite opinions about the value of bees in the orchard. It was suggested to him that there are small apiaries within a half mile or more of his orchard which would probably give him pollination. He disagrees and rents bees which he places in various parts of the orchard.

He made this statement: "We have a good sized block of Delicious that never had a crop until we brought in bees. We now rent bees and place them in different parts of the orchards and have had a good crop in that block for three consecutive years."

It is his opinion that bees located a half mile or more in a farming section would work on dandelions and would not come to the orchard to do a good job of pollinizing. By bringing bees in at the beginning of the blossoming period, they go right to work on the apple blossoms before they find the dandelions, and then the orchardist gets results. So it is Mr. Hartwell's opinion that bees should be brought in at the rate of 1 colony or more per acre at the beginning of blossoming and taken out before the calyx spray is applied because there is danger of poisoning the bees.

Great caution should be observed by the fruit grower in applying the pink spray. If poisons are applied when even a small percentage of blossoms are open during this spray, there is a heavy loss of bees because they bring in poisoned pollen which is consumed by the nurse bees in the hive. These die in large numbers for several weeks afterwards.

THE MEYER SWEET CHERRY RENAMED

Now Called Starking Hardy Giant

A letter from Mr. Paul Stark, Jr., of the Stark Brothers Nurseries & Orchards Co., Louisiana, Missouri, states that the Meyer Sweet Cherry has been named "Starking Hardy Giant". Several growers in Wisconsin are planning to test this new variety. We have mentioned several times in this magazine that the Meyer Sweet Cherry is a seedling grown by the Meyer family at Cedarburg, Wisconsin from whom the Stark Nursery purchased the rights to sell this variety.

The Stark Gold variety of sweet cherry is a good pollinator for the Stark Hardy Giant and carries about the same degree or hardiness in northern areas.

A tourist in the Ozarks called to the old woman sitting on the porch, "How far is it to the nearest town?"

"Pa figures it's about 10 miles that and about 12 back," she answered. "Which is on account of him walking straighter goin' than comin'."

KEEP SCAB OUT WITH DU PONT "FERMATE"

TOUGH ON DISEASE. "Fermate" fungicide gives foliage and fruit of apples and pears sure protection against scab. It also controls cedar-apple rust, black rot, sooty blotch and bitter rot.

EASY ON BLOSSOMS, LEAVES AND FRUIT. "Fermate" is safe to use through the scab season, provides disease control without burning or stunting even tender young growth. Safe in hot weather, too.

BETTER YIELD AND QUALITY. Leaf growth reaches full vigor when protected with "Fermate." Helps make higher yields of larger fruit with better finish.

COMPATIBLE WITH OTHER CHEMICALS. You can use "Fermate" safely with most pest-control products. For exceptional wetting and covering power, use Du Pont Spreader-Sticker in the spray mixture.

IDEAL FOR MANY FRUITS. "Fermate" also controls grape black rot, brown rot of stone fruits, peach scab, cherry leaf spot, cranberry fruit rots and raspberry anthracnose and leaf spot.

***See your dealer now** for Du Pont "Fermate" fungicide and other proved Du Pont pest-control products. Ask him for free booklets, or write to Du Pont, Grasselli Chemicals Department, Wilmington, Delaware.*

DU PONT CHEMICALS FOR THE FARM INCLUDE:

Fungicides: PARZATE® (Liquid and Dry), FERMATE,* ZERLATE,* Copper-A (Fixed Copper), SULFORON® and SULFORON®-X Wettable Sulfurs . . . *Insecticides:* DENATE® DDT, MARLATE® Methoxychlor, LEXONE® Benzene Hexachloride, KRENITE® Dinitro Spray, EPN 300 Insecticide, Calcium Arsenate, Lead Arsenate . *Weed and Brush Killers:* AMMATE,* 2,4-D, TCA and 2,4,5-T . . . *Also:* Du Pont Cotton Dusts, Du Pont Spreader Sticker, PARMONE® Fruit Drop Inhibitor, and many others.

*REG. U. S. PAT. OFF.

On all chemicals always follow directions for application. Where warning or caution statements on use of the product are given, read them carefully.

DU PONT

REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Orchard Notes

WHAT'S NEW IN ORCHARD MOUSE CONTROL?

Heavy Damage Brings Increased Interest In Successful Control Methods

By Wm. D. Fitzwater

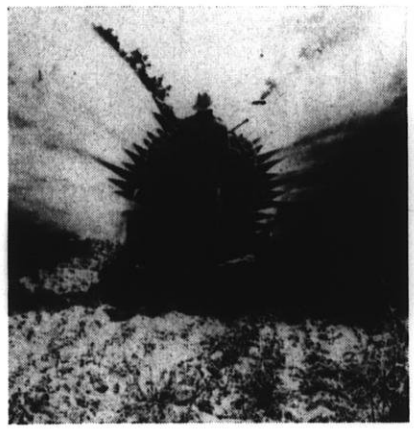
Most orchardists feel that there must be a simpler solution to the problem of orchard mouse control than the laborious method of trail baiting. We wish we could say there was, but the habits of the "wee beastie" have not permitted the ready adaption of new chemicals and methods to their control. **Ground sprays with a chemical that would either kill or repel mice from the orchard area have given inconsistant results. So far no chemical has done this effectively and cheaply.** In fact, we have found that pine mice are apt to be driven underground for periods of a week or more with the result that damage to the root systems has been increased.

Warfarin

Warfarin bait will kill meadow mice, but its success depends upon mice eating successive doses of poison bait over a period of two or more weeks. This involves the establishment of bait stations throughout the orchard that must be constantly serviced. We feel that these bait stations are never present in sufficient numbers to reach all parts of the mouse population. Further, the cost of constant refueling is impractical and unnecessary.

Strychnine and zinc phosphide baits will do the job with only one treatment. **The use of machines to broadcast the bait or lay bait trails has proven only 40-60 per cent effective.** Compared with 80 per cent effectiveness of a good trial baiting job, the 20-40 per cent margin may contain the ones that do the damage.

All the answers aren't known to this problem as yet. It may be that some modification of the above mentioned methods may prove to be the long sought for solution. At present, however, the Fish & Wildlife Service feels that the only certain orchard mouse control program includes trail



baiting in areas of heavy rodent pressure. A further warning—this coming winter is supposed to be the peak of mouse populations in the state. Considerable damage may be expected in those orchards that do not take thorough precautionary measures.

SOME ADVANTAGES OF SPRAY THINNING OF APPLES

By

Frank Horsfall, Jr., Dept of Horticulture, Virginia Experiment Station, In Virginia Fruit

1. Only a few minutes required to thin.
2. Spray thinning is not costly.
3. Better labor distribution to other jobs.
4. Tree vigor is preserved.
5. Better tree performance in following years if no spray thinning injury occurs.
6. Is likely to reduce biennial bearing.
7. Varieties for use as pollinators more likely to bear enough flowers each year.
8. Lower limbs may be overthinned.
9. Larger fruit size and higher yield. Fruit may mature earlier and have higher sugar content.
10. Selective action is to drop the weaker fruits.
11. Thin fruit when much smaller.

Do not spray thin:

1. Trees damaged by mite or insect injury the year before.
2. Unless heavy set is expected.
3. Trees which in past have failed to set after heavy bloom.
4. Apple trees less than 12 years old.
5. Following poor pollination weather (Rain and cold).
6. Where bee activity was not enough at bloom time.
7. Where trees have received too little nitrogen.
8. Trees low in vigor.
9. If foliage was spray injured the year before.
10. Where trees grow too close together and shade one another.
11. More than ten trees of each variety selected at bloom time. For comparison mark at bloom time ten other similar trees not spray thinned.

COMPARATIVE EFFECTIVENESS OF SPRAY MATERIALS FOR SCAB CONTROL

Commonly used fungicides vary somewhat in their effectiveness at different stages of scab development. While growers in Wisconsin know full well that the best way to control scab is to have the leaves covered with fungicide before infection occurs, the following table from the Proceedings of the Virginia Horticultural Society Annual Meeting will be of interest to Growers. It shows when fungicides are the most effective.

TIME OF SPRAY APPLICATION

Fungicide	Before Infection	During Rain	After Infection Scab Visible	After Infection Not Visible
Elemental sulfur	Good	Good	Poor	Poor
Liquid lime-sulfur	Good	Poor	Good	Good
Ferbam	Good	Good	Poor	Poor
Tag or Puratized	Fair	Fair?	Fair	Excellent
Crag 341SC	Excellent	Good?	Poor	Poor
Phygon	Excellent	Good?	Poor	Fair to good


Corn


Apples


Grapes


Celery


Beans


Onions


Olives

NO MATTER WHAT YOU GROW....


Wheat


Cabbage


Citrus


Cotton


Strawberries

NO MATTER WHERE YOU GROW IT....

REMEMBER— **PARATHION** KILLS MORE

TYPES OF INSECTS ON A BROADER RANGE

OF CROPS THAN ANY OTHER INSECTICIDE


Turnips

Consult your local agricultural authorities
on the advantages of PARATHION insecticides or write for
Parathion Grower's Handbook.


Pears

AMERICAN Cyanamid COMPANY

Manufacturer of *Thiophos*® Parathion Technical

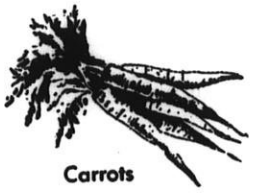
Agricultural Chemicals Division
30 Rockefeller Plaza, New York 20, N. Y.

AVAILABLE FROM NATIONAL MANUFACTURERS


Cherries


Potatoes


Peaches


Carrots


Tobacco


Spinach


Tomatoes


Plums


Beets


Peas

The Use Of Chemicals In

Weeding Vegetable Crops

By John A. Schoenemann
Dept. of Horticulture, U. W.

The number of crops in which weeds can be successfully controlled through the use of chemicals is increasing. The number of different kinds of chemicals available to do this job is also increasing. As a result, the field of chemical weed control is rapidly becoming more complex for vegetable producers.

Growers should thoroughly familiarize themselves with the nature of the chemicals they intend to use. It is also important to know in which crops a particular chemical can be safely used. Knowledge of the proper time of application is highly essential to success. The exact amount of a material which is recommended should always be strictly adhered to in order to avoid disappointing results.

Amounts of Chemical to Use

We often hear various terms being used in connection with chemical weed control recommendations. Amounts of material to use are most frequently stated in terms of pounds of acid equivalent or active ingredient per acre. Acid equivalent in the case of 2,4-D and TCA chemicals refers to the actual amount of pure acid in a given preparation. This information appears on the chemical container. Labels on liquid formulations of 2,4-D will state the number of pounds of acid equivalent contained per gallon.

In the case of other chemicals, the term active ingredient refers to the actual amount of active chemical in a certain preparation. For example, if a grower wishes to apply nine pounds of actual potassium cyanate per acre, ten pounds of a material containing 90% active ingredient must be used.

Timing of weed-killer applications is often stated as either a pre-emergence or a post-emergence treatment. The term pre-emergence refers to applications of a weed killer after a crop is planted but before any crop seedlings appear above the soil surface. Post-emergence simply means application of an herbicide after the crop plants have emerged.

As an herbicide, the chemical 2,4-D has limited use in growing vegetable crops. The amine form should always be used in those cases where 2,4-D is called for, because of its non-volatile nature. Since this chemical is highly toxic even in small amounts, sprayers should be carefully washed with ammonia solution or trisodium phosphate before it is used for other purposes.

Dinitro compounds should be handled with care. These materials can be injurious to human health if the fumes are breathed or excessive skin contact is permitted. Weed control obtained when dinitros are used as post-emergence sprays is greatly influenced by temperature. Best results are obtained when temperatures range between 60 and 80 degrees at time of application.

Stoddard Solvent

Stoddard solvent is a light petroleum oil which is used undiluted for post-emergence weed control in carrots, parsnips, dill and parsley. When used as a post-emergence spray, Stoddard solvent has proven most effective if applied at night. It can also be used in any vegetable crop at the rate of 80 to 100 gallons per acre before the crop seedlings emerge from the soil.

Potassium cyanate is best used as a contact herbicide on very small weeds. It is ineffective on grass weeds. Like Stoddard solvent, it can be used in any vegetable crop as a pre-emergence treatment where serious infestations of broadleaved weeds threaten. Usual rate for this purpose is 15 pounds per acre in 80 gallons of water plus a wetting agent.

The weed killing power of **calcium cyanamid,** in a granular or dust form, depends upon toxic products which are formed when it comes in contact with moisture. The dust form should be applied when weeds are already emerged and sufficient dew is present on their leaves.

PCP is a relatively new broadleaved-weed killer. The sodium salt form is the most reliable for use as an herbicide. This chemical is quite irritating to nose and throat membranes if accidentally breathed.

Sodium TCA has been used widely on hundreds of acres of **red beets** in Wisconsin this past season to control annual grass weeds. Recommendations call for eight to ten pounds of TCA per acre applied about two days before beets emerge.

For the Asparagus Bed

Chemical weed control is particularly helpful in perennial type crops such as asparagus beds. Use a pre-emergence spray of 2,4-D at two pounds per acre in established beds after discing in the spring, or following post-harvest discing when no spears are showing. This treatment will control most annual broadleaved weeds and some annual grasses. Do not treat more than once in any year. **Sodium TCA** at eight to ten pounds per acre can be used in established asparagus beds where annual grasses are the main problem.

Granular calcium cyanamid can be used as a post-emergence treatment in growing asparagus during the cutting season, when weeds are one to two inches tall. Use one pound to 30 feet of row in an 18-inch band over the row. When the dust form is used apply 75 to 100 pounds per acre when weeds are wet with dew and before they are more than two inches tall.

Weed control in onions is a difficult problem. Because they do not shade the soil enough to smother weeds, onions must be weeded all season long. Some growers report fairly good results using potassium cyanate, for both pre-emergence and post-emergence use.

Several different chemicals can be used for pre-emergence weed control in **potatoes on muck soils.** One to two pounds of 2,4-D per acre will control broadleaved weeds. Eight to ten pounds of dinitro can control broadleaved weeds and under certain conditions will also control

(Continued on Page 224)

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

BERRY GROWERS PROPOSE STRAWBERRY INSTITUTE

Board of Directors Meet In April

At the Spring meeting of the Board of Directors of the Wisconsin Berry and Vegetable Growers Association members transacted a good deal of business, including plans for two summer meetings and field tours as given in this issue.

The Board recommended that the dues in the Wisconsin Berry and Vegetable Growers be raised to $1.50 per member per year. This will be voted on at the Annual Convention in the Fall.

Every effort is being made to increase the membership in the Association. All Berry and Vegetable Growers are urged to send their dues of $1.25 for membership to Mr. E. L. White, Box 147, Fort Atkinson.

There was considerable discussion on a project proposed by Mr. H. J. Rahmlow, Madison, that an organization similar to the Wisconsin Apple Institute be formed as a part of the Wisconsin Berry and Vegetable Growers Association, to be called the Wisconsin Strawberry Institute. Object of the organization would be to raise funds and promote consumer interest in strawberries preceding and during the harvest season.

It was noted that quite often during the height of the harvest season prices drop. An active promotional program all over the state would increase the demand thereby helping prevent market surpluses. It was suggested that the dues in the Wisconsin Strawberry Institute might be 1c per crate and all berry growers in the state who grow strawberries for commercial sale be invited to participate.

'Tis said that the Tarahumare Indians believe that all plants have souls, and so they thank the plants each time they pluck off a leaf or flower.

WISCONSIN BERRY AND VEGETABLE GROWERS ASSOCIATION, BOARD OF DIRECTORS

Meeting in Fond du Lac on April 4, the Board planned two summer meetings—a Berry Growers Meeting at Sturgeon Bay and a Vegetable Growers Meeting at Madison.

Seated from left: Mrs. Charles Braman, Waupaca; E. L. White, Fort Atkinson, Sec.; Harry Barlament, Green Bay, Pres.; Charles Swingle, Sturgeon Bay, Vice-Pres. Standing from left: F. W. Van Lare, Oconomowoc; Chris Olson, Berlin; Fred Magnus, County Agent, Appleton, Advisor; and Charles Braman, Waupaca, Past-Pres. Mr. H. J. Rahmlow, Cor.-Sec., took picture.

SUMMER MEETING
BERRY GROWERS SECTION
Wisconsin Berry and Vegetable Growers Association
STURGEON BAY, TUESDAY, JULY 1

10:00 a.m. Assemble at Branch Experiment Station, Highway 42, North of Sturgeon Bay.

What we will see: Experimental work in strawberries and raspberries; variety tests. Also grain and fruit tree experimental plots for those who care to see them. Tour conducted by Mr. Frank Gilbert, Station Superintendent and Staff.

12:00 M. Meet at Reynolds Brothers, Inc. factory for luncheon. Bring picnic lunch.

1:15 p.m. Business session.

1:45 p.m. Tour to 2 commercial berry farms.

More details in our June issue.

Vegetable Growers Question Box

CONTROL OF VEGETABLE INSECTS

The following questions were answered by Dr. R. Keith Chapman, Department of Entomology, Univ. of Wis.

Cutworms

QUESTION: Last season cutworms almost ruined a large patch of melons. Is there a control that will prevent them from destroying many plants?

ANSWER: Most of the damage from cutworms in melons can be avoided by the use of dusts or sprays applied at the proper time. As soon as injury from cutworms appears the plants and the adjacent soil about 6 inches on both sides of the row should be dusted or sprayed with about two pounds to the acre of actual toxaphene, chlordane or D.D.T.

Cucumber Beetles

QUESTION: Two kinds of beetles were serious pests on our cucumbers and squash last year. One had stripes and another had spots. What are these insects and how can they be controlled?

ANSWER: The insects are the striped and spotted cucumber beetles. They appear very suddenly in the spring often soon after the plants come up and can do a considerable amount of damage if the grower is not prepared for them. D.D.T. dusts of 1 to 3% concentration dusted on the plants very lightly will do an excellent job of control on these insects. Some cucurbits are very sensitive to D.D.T. injury and care must be taken not to put too much on. Dusts of 3% purified D.D.T. or methoxychlor are very effective and less harmful to the plants.

Radish Maggot

QUESTION: Sometimes I can grow radishes without injury and at other times a maggot will almost ruin all the radishes. Is there some way of protecting the plants from the maggots?

ANSWER: Radish maggots can sometimes be avoided by making several plants at about weekly intervals—if one planting is badly infested the others before or after it are likely to be less seriously attacked. Insecticides can be used to control these maggots by dusting the plants and adjacent soil with a 5% chlordane dust or a 1% aldrin dust as soon as the plants come up. Another application should follow in a week or 10 days.

Cabbage Maggot

QUESTION: After we set out our cabbage plants, we lose a great many of them. The stems seem to turn brown. What causes it and what is the control?

ANSWER: The same control as suggested for the maggots on radish will control the insects on cabbage and cauliflower. Plants being transplanted may be protected by adding 1 to 2 ounces of chlordane or aldrin per a 50 gallon barrel of transplant water.

WHITE GRUB CONTROL IN STRAWBERRIES

QUESTION: What is the best method of controlling white grubs in a strawberry patch?

ANSWER: By Dr. C. L. Fluke: At present we recommend chlordane, although aldrin and dieldrion probably will be just as good. I am judging this by our results with the plum curculio larvae. However, I think growers should stick to the chlordane at the present time.

Dr. Keith Chapman of the Department of Entomology recommends using chlordane as follows. Apply from 6 to 8 pounds of actual chlordane per acre either as a dust or spray. Then work it into the soil with cultivator, disk or rototiller. The smaller amount, 6 pounds per acre, is recommended for sandy soils. As the soil gets heavier, more is used. 8 pounds per acre is used on heavy or muck soils.

NATIONAL VEGETABLE WEEK GOV. KOHLER ISSUES PROCLAMATION

Governor Kohler of Wisconsin has issued the first National Vegetable Week proclamation and has invited all of the other 47 Governors to recognize this outstanding agricultural event in their states during the period July 31-August 9, 1952.

National Vegetable Week and the American Vegetable Queen contest compliment each other. The vegetable grower's daughter, between the ages of 17 and 23, who wins the national contest, will be given an all expense trip from her home to the Tampa Convention of the VGAA, December 2-6, where she will find royal entertainment. All State Queens will be members of her court. Details concerning the American Vegetable Queen Contest may be had by writing the National Chairman, Paul Ruetenik, Vermillion, Ohio.

Everyone concerned with agriculture and the American economy should have an interest in National Vegetable Week, which is the only attempt on the part of the Vegetable Growers, as growers, to promote their products in the fierce competition for the attention of consumers.

In 1951, 27 Governors and 131 Mayors issued National Vegetable Week proclamations in recognition of this effort to prevent economic waste of vitamin filled, health giving cooli-cious vegetables during the summer peak production period.

ANTHRACNOSE ON RASPBERRIES MAY BE SERIOUS

Spray Before and After Blossoming

Experiments in several states have indicated that raspberry anthracnose can be controlled by spraying with a delayed dormant spray of lime sulphur, and then spraying just with Furbam, 2 pounds per 100 gallons of water, just before and again just after blossoming.

* * *

The tall African Marigold belies its name. It really originated in Mexico and would more aptly be named "Aztec" Marigold.

STRAWBERRY VARIETY TRIALS

Report of Variety Tests in Missouri, Published in Horticulture News Missouri Horticultural Society

Varieties behave differently in different sections of the country—under different climates and soil conditions. Therefore, tests in Missouri are probably not applicable in Wisconsin entirely. However, a report of the yields and remarks as to quality from a trial in Missouri is of general interest to growers and so we publish this report for what information it may contain.

"A three-week period without rain occurred during harvest season. Yields would have been at least 50 per cent higher if sufficient moisture had been available. The planting was covered with straw before the low temperatures of Thanksgiving week in 1950; consequently, low yields of a variety cannot be attributed to winter injury.

Yield Data, 1951

	Crates Acre	Remarks
Armore	257	Large, rough, firm, good flavor, bright color.
Aroma	128	Large, light red, flavor poor.
Blakemore	240	Medium size, light red, very acid, necked, firm.
Fairpeake	19	Size quite variable, excellent flavor.
Maytime	75	Medium size, dark red, prominent seeds, early.
Midland	75	Large, rough, excellent flavor.
Premier	138	Medium size, very soft, flavor good.
Suwanee	87	Small, good flavor.
Temple	185	Dark red, excellent flavor, firm, prominent seeds.
Tennessee Beauty	91	Green tip, large size, necked.
Tennessee Shipper	71	Small, flavor poor, very acid.

"Due to a late spring all varieties tended to bloom at the same time and there was little difference between varieties in date of first picking. Armore was still bearing well after other varieties had stopped.

"In 1951, the varieties Sparkle, Fairland, Tennessean (965), Robinson and Vermillion were added to our trials.

"The season of 1951 was not typical, if there is such a thing as a typical season, and perhaps some of these varieties will behave differently next year. It should be pointed out that the recommended varieties, Armore, Aroma, Blakemore, Premier and Temple continue to lead in yields.

"Of the varieties added to the planting in 1951, Tennessean was the leading plant maker. It was about as prolific as Blakemore.—By Delbert D. Hemphill.

* * *

In ancient times, victorious warriors were crowned with various types of leaves—Palm, Olive, Laurel, Myrtle, Ivy and Fennel.

* * *

SMALLER STRAWBERRY ACREAGE

The U. S. Department of Agriculture in preliminary estimates forecasts that about 150,850 acres of strawberries for picking this year. It is about 7% smaller than last year, but about 27% larger than the 1941-50 average.

Berry Plant Market

From the Editor's Desk

MAY COVER PICTURE— OUR FARM

Our cover picture this month is a photograph of a painting entitled "our Farm" by Mr. Chris. Olson of Berlin. It is another of his very homelike and typically Wisconsin scenes of which we will have a series on covers of Wisconsin Horticulture. Of the picture Mr. Olson writes:

"The picture is of our farm where most of the food shown in the various pictures we have painted, was raised and preserved. We have a seven acre farm from which we make our living. The cow supplies us with milk and cream, and sometimes we make our own cheese. When we moved to this small farm ten years ago, there were predictions that we would not stay here long. However, it is not possible for everyone to have a large farm. We have obtained a good living from this small place, and also very good health.

"The cow and the horse are very good pets. The horse follows us around and begs for strawberries."

INTERNATIONAL FLOWER SHOW AT HAMBURG

The 1953 International Flower Show, called the International Hamburg Garden Show will be held from May through October, 1953 at Hamburg, Germany. It will be held in the well-known "Planten un Blomen"—over 75 acres have been set aside for the show that will demonstrate horticultural achievements of firms of all nations that take part.

APPLE SAUCE CAKE

Cream ½ cup butter and 1 cup brown sugar and 1 cup white sugar. Add 3 eggs and beat well. Stir in 2 cups unsweetened applesauce. Add 1 cup each of raisins, chopped dates, and broken nut meats. Sift 3 cups flour, 2 tsp. soda, ½ tsp. salt, and 2 tsp. cinnamon. Mix dry ingredients with creamed mixture well. Bake in two greased bread tins at 350 degrees for 1 hour. **By Mrs. Henry Wiechert.**

WE APPRECIATE THIS

Early in April Mr. J. F. Magnus, County Agent of Outagamie County, at Appleton gave a program over Radio Station WHBY in which he stated:

"I would like to call the attention of gardeners to the fact that there is an opportunity for you to get information in gardening, fruit and berry growing by joining the Wisconsin State Horticultural Society or the Wisconsin Berry and Vegetable Growers' Association. The State Horticultural Society puts out a splendid little magazine known as "Wisconsin Horticulture". It has splendid articles from authoritative sources on methods of controlling scab, insects, on methods of fertilizing the orchard, on growing berries and vegetables, advertisements of licensed nurseries, growing of annual and perennial flowers, making displays and arrangements of flowers, methods of pruning shrubs, also many fine articles on beekeeping and the value of bees to the gardener, the smaller producer and the farmer."

Mr. Magnus then gave the names and addresses of the secretary and president of some of the affiliated organizations such as the Wisconsin Gladiolus Society, and the Wisconsin Beekeepers Association, also suggesting that anyone interested might write to this office.

An optimist is the middle-aged guy who thinks the dry cleaner is shrinking the waistband of his pants.

LILACS AT THE UNIVERSITY ARBORETUM

You Are Invited To Visit The Lilac Planting During The Blooming Season.

The lilac planting at the University of Wisconsin Arboretum in Madison has now reached a stage where it is attracting visitors all over the state. There are 164 varieties of lilac hybrids and 17 different species such as the Korean (Early), Chinese, Japanese, Persian, Hungarian, etc.

The blooming season varies, and may be anywhere from May 18 through June 1st. However, newspapers usually carry the date, or information may be obtained by writing to the Department of Horticulture, University of Wisconsin, Madison, as to the best time for visiting the Arboretum.

The Madison Garden Club has helped actively in creating the lilac planting since its beginning, providing funds for the purchase of new varieties.

Directions for reaching the Arboretum: follow highway 18 and 151 to the southwest side of Madison. In Nakoma, it is known as Nakoma Road. At Yuma Street, turn south to the Arboretum entrance. Follow this until you see the lilacs. Coming from the east, take Mills Street south to the bridge, cross the bridge and follow the Arboretum drive eastward until you see the lilacs.

REVEREND A. H. OTTO

Reverend A. H. Otto of West Bend, a Past President of the Wisconsin Garden Club Federation, and an Officer of the Wisconsin State Horticultural Society passed away on March 28. He was a charter member and officer of the West Bend Garden Club, and a very active gardener. He was pastor of the Methodist Church in West Bend.

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
JOHN GATES
Two Rivers

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

TREASURER
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

ENJOY GLADIOLUS IN YOUR FLOWER GARDEN

By Robert O. Magie, Gladiolus Investigations, Florida.

The growing of gladiolus is a fascinating hobby for many people. Men of various professions and businesses have found the breeding and growing of new varieties so interesting that they retired to make gladiolus their hobby or major source of income.

For best results, gladiolus plantings must be exposed to full sun for the larger part of daylight. Competition with tree or shrub roots is very undesirable. Gladiolus do well in sandy or clay soils that are well drained and contain some organic matter. The lack of organic matter may be overcome by more frequent watering and by mulching. If drainage is poor, plant the bulbs in hilled rows.

Depending on how high the rows are to be hilled, plant bulbs in a very shallow furrow or as deep as 4 inches. Place each bulb in furrow with basal scar down and space two or three bulbs per foot of row length. Cover large bulbs with 4 or 5 inches of soil and the smallest bulbs and bulblets with about 2 inches. Five inches of soil usually will hold heavy spikes upright in spite of wind and rain, if the soil surface around the plants is not disturbed for three or four weeks before flowering. Some gardeners prefer to plant bulbs about 6 inches apart each way in flower beds or in borders.

How to Apply Fertilizer

Fertilizer may be applied several days before planting, either broadcast before spading or mixed in the row. It also is applied to soil surface between rows while the plants are growing. About one-third of the fertilizer is used before planting or just after the shoots come up. The remainder is used in two or three top-dressings about 3 weeks apart. Well-rotted manure or compost may substitute for some of the fertilizer, but fresh manures cause rotting of bulbs.

Shallow cultivations should be made when necessary to control weeds. Cutworms are controlled by dusting with 5 percent chlordane. First dusting should be made when the shoots begin to emerge. This dust also controls thrips which cause silvered areas on leaf bases, and later ruin the flowers.

IRRIGATION FOR GLADIOLUS

The most important factor in producing large, high quality flower spikes has been irrigation. Most growers provide good conditions of nutrition, but many have failed to get the size of spike desired because they did not understand the water requirements of most gladiolus varieties. Optimum soil moisture conditions are provided by a water table held at a uniform height, or by overhead watering applied frequently but not too heavily. Fluctuation of soil moisture should be held to a minimum.

Instead of flooding the tile or ditches to bring the moisture up in the soil and then turning off the water, keep the water running slowly so as to maintain a constant level of water at a depth of 18 inches or whatever is required to keep the soil moist except for a shallow dust mulch.

During rains, turn off the water and allow most of the excess to drain away. Stop the drainage before the water reaches its former level. Turn on water again when necessary to maintain level. This is **very important after heavy rains** when the lower roots are rotted off due to excess water and lack of oxygen. Therefore, after damaging rains keep the moisture level higher than normal for several days in order to keep the surface roots alive and to allow for new root growth.

Never apply fertilizers or top dressings after very heavy rains unless they are applied sparingly so as to avoid injuring the roots at the soil surface. It would be safer at such time to apply fertilizers and nutrient solutions by spraying the leaves. **By Robt. Magie, Gulf Coast Exp. Station, Florida. In Bulletin for Glad Growers.**

CONTROL OF FUSARIUM ROT IN GLADIOLUS CORMS

A summary of the 1951 gladiolus disease control studies in Illinois by J. L. Forsberg, was recently published in the Florist's Review.

In a study of fusarium rot control, Aagrano 350 Orthocide 406, carbide and carbon experimental fungicides 224 and 5400 and New Improved Ceresan were compared as preplanting corm treatments on the varieties Mother Kadel, Oriental Pearl and Picardy. Aagrano and New Improved Ceresan were used as 15-minute dips at the rate of one ounce in three gallons of water, with Dreft as a wetting agent. The other three materials were used as dusts.

All treatments reduced fusarium rot. Aagrano 350 and New Improved Ceresan were essentially equal in effectiveness, while the other materials were somewhat less effective. None of the materials was injurious to the plants or corms.

Two soil fumigants, CBP-55 and OS-1199, supplied by Shell Oil Co., were used alone and in combination with the New Improved Ceresan corm treatment.

Before the fumigants were applied to the soil, the previously opened rows were closed and raked smooth. CBP-55, a liquid, was applied May 17 with a Fumigun injector at 12-inch intervals, about six inches deep on each side of the rows. The Fumigun was set to deliver 1.7 c.c. of CBP-55 for each injection. On May 23 the rows were spaded so that the soil was completely turned over; then the soil was raked smooth, and a second application of CBP-55, of the same amount as the first application, was made in the same way. On May 29 the rows were reopened, and the corms were planted.

Fumigant OS-119, a powder, was evenly distributed on the bottom of the furrow at the rate of 62.5 grams per 10 feet of row. The powder was stirred into the soil with a rake and covered lightly. Corms of the varieties Dieppe, Mother Kadel, Picardy and Silver Wings were set in the furrows and covered immediately. One-half of the corms of each variety were treated with New Improved Ceresan immediately before planting, and the other half was given no preplanting treatment.

Fumigant CBP-55 was beneficial only on the variety Dieppe. Fumigant OS-119, when used alone, resulted in an increased yield of rot-free corms in all varieties, as compared to the respective untreated checks. However, the combination of OS-1199 used as a soil treatment and New Improved Ceresan used as a corm treatment resulted in plant injury in all varieties except Dieppe. This injury was expressed in the yields of total corms, rot-free corms and average weight of harvested corms.

Resistance To Fusarium

Fifty varieties were tested for resistance to fusarium rot by inoculating 25 corms of each variety before planting. Spirit of St. Louis and Yellow Herald showed greatest resistance to fusarium; Annamae, Mrs. Lulu Hunt, Pacifica and Valeria showed some resistance, and one to three plants of Betty Coed, Hopman's Glory, King Tan, Lavender Prince and Snow Princess survived and produced rot-free corms. In the remaining 39 varieties, no plants in the inoculated series survived.

ADDITIONAL GLADIOLUS SOCIETY COMMITTEES

AUDITING: Chester Harrison, Waldo, Chairman; Peter De Pagter, Cedar Grove; Walter Axel, Sheboygan.

NOMINATING COMMITTEE: Leland Shaw, Milton, Chairman; James Torrie, Madison Chapter; G. H. Thompson, Manitowoc Chapter; Paul Ravet, Twin Cities Chapter; Dr. R. H. Juers, Marathon Chapter.

SCLEROTINIA ROT CONTROL

The following is the summary of the 1951 test on control of sclerotinia rot on gladiolus at the University of Illinois as published in the Florist's Review.

In an experiment on sclerotinia rot, one lot of 200 Silver Wing corms and one lot of 280 Elizabeth the Queen corms were used. All corms had numerous small sclerotinia lesions. One-half of each corm lot was treated with Calogreen dust immediately before planting; the other half was planted without treating.

With Elizabeth the Queen, 111 rot-free corms were harvested from the treated lot and 106 from the untreated lot. Silver Wings produced 53-rot-free corms from the treated lot and 47 from the untreated lot.

FOR YOUR CLUB OR CHAPTER PROGRAM

Skit Available—"The Road to Reno Is Strewn With Gladiolus"

An excellent skit entitled "The Road To Reno is Strewn With Gladiolus," was presented at the Annual Spring Meeting of the Wisconsin Gladiolus Society. The skit has been sent to the office of the Wisconsin State Horticultural Society and is available for use for Gladiolus Chapter and Garden Club programs. Write us for a copy well in advance.

The skit is quite humorous. A young wife finds, in her husband's pockets, such names as Nacy, Lois, Peggy Lou, Delilah, Janet Lee, Kathy Lee, etc. She calls the Pinkerton Detective Agency and what happens after that will keep everyone alert.

TWIN CITY CHAPTER NEWS

The Twin City Gladiolus Chapter has decided to continue the 4-H Club Project which consists of the Society's buying bulbs for interested 4-H members from Marinette and Menominee County to grow.

We are also co-sponsoring with the Marinette Garden Club, a Dorothy Biddle Demonstration on Flower Arrangement in May.

Our meetings are being held regularly and our programs have been devoted to talks on gladiolus culture.

By Delores Sommerfeldt, Secretary.

EDWARDS LABORATORY, MAKERS OF SOIL TESTING OUTFITS MOVES

The Edwards Laboratory which markets Simplex Soil Testing Outfits, Soiltex (acidity testers) and the Home Simplex Soil Tester to commercial growers, home gardeners and educational institutions, is moving to its own building in Norwalk, Ohio (P.O. Box 318).

The move means that the Edwards Laboratory will be more conveniently located to carry out a proposed increase in experimentation. The Laboratory has advertised Simplex Soil Testing Outfits in this magazine for several years.

Father: "Mabel, that young man of yours stays too late when he calls. Hasn't your mother something to say to you about that?"

Mabel: "Yes, father—mother says men haven't changed a bit."

WHY 2,4-D KILLS WEEDS

The chemical, 2,4-D, has the same type of control over plant growth phenomena as naphthaleneacetic acid, indoleacetic acid or any other of the recognized auxins. These latter substances are used to set seedless fruit on tomatoes, to make apples remain on the tree another ten days at harvest time and to give oranges a better color. Yet, none of them is a good herbicide. Messrs. Van Overbeek, herbicide. Messrs. Van Overbeek, Blondeau and Horne, of Shell Oil's Modesto, Calif., laboratory, have discovered that the herbicidal activity of 2,4-D is not the result of a new type of action, but is caused by increased activity along recognized hormonal channels (Plant Physiology, October, 1951).

Hormones, in general, increase the rate of cell proliferation, increase respiration and carbohydrate depletion and inhibit lipase activity and numerous other things, but 2,4-D does all these things more efficiently at low concentrations. Moreover, its efficiency becomes more striking as concentration increases. The herbicidal properties found in 2,4-D and not in the other auxins are therefore recognized as the result of a difference in quantity rather than quality of reaction. From The Florists' Review.

NEW EVERBEARING STRAWBERRIES
Some of the New Varieties May Be Overrated

A report on some of the new everbearing strawberry varieties was given in the April issue of the Minnesota Horticulturist by Dr. L. C. Snyder, Extension Horticulturist for Minnesota as follows.

RED RICH: Introduced by Marion Hagerstrom of Enfield, Minnesota, continues to show promise. Developed on a sandy soil, it may do better on sandy soils than real heavy soils. A vigorous plant and a fine quality berry. A good freezer.

BRILLIANT: A Michigan variety. A high-yielding variety of attractive, well-formed berries. Similar to GEM and probably an improvement.

SUPERFECTION: Another introduction from Michigan. The highest yielding everbearing variety in tests at Ames, Iowa. Similar to GEM in appearance.

STREAMLINER. Overrated. Produces berries on short stems under the leaves. Hard to pick. Good quality.

EMERSON PASCAL
A Blight-Resistant Celery

Emerson Pascal is a new blight-resistant celery, seed of which is now available commercially for the first time. This variety resembles Summer Pascal in that it is green in color, has high table quality, meaty petioles, and matures in about the same length of time. Like Summer Pascal, it is lacking in heart, and the brittleness that makes it good to eat also makes it hard to handle at harvest time. It differs from Summer Pascal in having slightly longer petioles (or stalks), deeply cut leaves, and resistance to both Cercospora or early blight and Septoria or late blight.

Although Emerson Pascal is not immune to the blights and shows some spots on the older leaves at times, spraying with fungicides should not ordinarily be necessary in northern states where blight is only moderately severe.

Work on blight resistance is continuing because no one variety will meet the needs of all growers and consumers and because market preferences for celery have been undergoing some changes during recent years. **By H. M. Munger and A. G. Newhall, Ithaca. In January Farm Research.**

CHEMICAL WEEDING OF VEGETABLES
(Continued from Page 216)

small annual grasses. PCP at the rate of 15 to 20 pounds per acre will control most broadleaved weeds effectively. Where annual grasses are the main problem in potatoes on muck soils, use 10 pounds of TCA per acre.

Dinitros are still the principal materials being used for weed control in **canning peas.** Recommendations call for ¾ to 1 pound per acre in 60 to 80 gallons of water. This should be applied when weeds are small, before peas are eight to ten inches tall and before blossoming begins.

A new chemical called MCP holds promise as a post-emergence for canning peas.

Broadleaved weeds and some annual grasses can be controlled in sweet corn by using 2,4-D, pre-emergence. Small amounts of 2,4-D can also be used as a post-emergence treatment before the corn is ten inches high.

Weed control chemicals can help make possible more efficient production of vegetable crops. However, weed control chemicals are not a substitute for usual good farming practices. The importance of good tillage, proper seed bed preparation, timely cultivations and other means of minimizing the weed problem should not be overlooked by the grower.

THE BEST LIGHT AND TEMPERATURE FOR AFRICAN VIOLETS
(From Bulletin, Missouri Botanical Gardens)

Light

Good specimens of Saintpaulias are grown under various light conditions due to the fact that temperature, relative humidity, and day-length interact with the light, and that success depends on a suitable combination of these factors rather than on any single one. However, it is generally agreed that in terms of foot-candles the light intensity should be not less than 300 nor more than 1200. As the light-intensity requirement is inversely proportional to the day length it follows that the shorter the day the greater the intensity that can be tolerated. Consequently, the plants can stand and actually do better with a higher light intensity during the short winter days than during the long summer days. Generally, though, it is safer to grow Saintpaulias in the indirect or suffused light that comes through a curtain rather than in direct sunlight, especially in the summer. In too strong light the leaves tend to become light-colored but flowers are produced at a normal rate or nearly so. **In too weak light the leaves become long-stemmed and dark colored,** and the flower production is slowed down considerably. There is no harm in moving the plants around the house with the season or until a suitable spot is found.

Temperature

Saintpaulias being a tropical plant, it is not surprising that it is rather sensitive to temperature changes, particularly sudden ones. Although

different varieties vary somewhat in their requirements all those that I am familiar with do best in a night temperature somewhere between 60 and 70 degrees F. The day temperature on bright days should be about 10 degrees higher, and up to 30 degrees higher will do no harm. In cloudy dark weather a day temperature only slightly higher than the night one will be all right.

PEONIES

Peonies should be selected for your home grounds while they are in bloom. June is the time to see them in our gardens at the north city limits on Highways 26 and 89.

If you can not visit our gardens, ask for our catalogue. It is free.

BURR OAK GARDENS
Box 147 Fort Atkinson, Wisconsin
E. L. White, Prop.

Note: We have a surplus of 400 to 500 Festiva maxima white peony roots that we will sell at a low price, especially if you will dig them.

Garden Club News

FLOWER ARRANGEMENT SCHOOLS
LECTURER: DOROTHY BIDDLE OF NEW YORK

May 19, Monday, Milwaukee Y.W.C.A., 610 N. Jackson Street, Milwaukee, Wis. Sponsored by the Milwaukee Region.

Program: 8:45-9 a.m. Registration. 9:00-12:00 M. Fundamentals of flower arrangement and judging. 1:30 p.m. Adventures in table setting.

Committees

Mrs. L. G. Stewart, Chairman; Mrs. Val Suttinger; Mrs. Chester Thomas; and Mrs. John Dooley, Committee Secretary.

Tickets: Mrs. Arthur Knorr and Mrs. Roy Sewell. Registration: Mrs. Max Krautschneider and Mrs. Henry C. Krueger. Flowers and Supplies: Mrs. Carl Lemke. Exhibits: Mrs. Ray Luckow and Mrs. Norbert Gresbach. Hospitality: Mrs. Robert La Philliph. Hostesses: The Wauwatosa Garden Club Members. Publicity: Mrs. Chester Thomas. Wisconsin State Horticultural Society Display: Mrs. Wallace Freund.

May 20, Tuesday, Sheboygan, Wis. Episcopal Guild Hall, corner north 7th Street and Ontario Avenue. By the Sheboygan Garden Club.

May 21, Wednesday, Oshkosh, Wis. Athearn Hotel. Sponsored by the Winnebagoland Region.

Program: 9:00-9:30 a.m. Registration. 9:30-10:30 a.m. Flower Show practice discussion. 10:40-12:00. Color in flower arrangement. 12:00 M Luncheon at Athearn Hotel, $1.50.

1:30-2:30 p.m. Basic ideas in flower arrangement. 2:30-4:30 p.m. Demonstration in flower arrangement by Dorothy Biddle.

Committees

Miss Bessie M. Pease, General Chairman. Registration; Mrs. Marvin Haller, Mrs. Ward Schroeder and Mrs. Frank Schultz. Luncheon: Miss Agnes Phillipson, Mrs. David Ciscel and Mrs. F. H. Volkman. Flowers: Miss Anna Christensen and Miss

Anna Phillipson. Tables: Mrs. J. G. Carey, Mrs. Melvin Peterson and Mrs. O. J. Bloom. Hospitality: Mrs. Arthur Laabs and Mrs. Olin Geiger. Publicity: Miss Agnes Phillipson.

May 22, Thursday, Iola, Wis. Our Saviour's Lutheran Church. Sponsored by the Central Region.

Program: 9:00-9:30 a.m. Registration. 9:30-10:30 a.m. Basic ideas in flower arrangement. 10:40-12:00 M. Color in flower arrangement. 12:00 Noon luncheon. 1:30-3:00 p.m. Adventures in table setting. 3:10-4:15 p.m. Forum. Questions and answers about flower arrangement and table setting.

Committees

Registration: Mrs. R. C. Cleaves, and Mrs. C. F. Wipf.

Luncheon: Mrs. A. Kruse, Chairman.

Flowers: Mrs J. Rosholt, Mrs. E. Lutz, Mrs. H. Amundson and Mrs. O. Waller.

Tables: Mrs. Marian Leer, Mrs. F. M. Fairchild, Mrs. E. H. Knickel and Mrs. Lawrence Kriewaldt.

Hospitality: Mrs. E. Lutz, Mrs. A. Kruse and Mrs. G. H. Willett.

Publicity. Mrs. R. O. Cleaves and secretaries of all the clubs.

Gladioli first became popular in England after Queen Victoria's visit, in 1855. to Fontainebleau, where M. Souchel used the bright Gladioli as garden borders. So great was her admiration that she ordered Gladioli grown for the royal table when she returned to England.

MILWAUKEE REGION ELECTS OFFICERS AND PLANS INTERESTING PROJECTS

Delegates of the garden clubs in the Milwaukee Region met at the home of Mrs. A. Knorr in Brookfield on April 15. It was a very interesting and friendly meeting.

New officers were elected as follows: President, Mrs. S. Swenson, Lincoln Manor Garden Club; Vice-President, Mrs. C. F. Biermann, West Allis Home and Garden Club; Secretary, Mrs. John Dooley, West Allis Home and Garden Club; Treasurer, Mrs. Wallace Freund, West Bend Garden Club.

Mrs. Chester Thomas, Milwaukee, was elected a member of the State Garden Club Advisory Board to the Horticultural Society.

The club is planning a tour to Baraboo on Tuesday June 10.

The delegates were very much interested in a perfection of bloom judging school as a part of the project for training flower show judges to receive the certificate of the Garden Club of Wisconsin. Tentatively, a school for judging roses, perennials and other flowers was planned for July 11, at Whitnall Park. Mrs. C. F. Biermann was appointed Tour Chairman and Mrs. Elizabeth Stewart and Mrs. Vall Stettinger, Co-chairman of the judging school.

SHADE NEWLY PLANTED ROSE BUSHES

The branches of the tops of newly-planted rose bushes sometimes dry out during warm sunny weather before the root system is developed and can supply moisture to the tops.

It is well to prune rose bushes as soon as planted, cutting out all dead or crossing branches and pruning to a height of about 8 or 10 inches, leaving at least 3 or 4 good buds on each branch. Then it is helpful to cover the branches with a cardboard box or a heavy paper bag to provide shade for the tops until the new leaves begin to appear. The shade prevents dehydration of the branches during sunny weather.

MAUSTON GARDEN CLUB

At the December meeting of the Mauston Garden Club Mr. John Ensch showed colored movies of European countries. In January a pot luck supper was followed by the installation of officers. Then, through the courtesy of Mr. John Hosig, we viewed colored slides of our August flower show and the beautiful gardens of Mr. C. C. Remington and Mr. D. L. Remington.

Mr. H. J. Rahmlow, Secretary of the Horticultural Society, was our speaker in February. His interesting talk on Garden Planning and Planting was illustrated by colored slides. At our March meeting Mr. George Ziegler, University Extension Landscape specialist, discussed Landscape Design. During the afternoon Mr. Ziegler and our Civic Committee made a survey of the City Hall and Library grounds and Mr. Ziegler submitted a plan for us to use in beautifying the property. Our committee is working to carry out the plans. Our April program featured Mrs. Arthur Bassett of Baraboo who gave a talk and demonstration of flower arrangements.

Our club has given to our public library twelve garden books and subscriptions to magazines. This year we plan to sponsor more junior gardens. We are looking forward to our annual flower show in August. Members are enjoying the monthly news letter prepared by our program chairman, Mr. C. C. Remington. Besides items on our club activities, it includes garden hints, news of other clubs, humor and poetry. By Grace Gates, Sec.-Treas.

OMRO GARDEN CLUB PROGRAM FOR 1952

The program of the Omro Garden Club is to stimulate an interest in gardening and the development of the homegrounds; to aid in the protection of forests, wildflowers and birds; and to promote civic interest and beautification.

In our meetings this year we are studying trees and shrubs native to our locality, annuals, perennials, vegetable gardening, herbs, and bulbs. Included are several topics concerning different phases of flower arrangement. One member is assigned to bring an arrangement of the month, each month.

AFRICAN VIOLETS

AFRICAN VIOLETS, in the double white with variations; small miniature types; lovely bronze leaf varieties; new girl foliage introductions; doubles in both light and dark colors; Rainbow Geneva (red with white edge); single white with blue core, orchid edge and eye; Grotei (hanging basket type) and many others. Visitors welcome throughout the Spring and Summer. Mrs. O. F. Isenberg, 433—3rd St., Baraboo, Wis.

At railroad crossings, here's how to figger: in case of tie the engine's bigger.

This is the time of the year that people who figured they had money to burn are sifting the ashes.

Our sunshine committee disperses potted plants and flowers to the "aged" in homes and hospitals.

In May, besides the regular meeting, the group meets at the Omro Park to tend the perennial flower bed there. Many of the group plan to attend the Dorothy Biddle school in Oshkosh, May 21st.

Our annual 'Strawberry Festival" will be held in June. A guest speaker will be engaged for the event.

A garden tour of the flower beds at Menominee Park, Oshkosh, is planned for September. **By Mrs. Arthur Driessel, Sec.**

PEWAUKEE GARDEN CLUB

During the past year our club gave gifts to the veterans at Resthaven Hospital, Waukesha, at Easter and at Christmastime. Each member made ten favors suitable for use on the trays of the patients. These gifts were greatly appreciated.

The garden club had a booth at the Midsummer Festival in June and the Fall Festival in September, at which plants, vegetables and corsages were sold. The proceeds were used to finance a planting of trees in one of our parks. Three were evergreens; a Douglas Fir with a Pfitzer on either side. A large native stone with a bronze placque with the inscription "Dedicated to the Veterans of World War I and II by the Pewaukee Garden Club" and two stone benches complete the setting. It was presented to the town on Armistice Day with an appropriate ceremony.

A new idea is being tried and is proving satisfactory. Two members plan each program, members serving in alphabetical order. Thus each meeting is a surprise and greatly enjoyed. For example, the first two members read two short articles, one on the Phoebe bird, the other "Suitable Shrubs to Attract Birds". Then, leaves of house plants were passed, pinned on numbered cards. Members were given prizes for guessing the names of the plants.

We meet once a month in the home of a member, and a co-hostess serves with the hostess. Thus, four members are active in the day's program.

We hope to make some tours and have a picnic besides our regular meetings this year. **Mrs. Roy P. K. Johnson, Sec.**

WESTCHESTER GARDEN CLUB SPREADS CHEER

At Christmas time the club decided to spread a little cheer all year instead of just at that time. Each month, two girls either grow or purchase 7 plants which we deliver to the invalided people, the names of which we receive from the Visiting Nurse Association of Milwaukee. The project has been very successful not only in the satisfaction of the happiness it brings the people, but the feeling it gives the girls of helping someone. Each month they report on their deliveries and each month the response is the same. The people are so grateful and so happy to have someone visit, and they always request that we stay and talk to them or return. Some of the girls are making it a point to revisit their names and taking enough time to really stay and visit with the people. We hope to make this a yearly project. **By Mrs. Robert Uecke, Sec.**

Editor's note: We congratulate the club on this fine project.

MEN'S GARDEN CLUB OF MANITOWOC

Our Men's Garden Club held their regular meeting Tuesday evening, April 15 at Rahr Civic Center, Manitowoc, with Mr. R. H. Lang of L. L. Old's Seed Company, Madison, as a speaker. Wives of the members were present as guests. Slides of the Men's Garden Club of America were also shown.

The club is very active this year. We have a test program of Tuberous Rooted Begonias as a part of the club's program with the Men's Garden Club of America. This year we will attempt to test the amount of sunlight the begonias will take in open beds All previous tests have been made i full shade. Other members of th club have various other test programs **By J. L. Hamilton, Secretary.**

OFFICERS OF THE MUKWONAG GARDEN CLUB

Mr. R. J. Porter, President; D J. C. Harland, Vice-President; Mr Lester Buell, Secretary; and Mr Evan Hill, Treasurer.

NATIONAL ROSE SHOW BY THE AMERICAN ROSE SOCIETY EAST LANSING, MICHIGAN, JUNE 13-14

A National Rose Show will be held in connection with the America Rose Society Convention in Demonstration Hall on the Michigan Stat College Campus at East Lansing Michigan on June 13-14.

There will be lectures on flower a rangements, soil management f roses, and other topics. Also school for rose judging conducted b C. H. Lewis of Virginia, Chairma of the Society's Committee on train ing judges. There will also be tour of gardens. A complete program ma be secured from the American Ros Society, 1316 Derry Street, Harris burg, Pennsylvania.

MOST POPULAR HEMEROCALLI

The American Hemerocallis Societ held a popularity poll in 1951 and th ten Hemerocallis receiving the grea est number of votes among 103 varie ties are: Painted Lady 409, Potentat 236, Garnet Robe 234, Hesperus 21 Caballero 217, Pink Charm 20 Colonial Dame 201, Georgia 188, Mi sion Bells 187 and Dauntless 184.

TEN MOST POPULAR CHRYSANTHEMUMS

The National Chrysanthemum S ciety conducted a popularity conte of varieties in 1951. The followin ten varieties were given the highe ratings: Mrs. H. E. Kidder, Charl Nye, Betty, Silver Sheen. Carniv Yellow Spoon, Lavender Lady, Oli Longland, Major Bowes and Lili Doty.

In the English inns and homes, du ing the Shakespearean era, the Cal dula was used to flavor soups a other food.

Spring In The Garden

THE HOE — BO

An interesting little bulletin entitled "The Hoe-bo," the mouthpiece of the Milwaukee County Men's Garden Club is published for the members by the members. It gives not only excellent information on gardening but also on the projects of the club. An active plant testing program is being carried on, with a chairman in charge of testing several types of plants.

The president of the club is Marvin C. Karrels, of Milwaukee, Vice-President Ronald A. Padway, Milwaukee, and Secretary and Editor, is R. A. Wilson, 3233 S. 21st St. Milwaukee.

CONTROL THE IRIS BORER NOW

If you grow iris and have not yet dusted the young plants with DDT and Sulphur, do so at once.

The DDT will control the young borers as they feed on the outside of the iris leaves for a short time before boring in and moving downward to feed in the rhizomes and mature. The sulphur will control iris leaf spot which is frequently a serious pest, especially during the past few years when there has been abnormal rainfall. The combination of DDT and Sulphur, should be applied about once each week during May and June for best results. Rotenone and sulphur can also be used.

Last September and October a moth which flies at night laid eggs on the tops of the rhizomes at the surface of the soil. The eggs hatched during the warm weather of April and young larvae are no doubt still feeding on the outside of leaves but not much longer. So on with the dust!

TWO GOOD MOVIES AVAILABLE FREE

For Your Garden Club Program

The Photoart Visual Service. 840 N. Plankinton Avenue, Milwaukee 3, Wis., has the movie, 'Springtime in Holland," and also "Story of Modern Roses" available on a free loan basis. The only cost is transportation and insurance.

These are both excellent colored, 16 mm motion pictures with sound. Perhaps your County Agent or School has a sound projector. The films should not be used in a silent projector due to injuries.

DON'T ROLL YOUR LAWN

"If anyone tries to sell you on the need for power-rolling your lawn, drive him off with a club."

That was the advice given to members of the Men's Garden Club in Chicago by Dr. R. Milton Carleton, research director of Vaughan's Seed Company in a recent talk.

"We have spent thousands of dollars trying to find a low-cost method of overcoming the effects of soil compaction, yet every year sees the use of more and more power rolling equipment which increases compaction," he continued.

He described experiments in which strips were rolled across established lawns, following the same path for a number of years. After two years the rolled strips could easily be picked out because of the yellow color and poorer growth of permanent grasses. Weeds like Spotted Spurge, "Farmers Lawn" and Chickweed were far more plentiful in rolled strips than in the open lawn.

The effect of compaction is to drive out air, force the soil particles so close together that moisture and plant food cannot penetrate, and to interfere in many ways with normal plant growth.

In the past lawns were rolled to press back plants heaved out by frost action, and to overcome the roughness of worm castings. Night crawlers, which work all winter long under snow, are a major cause of bumpy lawns in Spring.

If a roller is used for this purpose it should not be heavy. No lawn can stand enough pressure to flatten out high spots and make the earth flow sideways to fill in low spots. A better method is to cut off high places with a spade and use the turf and earth removed to fill up low spots.

A much simpler solution is to treat the soil with one pound of 5% Chlordane dust to every 1,000 square feet. This destroys white grubs and earthworms. Since it destroys these natural foods of Moles, treatment is a further protection for lawns in Mole-infested areas.

Top-dressing with screened compost or other forms of organic matter, and reseeding in the compost is the logical method to level a lawn. The sooner this is done in Spring, the better.

TEST GARDEN SEEDS LEFT OVER FROM PREVIOUS YEARS

QUESTION: How can I test garden seeds that I saved over from last year? I would not like to plant them unless the seeds germinate well.

ANSWER: By John A. Schoenemann, Department of Horticulture, U. W.: The following procedure is helpful in order to determine the percentage of seeds which will germinate when sown in the garden.

Put some seeds between two moistened pieces of paper toweling and place this betwen two dinner plates. Keep in a warm place and count the number that sprout compared to the number originally placed between the papers. This will indicate whether the seed is worth using. When the percentage is not too low, you can sow the seed a little thicker in order to get a good stand.

A plumber, doing some work for a friend customer, grew expansive about his family. "My daughter is a fine girl," he said proudly. "She graduated from college last year and now she has a job at $35 a week. That's a pretty good salary for an uneducated person."

Some Lovely

New African Violets

By Mrs. O. F. Isenberg, Baraboo

New African Violet varieties, those of the spring of 1952 are especially outstanding and lovely. I think the violet enthusiasm in the mid-west is growing and in a few years we should be ready for some excellent large shows.

The goals of the hybridizers remain the same—purer colors, especially true blues and true reds, double pinks, larger flowers, less brittle leaves, and departures in foliage or flower form or color that will appeal to the public.

I will briefly describe some of the newer varieties. **PURITY,** very fine quality double pure white, many blooms, foliage a rich green. **AZURE BEAUTY** flower is a double clear sprakling white with a center of the coolest, cleanest blue you can imagine. **GROTEL,** the hanging basket violet, has creeping brown stems which sometimes root at the nodes. The almost round dentate leaves have stems which grow to ten inches in length. The flowers are a blue-violet which are borne in clusters, resembling a nosegay. **SNOW PRINCE,** pure white blossoms, full and round. If you have difficulty growing pure white ones, Snow Prince will give you new confidence. **ROSE MARIE,** positively a true rose color, flower stems are a deep wine, foliage is smooth tailored, lightly quilted with reddish reverse.

SAILOR'S DELIGHT, another great new double in light blue and with girl-type foliage. An excellent grower with large size flowers and brilliant color. **SEA GIRL** is very similar but it has a darker richer blue flower and foliage has a very heavy texture. **BLUE DELIGHT,** large white flowers with bright blue edge and a dark blue eye. **PINK DELIGHT,** light clear pink flowers, very bronzy foliage. **ORCHID SUNSET,** beautiful new double orchid red on good foliage. **APPLE BLOSSOM,** very large white blooms with

pastel shading on dupont foliage. **RED VELVET,** newest red, large velvety blooms on dark veined foliage. **DOUBLE ORCHID GIRL,** double, deep orchid red flower on girl-type foliage. **ORCHID DOUBLE NEPTUNE,** an orchid sport of Double Neptune. **MAUVETTE FRINGETTE,** petals have a delightfuly wavy appearance, with a decidedly fringed edge, set off by a bright yellow eye. Foliage is also wavy. Color is a lovely mauve pink. **GYPSY JANE,** flower has a gloss you cannot describe, flower as large as a Dupont but blooms more profusely light lavender.

A Miniature

OROS DUBONET, is a miniature type of African Violet and is just adorable. Often it is called the tea cup violet because it is a small grower but it has all the qualities of the largest and the best. It has very deep dark green leaves and a very profuse bloomer with lots of dark mahogany red flowers. **BRONZE GIRL,** excellent heavy bronzy girl-type foliage and large red flowers having very round petals. **LADY GRACE,** unusual irregular bronzy shaped girl-type foliage with deep red blooms like Red King. **SNOW GIRL,** darkest blue-violet giant sized flowers with heavily fringed and fuzzy rick-rack type margins on the petal edges. Leaves wavy and of heavy texture.

GORGEOUS BLUE WONDER, a really striking marbelized flower in white and brilliant blue, more intense in the center. Grow it in your center window for sharpest coloring and design. Heavy bloomer, large flowers, light green foliage, white stems, clean cut finish. **BLUE HEIRESS,** brilliant Dupont seedling with heavily scalloped girl-type foliage and superior habits. Giant sized flowers of heavy substance. **WHITE BOY HYBRID,** white flower with a heavy band of bright orchid at the petal edges, sometimes extending to the center of the flower. **RAINBOW GENEVA,** burgandy red flower with sugar white edge. **LADY GENEVA,** deep blue with white edge on flower. **FANTASY,** large eversporting lavender blooms that are streaked, splashed and dotted deep purple. **LAVENDER BEAUTY,** large deep silvery mauve flowers, a profuse bloomer that is exquisite. **RED KING,** deep rich red which holds its color, foliage darkest possible green, underside deep wine. Robust plant. **PINK AMAZON,** true pink flowers, heavy substance in both bloom and foliage. **NAVY** and **RUBY BOUQUETS** are excellent doubles.

There is no end describing the newer varieties of this spring, but there must be an end when it comes to publishing space in this magazine; if any of you wish to see any of these new varieties in bloom, stop in when in or near Baraboo. I will be happy to show them to you.

The Cabbage Rose, or Rose a Cent Feuilles, is reported to be one of the first Roses introduced into Western Europe, and may have been brought into Europe by returning crusaders in the twelfth century. It was probably the Rose used by the ancient Greeks at their banquets and festivities. The Damask Rose was another early Rose brought to Europe from the vicinity of Damascus, Syria. The French called it the "Rose from Damascus."

* * *

Back in the seventeenth century, a single Tulip, called the Semper Augustus, sold for $1,400.

How To Arrange

Flowers For Your Church

By Ralph A. Norem, Oshkosh

The problem of arranging flowers for church is about the exact opposite of that of making a miniature arrangement for a flower show. A miniature is an arrangement not exceeding three inches in overall height. It is designed to produce the same effect as an arrangement of larger size. The proportions are all there, but on a minute scale. It is viewed at close range and in good light.

Arrangements for church must be made large. In some churches they can be well over three feet in overall height. They are viewed at a distance and in subdued light. They can be made to produce the same effect as smaller arrangements seen at closer range and in clearer light. The same rules of design hold good. The proportions must all be there, but on a large scale. The subdued light calls for clear colors and bold lines. Striking contrasts are permissible.

Churches ordinarily have their own containers for flowers. These harmonize with the other appointments and the general architecture of the church. They come in pairs, and may be shiny brass vases or larger, heavier, bronze urns.

Arrangements In Pairs

To make arrangements in a pair of bronze urns it is necessary to have flowers of adequate height. Height can be provided by chrysanthemums, gladiolus, stocks, or snapdragons. Begin by selecting two fresh, straight stalks cut to exactly the same height. Place one in each vase off center to stand firm and erect to give dignity to whatever is to follow. An asymmetrical design makes for variety and contributes to added interest in the arrangements. Leave no doubt as to the precise point in the arrangement, where the center of interest is. The eye must come to rest somewhere. The two arrangements should compliment each other, but otherwise be as nearly alike as possible.

Containers

Although the church may have its own flower containers, that does not mean that other containers cannot be introduced on occasion to provide variety. Arrangements of marigolds in a pair of yellow oval vases can be effective in the fall of the year. There are occasions when all-white arrangements in a pair of white pillow vases can be both striking and appropriate.

Hydrangeas can usually be had at the florists in the spring of the year. A pair of these that nicely balance each other can be purchased on a Saturday. If kept well-watered they will lose little of their original beauty and freshness for the three following Sundays. They will provide beautiful and appropriate flowers at low cost per Sunday and at minimum effort for the flower committee. The committee will welcome the relief these plants can provide.

The Role of Church Flowers

It must be remembered that the role of flowers in church is a secondary and supporting one. The flowers must at all times be an aid to worship, never a display for its own sake. This rule holds true even for Christmas and Easter. We may want to see poinsettias in church at Christmas time, perhaps even lots of poinsettias. The same holds true for lilies at Easter. But restraint must be exercised. The flowers must not dominate the scene.

It has been found to work out in practice to sell lilies to members of the congregation at half price after the services Easter morning. This practice is not without its advantages. It gives members of the congregation an opportunity to help the flower fund while at the same time getting a plant at low cost for a shut-in, friend, or relative. The flower committee can have the use of more lilies. The florist can offer a better price because of the quantity order. And finally, the church can be made to look really beautiful with lilies Easter morning.

What works for lilies at Easter also works for poinsettias at Christmas. White poinsettias have their uses as well as the red, and should not be overlooked.

CHLORDANE FOR CRAB GRASS CONTROL

A report by B. H. Grigsby of the Michigan Agricultural Experiment Station at East Lansing tells that chlordane can be used to reduce the emergence of crab grass seedlings. In one experiment conducted at the Station in which flats, sown with crab grass seeds, were sprayed with an emulsifiable concentrate of chlordane, the results after 10 days showed that the treated flats had no crab grass or broad-leaved weeds, while the untreated ones produced an abundance of both. After 6 weeks, however, all flats had some crab grass, but the chlordane treated ones had much less. A highly refined oil, used with technical chlordane resin for greater effectiveness, and applied as a foliage spray, gave a rapid kill of crab grass without injury to the lawn grass in the mixture used in another experiment. Bent grasses appear to be tolerant of the oil-chlordane mixture, and chickweed can be destroyed with chlordane in oil. **From March issue of Horticulture.**

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

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Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

May In The Apiary

May is a month of hope for the beekeeper. Fruit trees and dandelions bloom, providing much needed nectar and pollen. Brood rearing reaches its maximum — the queen lays more than a thousand eggs per day and young bees are hatching to take the place of the older bees. The colony is building to maximum strength for the honey flow which is not far away.

May is also the month during which the beekeeper must not forget about his bees — not let other work interfere with frequent inspection to see that they do not prepare to swarm. How disheartening to put in hours of work in fall and early spring, building up the population of a colony only to see its honey producing potential destroyed by swarming.

When a beekeeper says he has been too busy to look at his bees, we certainly feel like saying "You would have made more profit by giving a little attention to your bee colonies than anything else you could have done." That would certainly be true if, by such attention the beekeeper prevented swarming.

In this issue, Mr. Edward Ranum of Mount Horeb, an experienced commercial beekeeper, discusses his method of swarm control. There are a number of successful methods, some require more labor than others. Mr. Ranum's method is being used by many Wisconsin beekeepers.

Amateur beekeepers may wish to try out other methods of swarm control as well. That is what makes beekeeping an interesting hobby. In all of the methods you read about, you must remember the one fundamental principal — the queen prefers to go upward to lay and if there is no place for her to go, or if she is surrounded by combs filled with honey, pollen and brood — especially if there are a thousand young bees hatching out everyday around her to increase the crowded condition, swarming preparations are inevitable.

By giving the queen room, either in the brood chamber to which she is confined or providing room with an empty brood chamber placed above the one in which she has been laying as described by Mr. Ranum, swarming is at least delayed, if not controlled entirely.

Remember, however, that there will be colonies that will start queen cells and prepare to swarm in spite of any method you may use. All we can do in such cases is continue to cut out queen cells or if this is too laborious, divide the colony into two parts, thereby reducing the population and the crowded condition, giving each section plenty of room.

Watch Out For Starvation

There is a period between dandelion and fruit bloom and the beginning of the clover bloom in early June when brood rearing is at a maximum but with very few honey plants from which nectar may be obtained. Colonies that did not bring in much honey from fruit bloom or dandelions but are building up rapidly during this period may **run out of stores and starve.** Many beginners do not realize this — they feel that the bees should make their own living during a month like May. Such is not the case. Watch your colonies at least once each week and inspect the brood chamber for honey, pollen, and the condition of the brood. Feeding can still be done with a sprinkling can using a warm syrup of about 1¾ parts of sugar to one part of hot water.

BENEFICIAL INSECT RESEARCH CONSOLIDATED JAMES I. HAMBLETON, NAMED CHIEF

Establishment of a Division of Bee Culture and Biological Control in the Bureau of Entomology and Plant Quarantine, was announced by the U. S. Department of Agriculture. All of the Bureau's activities with respect to bees and other beneficial insects will be consolidated into this single Division. This unit is also responsible for research relating to biological control of insect pests and weeds, including diseases of insects.

Establishing this Division represents one more step in the Bureau-wide reorganization aimed at making the money available for research return the greatest possible benefits to the American public.

James I. Hambleton, for 30 years head of the Division of Bee Culture, was named to head the Division of Bee Culture and Biological Control. Willis J. Nolan, formerly Hambleton's first assistant, will head the Section of Biological Control.

Research has shown how to make effective use of honey bees as pollinators of seed and fruit crops, adding millions of dollars to the value of these crops. The studies of bee diseases and their prevention, and research into the best methods of bee management, have placed bee-keeping on a commercial basis.

Swarm Control

By Edward Ranum, Mount Horeb

Swarming should not be too serious a problem if the proper preventative measures are applied early in the season. Weather conditions will vary considerably from one year to another so that it is difficult to set a definite date for beginning manipulations. Ordinarily we would suggest about May 1st, or whenever nectar and pollen are being carried in quite abundantly. **Our bees are wintered in three brood chambers,** with an open auger hole entrance in the top body. By May 1st the two top bodies should be fairly well filled with brood, honey and pollen. If these conditions exist, we then take the empty bottom body and place it on top, at the same time opening the entrance holes in the two bottom bodies.

Now, we will find a number of colonies below average in strength as well as some above average. If nectar is coming in, we will then remove every weak colony to the stand of a strong colony and place the strong colony where the weaker one formerly stood, thereby strengthening the weak colony by the large force of returning field bees from the stronger one. We also counteract any danger of swarming preparations in the more populous colony. This procedure, however, would not be advisable in a yard where disease may be present.

Reverse Brood Chambers

Up until the time when the main honey flow is well underway, we repeat the reversing of the brood bodies as explained previously as often as is necessary to relieve congestion in the top body, at the same time checking the bottom of each body for any start of queen cells. When supers are needed, we try to arrange the brood bodies so that the empty super is placed directly above a body which is well filled with brood. This will force the bees to occupy the super at once for storage honey, leaaing the brood combs clear for eggiaying.

We prefer not to use excluders and although we will probably get some brood in the first super, we would rather see that than a large swarm heading for the woods or hanging in a treetop. We practice top supering and by crowding them down toward the end of the honey flow, we usually find all supers well filled and clear of brood as well as one or two brood bodies quite well filled with honey and pollen for winter stores.

We wish we could say that our swarm methods are 100% effective. Some seasons it seems there will be swarming regardless of preventative measures and it will then be necessary to take more drastic steps wherever swarming preparations are in evidence.

AN EXCEPTIONAL SWARM

By Marvin W. Kosanke, Ripon

Whenever I have had a chance to hive a swarm of bees I have always done so. Although it is not very practical or profitable after the month of June it is a very pleasant experience.

An Unusual Swarm

It was on the 19th of August that I received a call that a swarm had settled on a fence along the side of a highway. As soon as possible I drove over to this location with a hive and when I arrived I found a very large swarm of bees had clustered on the brace pole. I had no trouble in hiving the swarm and when I returned in the evening the hive was completely filled with bees. This swarm was so large that I gave it another super immediately when I took it to my apiary.

Although it was late in the season and the weather was not very favorable this colony filled their food chamber and stored a surplus of twenty pounds of honey.

I realize this swarm was exceptionally large and that most all other swarms have to be fed later on when hived at this time but I believe it is often very worthwhile to hive them.

ARE WE MISSING A GOLDEN OPPORTUNITY?

School lunch Survey Proposed by H. A. Schaefer, Osseo

The School Lunch program is one of the best marketing aids to the Beekeeping Industry. Not only for the present, but for the future. Too many of us think only of the present. The Future in mind, with the proper attention to the Present, the School Lunch program could greatly benefit our industry. The children of today will be the parents of tomorrow. Give them honey they like as a spread or in combinations. Have the children eat honey because they like it—today —and the industry will not be lacking consumers tomorrow.

We hear too many complaints about why honey is not used in this or that school. Now and then we hear what some enterprising beekeeper has done to start the School Cook using honey. Just a little effort and much honey is used. CAN WE INDUCE ALL SCHOOLS TO USE HONEY IN THEIR LUNCHES?

We CAN! First we must know why schools do or do not use honey. This calls for a survey of the schools. Can Wisconsin Beekeepers make this survey? How? By having our county Beekeepers Associations organize a drive and for individuals not belonging to a county organization to contact their local schools. How about it? Can we do IT? Sure we can, but this will require YOUR help! Here is another way you can help to protect your investment in bees!

Questions to be asked the School Cook or other official. ARE YOU NOW USING HONEY IN YOUR SCHOOL LUNCHES?

HOW?
How do the children like it best?
Any other uses?
How much do you use a week?
Did you send for honey recipes
WHY NOT?
POOR HONEY?
NAME OF SCHOOL
Address
Beekeepers name and address

The findings of the survey will be published in an early issue. Please mail all completed questionnaires to H. A. Schaefer, Osseo, Wis.

RECOMMENDATIONS ON POLLINATION

From the Report of the Bee and Honey Advisory Committee to the Director, Wisconsin Dept. of Agriculture

The problem in developing the pollination program is first a realization of the services of the honeybee as a pollinating agent. The second problem is to encourage the proper use of bees for maximum results. The need now is for a program of cooperation which will recognize the requirements of the farmer and the contribution of the beekeeper accompanied by just compensation for the services of the beekeeper's colonies. There is an increased feeling of the need of Wisconsin raised legume seed better adapted to local conditions. There exists some question in the minds of many farmers as to the value of bees as pollinators. For example, there is a school of thought that bees contribute very little to the pollination of alfalfa in Wisconsin.

The committee suggests:

1. An educational program be dedeveloped based on the proven theory that bees can solve the pollination problem in fruit, vegetable and seed production.
2. Studies be conducted to establish definitely the value of bees as pollinators of seed crops under Wisconsin conditions.
3. Colony standards be drawn up which will assure the farmer of colonies capable of doing an adequate pollination job.
4. An equitable schedule of rental fees be established.
5. Farmers desiring pollination service should be aided in contacting beekeepers.
6. A publication be made available which will provide information to anyone interested in securing bees for pollination stating the value of bees on various farm crops as determined by studies under Wisconsin conditions.
7. Pollination demonstration areas should be established whenever possible.

NEW IDEA TO CATCH A SWARM

In the April issue of Modern Beekeeping, there is a report on a beekeepers meeting in Texas at which one of the beekeepers told of his method of taking a swarm of bees off of the limb of a tall tree. It is described as follows.

Tie a bottle to a fish line and throw it over the limb aiming it so the line will fall over the swarm of bees. To the other end of the line. tie three brood combs held together by three cleats nailed across the top bars. These frames are pulled up to the swarm and left for several hours, when they are lowered, bringing the swarm with them. Cleats are removed and the frames placed in a hive.

HONEY PRICE SUPPORT

U. S. DEPARTMENT OF AGRICULTURE ANNOUNCES INCREASE IN PRICE SUPPORT TO 70% OF PARITY.

The U. S. Department of Agriculture announced in March that honey will be supported at a National average price of 11.4c per pound—70% of the current parity price, adjusted to the 60 pound container level.

Price support of honey within the range of 60 to 90% of parity was made mandatory under the Agricultural Act of 1949.

There will be a program of farm — storage and warehouse — storage loans. The Commodity Credit Corporation will purchase honey delivered by producers under purchase agreement.

Beekeepers or cooperative associations of beekeepers can apply for loans and purchase agreements directly to the County PMA offices.

More details will be announced later. The support price on the various grades and color of honey have not yet been announced.

EXTRACTOR FOR SALE

For Sale: Root 8-fr. power extractor, with motor, honey pump, piping and storage tanks, etc. Also, used 8-fr. equipment; bodies, bottoms and covers. All reasonably priced. Ranum's Bee Farm, Mount Horeb, Wisconsin.

LARGE ATTENDANCE AT AMATEUR BEEKEEPERS MEETING

Sunday April 20th was a beautiful day, and it brought out 49 cars of beekeepers to attend the Amateur Beekeepers Meeting and Demonstration at Walter Diehnelt's Honey Acres near Menomonee Falls.

The meeting was called by County Agents S. S. Mathisen of Milwaukee County, Carl Gilman of Ozaukee County, and Earl Skaliskey of Washington County. The Diehnelts handled the crowd in their usual efficient manner and everyone had a wonderful time. The meeting began at about 1:30 p.m. with a demonstration on introducing package bees by the spray and direct release method by H. J. Rahmlow, Madison, and "Bud" Diehnelt. This was followed by questions and answers and demonstrations on various methods of feeding bees. There were so many questions the demonstration lasted until 3:30 p.m. when Bud Diehnelt showed some beautiful slides on various beekeeping activities and methods.

The Dodge County Beekeepers Association planned a similar meeting on Sunday May 4th.

HONEY PROMOTION

The American Honey Institute has announced that Robin Hood flour carried full page ads on honey and hot biscuits in magazines during the month of April. They were in four colors in some magazines, two in others.

The rice industry issued releases on rice and honey.

The National Dairy Council included honey in its publicity material for Honey For Breakfast Week.

The Purity Baking Company furnished posters "Everybody Enjoys Honey" for hundreds on their sales force.

Family Circle magazine used honey in a glazed broiled ham.

Gerber's used honey, lemon beets in their baby food bulletin.

All of this promotion was free.

USED ORCHARD SPRAYER WANTED

Want to buy used orchard sprayer —any size—50-200 gallon tank. State price, model, etc. Victor V. Voigt Rt. 2, Reedsville, Wis.

APIARY INSPECTION WORK ACTIVE

Thirty Part-time Inspectors On the Job

According to John Long, Wisconsin has had an apiary inspection program for 55 years, and the spread of diseases has been kept at a minimum.

This year 50 counties have appropriated supplementary funds for bee inspection work as follows:

Barron $200.00; Brown 200.00; Buffalo 100.00; Calumet 200.00; Chippewa 200.00; Clark 350.00; Columbia 200.00; Crawford 200.00; Dane 300.00; Dodge 300.00; Door 200.00; Douglas 200.00; Dunn 50.00; Eau Claire 200.00.

Fond du Lac $200.00; Grant 250.00; Green 100.00; Green Lake 250.00; Jackson 200.00; Jefferson 200.00; Kenesha 150.00; La Crosse 200.00; Lincoln 50.00; Manitowoc 200.00; Marathon 300.00; Marinette 100.00; Milwaukee 400.00; Monroe 150.00; Oconto 150.00; Outagamie 200.00; Ozaukee 400.00;

Pepin $50.00; Pierce 150.00; Polk 200.00; Racine 250.00; Rock 500.00; Rusk 200.00; St. Croix 150.00; Sauk 250.00; Shawano 150.00; Sheboygan 200.00; Taylor 100.00; Trempeleau 250.00; Vernon 200.00; Walworth 250.00. Washington 150.00; Waupaca 150.00; Waushara 100.00; Winnebago 400.00; Wood 300.00.

SUMMER MEETING WISCONSIN STATE BEEKEEPERS ASSOCIATION JULY 22 and 23

Tuesday, July 22 at Diehnelt's—Honey Arces, Hy. 166, Menomonee Falls.

Wednesday, July 23, Eau Claire Lake's Park, Hy. 27 north of Augusta, Wis.

Forenoon program—demonstration.

Noon—Pot luck luncheon.

Afternoon program of outstanding speakers. Details in our June issue.

Nearly 500 years before the Christian era, the Chrysanthemum was eulogized by Confucius, the Chinese philosopher.

Wisconsin Horticulture

June, 1952

WISCONSIN HORTICULTURE

The Official Organ of the Wisconsin State Horticultural Society

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Subscription by membership in the Wisconsin State Horticultural Society. Annual dues are $1.25 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

In July, It's Time To

Watch Out For Apple Maggot

That Serious Pest Requires Spraying Late In The Season For Control

Will the apple maggot be with us again in large numbers this summer? Dr. C. L. Fluke tells us that the codling moth and plum curculio lived over-winter in good shape and it is presumed that the maggot did also. Weather conditions, however, during July and even August will determine local infestation. There are always some maggot flies, and any grower who has had trouble with this insect in the past should be prepared to spray when the time comes.

Favorite Varieties

Apple maggot attacks the sweeter or not too acid varieties such as Tolman Sweet, McIntosh, Wealthy, Snow and Delicious.

The insect spends the winter in the soil as a small seed-like pupa. In early summer, usually by the **Middle of July**, the flies begin to come out of the soil. During the bright sunny days they may be seen flying among the trees, occasionally alighting on leaves or apples, lapping up any food that they can find.

The flies feed for about two weeks after emergence and then the females lay eggs by making tiny punctures on the apples, so small that they are difficult to find with the naked eye. The eggs hatch within a few days and then the young maggots start feeding. They grow slowly at first, but after the apples become mellow, they grow rapidly.

Apple Maggot injury. The larva have tunneled around in the flesh of the apple. Decay has started and darkened the tunnel.

The apple maggot fly. Note the letter "F" on the wing. Watch for them about the middle of July. They are rather tame and not difficult to see if present. Found mostly on sunny side of trees and on trees of sweet varieties.

Control

Two pounds of either lead arsenate, or 50% DDT wettable powder to 100 gallons of spray will control the maggot, but it is important that the spray be applied at the right time.

One spray will not control the maggots in years when emergence is over a long period of time. The only sure way to determine the right time to spray is to trap the flies.

A Trap

A simple effective trap is made by filling a 5 pound honey pail or similar container with a "lip" with water, adding 1 tablespoon of household ammonia and a pinch of powdered soap. Place the pails in the orchard not later than July 10, and examine daily, counting and removing the trapped flies. This is best done by pouring the solution through a strainer into another pail.

Spraying should start 10 to 14 days after the first fly is caught. As long as flies are caught it is necessary to spray every ten days or two weeks.

If it becomes necessary to spray near picking time use methoxychlor at the rate of 2 lbs. to 100 gallons of water.

We suggest that you write for circular 394, Controlling the Apple Maggot, from the College of Agriculture, University of Wisconsin, Madison.

Apple Maggot larva. Full grown larva of the apple maggot much-enlarged. These are maggots that tunnel through the flesh of the apple and cause the injury. Photos by the Dept. of Entomology, U.W.

The more children's fingerprints in a home, the fewer on police blotters.

It has been said: "He who laughs last is the one who intended to tell the same story himself."

June On The Fruit Farm

By Conrad L. Kuehner

PEAR PSYLLA

Last summer many pear trees in southern Wisconsin counties became heavily infested with pear psylla so that by August and September much of the foliage dropped off the infested trees and the fruit was unfit for use from the smutty accumulation of honey dew and sooty fungus on the surface of the fruit. You can learn whether or not the pest is present by turning over the terminals of the pear branches. If it is present, there will be glistening drops of honey dew on the under side of the leaves. If abundant, a spray or two of nicotine sulphate may be used at the rate of one pint in 100 gallons of spray mixture. (In commercial pear orchards of the far west Parathion is used to control pear psylla during the summer.)

MUCH INTEREST SHOWN IN CHEMICAL WEED CONTROL IN STRAWBERRIES

Judging by the numerous letters we have received from strawberry growers the past several weeks inquiring about chemical weed control in strawberries, quite a few growers will be saving themselves labor costs in their strawberry weeding. A number of County Agents are cooperating in this project and have made applications of chemical weed killers such as Crag Herbicide No. 1 in some of their new strawberry plantings. Results are being watched with interest by the cooperating growers and others who may wish to adopt the practice next year.

TO PRESERVE YOUTH

Youth is preserved and the life span of animals dramatically lengthened through a special diet being tested by Dr. Thomas S. Gardner of Rutherford, N.Y. His best exhibit is a guinea pig named Peter. When Peter was 700 days old and aging fast, yeast nucleic acid was added to his diet. In subsequent months, he grew a new set of teeth, developed a handsome coat and gained weight.—**Capper's Farmer.**

IT PAID TO BRIDGE GRAFT THIS GIRDLED TREE

The picture shows Hugo G. Klumb of Rochester, Wisconsin, pointing to some successful two year old bridge-grafts he made on the mouse girdled trunk of a young apple tree. In another two or three years the bridges will have grown large enough to contact each other, thus closing up the entire girdle. However, girdling is likely to be repeated unless the tree is supplied with a protector of hardware cloth or other suitable material and the tall grass is removed in late summer or early fall from the area immediately around the trunk.

MARK FRUIT TREES FOR REMOVAL NOW

During the summer, just before the harvest season, is a good time to study the trees in the orchard and mark those that should be removed. At this time we can more accurately determine which are the unprofitable trees.

Dr. John Snyder, Washington State Extension Horticulturist, gives these suggestions for selecting trees to be removed, in the magazine Better Fruit.

"1. Trees that produced small, poorly colored fruit in spite of good care. 2. Trees showing general lack of vigor for no apparent reason. 3. Trees showing one or more leaders with small yellow leaves or die-back. 4. Trees that show signs of going down when leafed out in the spring.

Mechanics of Taking Out Trees

"It is not necessary to take out the stump unless you want to replant where the old tree is. There is no harm in planting in the same location or near the stump.

"A convenient way to remove leaders is to saw them off at the tree head with a one-man chain saw while the tree is standing. The stump can be pushed out with a bulldozer or sawed off even with the ground.

EXPERIENCE WITH POWER PRUNERS

What has been the experience of fruit growers with power pruners. In the magazine of the Maryland Horticultural Society we find a convention report of a grower who had used power pruners for three years. He stated that power pruners cut time about 25% and reduced costs about 20%. Orchards crews liked them but they are still hard work to use and are dangerous, require careful use and call for **quick decisions.** The initial cost of equipment may be high, as four pruners work on 50 foot hose lines per compressor. This grower suggested a 27-inch pruner head for older trees, with tough, sturdy compressors. He used three pruner lines off a Farm-al tractor-mounted compressor.

Another grower at this meeting stated that orchard laborers consider power pruners harder to use, so are paid a little more for power pruning. The method he uses is to make saw cuts and haul out the brush, then prune by hand as high as a man can reach, and then finish pruning the tops by use of power pruners operated by men standing on a truck platform.

When you are looking for a helping hand, look at the end of your arm.

A fishing rod, according to some wives, is a pole with a worm on both ends.

FRUITS & VEGETABLE G OWERS SUPPLIES

SPRAY MATERIALS

Insecticides & Fungicides

Arsenate Lead
Kolospray
Mike Sulphur
Sulfronx
Mulsified Sulphur
Kolofg

Fermate (Ferbam)
Marlate
Wettable Rotenone
Ferradow (Ferbam)
Carbomate (Ferbam)

Chlordane—40% Wettable
45% Emulsiable
Tozaphine
Dithane D14
7s 78

Pargate:
Powdered
Liquid
Cocs (Potato Spray)
Crag 341

2 - 4 - Ds

Dow Selective
2-4D Amines 40%

Esteron 44
Esteron 2-4-5

Esteron Brush Killer
Sodium Chlorate

Weed Killers
AMMATE—Crag-Herbicide I

VEGETABLE GROWERS SUPPLIES

Ariens Tillers - Roto Tillers - Bolens Tractors - Potato Harvesters - Grader - Cleaner - Irrigation Systems - Vine Cutters - Potato Laundry - Conveyors - Roto Beaters - Farm Hand Power Boxes - Forage Units & Running Gears

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Orchard Notes

MILWAUKEE COUNTY FRUIT GROWERS ELECT OFFICERS

The Board of Directors of the Milwaukee County Fruit Growers Association have re-elected the officers as follows: Arthur Brunn, President, West Allis; Frank W. Meyer, Vice-President, South Milwaukee; Afred J. Meyer, Secretary-Treasurer, Route 2, Box 318, Milwaukee 15.

OFFICERS OUTAGAMIE COUNTY FRUIT GROWERS ASS'N

Pres.: Reinhold Harp, Hortonville; Vice-President: John Vanden Elzen, Appleton; Sec.-Treas.: Harvey Jamison, Appleton.

SECOR APPLES POPULAR

William Leonard, President of the Jefferson County Fruit Growers Association has high praise for the Secor apple. Quite a number of members of his association ordered test trees from the Wis. Horticultural Society some years ago and the variety has done exceptionally well in the Jefferson County area.

The reason Mr. Leonard praises the variety so highly is that it has excellent quality and keeps until late in the season. He said there is a splendid market for it from January until April, and, "I only wish I had about 2,000 bushels of them for late winter and early spring sales. They go like hot-cakes".

In the news letter of the Iowa Horticulture Society Secretary William Collins gives this information about the variety.

Secor: Originated in Ames, Iowa, by the Iowa State Agricultural Experiment Station (S. A. Beach). Introduced commercially in 1922. Salome X Jonathon; cross made in 1906; selected in 1918. Fruit: red striped; juicy; sprightly flavored; matures on trees 10 days later than Jonathan; hangs well; free from soft scald and Jonathan spot in storage; keeps well until April or May; best quality of any variety in its season.

Sign noticed in a butcher shop window in a town—"Our beef has never pulled a wagon."

The adult coddling moth. Most important insect pest of apples. Colors: mottled gray with fine silvery lines across wings. Wing tips darker. About ¾ inch long. Wingspread about 1 inch. First appearance about 2 weeks before petal fall. Second brood appearance about 55-60 days later. Watch for it. It flies most frerely in late evening.

BAYFIELD FRUIT GROWERS TOUR JUNE 27-28

Apple and berry growers of Bayfield will have a meeting and tour June 27-28.

The meeting was arranged by County Agent R. J. Holvenstot in cooperation with the Bayfield Fruit Growers Association.

On Friday evening, June 27th, the growers will meet in the Bayfield Town Hall for a discussion of cultural problems. On the forenoon of Saturday, June 28th, there will be a tour to orchards and berry farms conducted by County Agent Holvenstot, H. E. Halliday and H. J. Rahmlow to observe cultural methods, disease and insect control.

CLOVER POLLINATION STUDIES

Will honey bees pollinate red clover? Occasionally we read the statement that they do not. Several Experiment Stations have shown that they are quite efficient if the number of bees per acre is sufficient and if the colonies are properly located in the field.

The Iowa Experiment Station reports a test on a field of 23.5 acres of common red clover in which 40 colonies were located in groups of 5 along its northern border, and 37 colonies about ⅛ mile farther north. The bees had access to a field of alfalfa and another field of red clover.

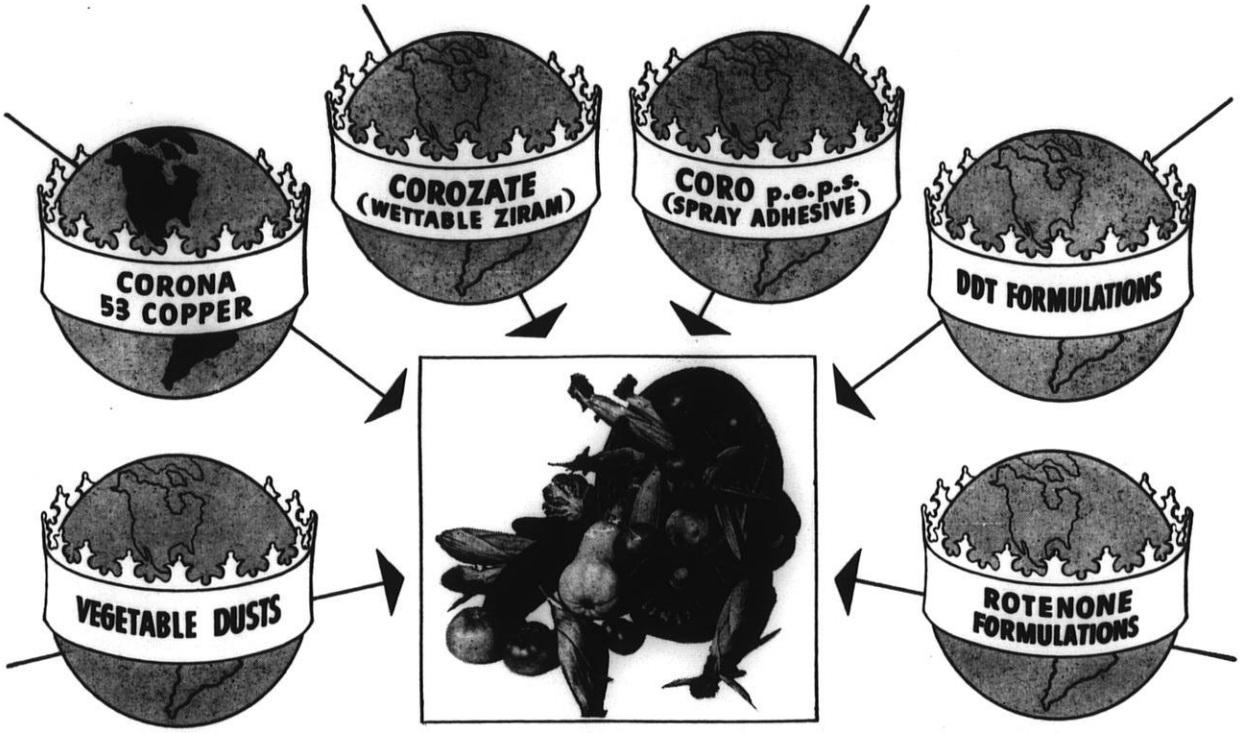
Results

The results were as follows, as published in the Iowa Bulletin: "Average yield for the area within 300 feet of the row of hives was 117.6 pounds of seed per acre. This is 2½ times the average yield of 46.9 pounds per acre found for the 300-foot-wide belt across the far end of the field, between the 900 and 1200-foot distances.

It is to be noted that the break in high seed yields in 1951 came between 300 and 400 feet from the colonies, whereas in 1950 a similar break occurred between 400 and 600 feet.

The apparent correlation of the 2 years' records on this point suggest that the desirable spacing between groups of colonies in red clover seed fields may be approximately 200 to 300 yards, a point of vital interest to both beekeeper and farmer. **By O. W. Park and R. J. Walstrom.**

You can tell from the kind of energy a man applies to a spade whether his mind is occupied with raising some vegetables or digging some bait.



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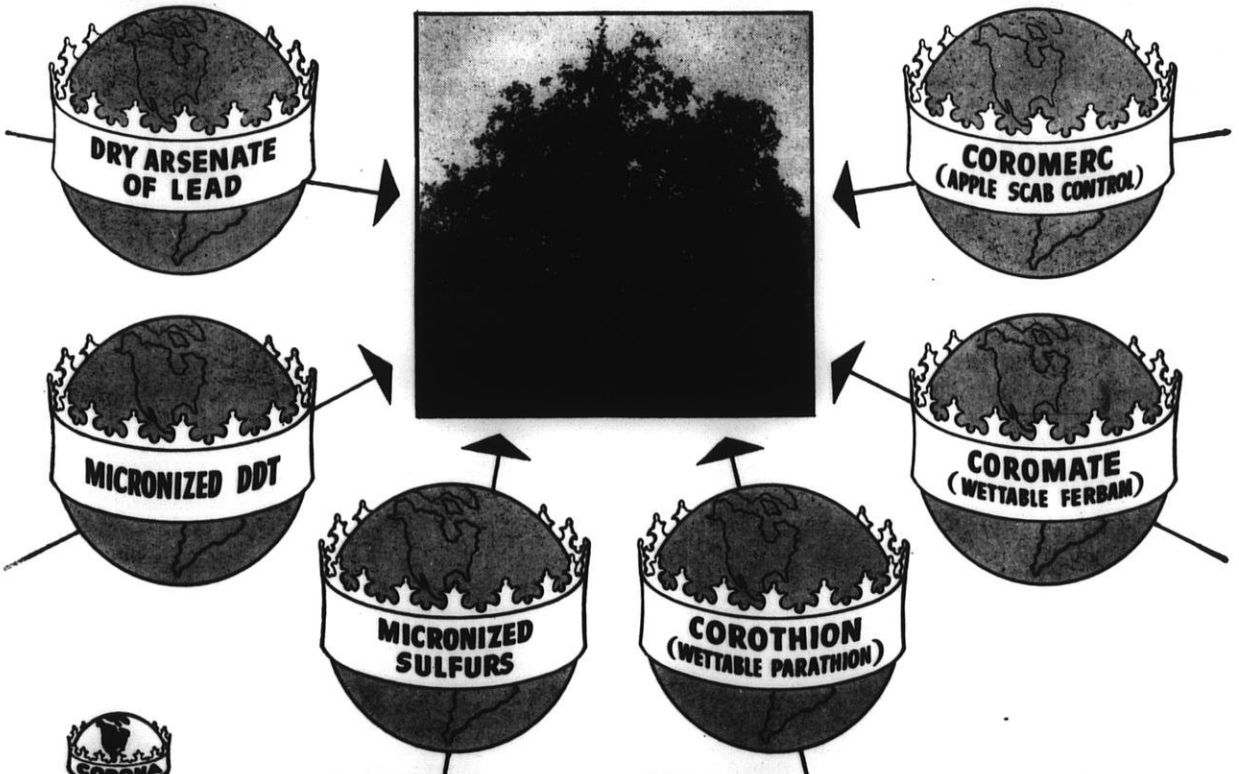

CORONA CHEMICAL DIVISION

PITTSBURGH PLATE GLASS COMPANY

MILWAUKEE, WIS. MOORESTOWN, N. J.

Niemans Observe Centennial Of Orchard Homestead

In the summer of 1852 Jochim Niemann, a forester in Mechlenburg, Germany, took his wife, two young boys and his father to the United States. A sailboat trip of about four weeks landed them in New York, and from there they traveled overland by rail to Milwaukee, Wisconsin. The rest of the trip to the home of some former friends who lived in Germantown in Washington County was made by oxen. In selecting a farm, Jochim Nieman looked for land on which the hard maple and beech trees grew well, for this land was considered good land for farming. He purchased the eighty acre tract of land, which the Niemans have held as a homestead for 100 years, and took possession in the fall of 1852.

The family, like many other Wisconsin farm families, went into general farming; but soon the inherent love for tree culture began to emerge. The planting of a three acre apple orchard over the protests of other members of the family who figured that good wheat land, cleared out of the forest, was too valuable to be put back into trees, was the result of this devotion to the science of horticulture.

The first apple orchard was planted to such well known old varieties as snow, golden russet, greening, twenty-ounce, red astrachan, sweet russet, early harvest and northern spy. The fruit from an orchard this size was more than the family could use for fresh fruit, dried apples, and cider, so the surplus was hauled to Milwaukee on a horse drawn wagon in canvas two bushel grain bags. The bottom of the wagon was filled with hay, and hay was also used to pack between the layers of bags to prevent bruising the fruit as it was hauled over the rough roads. About 40 bags were loaded at a time. The sales were mostly made by a house to house canvas and the prices were not too high.

An incident is related of an entire load being sold to a produce peddler met on the way into the city, for 27c per 2 bushel bag.

After a number of years had passed, the urge to move to newer frontiers made Jochim Niemann take his now growing family to Hamburg, Marathon County, where one of his daughters married Fred Fromm and became the mother of the Fromm Brothers, world's largest producers of Silver Fox. His oldest son, John, was left on the Ozaukee County homestead.

(To be Continued in Next Issue)

PACKAGING—THE GROWERS' VIEWPOINT

New Jersey Experiment

A N.J. grower, cooperating with New Jersey College of Agriculture (Rutgers) and USDA, tried on-the-farm packaging three weeks in tests to determine whether fresh market sales could be expanded and distant markets broadened by prepackaging.

Operation was carried out by two girls in a field packing house; one cut off butts by hand and weighed them into 1½ lb. lots, the other placed stalks (with aid of a wide metal band) in a cellulose acetate film bag. Top of bag was folded and stapled with hand stapler. Time checks showed girls could package as fast as asparagus could be bunched after a few days' experience.

Cost of packaging materials during test period including bag, staples, labels, was 2.3c a package or 1.6c a lb. Package contained about 1½ lbs. fresh-cut asparagus to 1¼" in diameter and from 7¼" to 8" in length. Color was good; quality above average; spears usually green down to butt.

From May 10 through June 24 same year, asparagus was marketed at 27c to 35c per 1½ lb. package. Bunched asparagus sold from 45c to 55c per 3¼ lb. bunch and averaged about 49c. Consumers were willing to pay a premium of 5c a lb. for prepackaged product. Four stores discontinued handling bunches soon after program started. Daily checks on quality showed prepackaged product could be kept 3 days without deterioration.—From Market Growers Journal.

WISCONSIN'S FIRST FRUIT GROWERS ASSOCIATION

Organized in 1855

In the library of the Wisconsin State Horticultural Society is a copy of the Transactions of the Wisconsin Fruit Growers Association for the year 1855. It is a very interesting publication as this Association was the forerunner of the Wisconsin Horticultural Society. The Association carried on until the beginning of the civil war when all meetings were discontinued. At the close of the war horticulturists met again and organized the Wisconsin State Horticultural Society in 1865.

Officers at that time were H. J. Starin of Whitewater, President; Vice Presidents: Cyrus Hawley of Milwaukee, D. Worthington of Waukesha and F. Drake of Racine; Mark Miller of Madison, Recording Secretary; Charles Gifford of Milwaukee, Corresponding Secretary; R. W. Parker of Milwaukee, Treasurer. On the Executive Committee was J. C. Brayton, Aztalan, Charles Gifford, Milwaukee, and A. G. Hanford, Waukesha.

Many Exhibits In 1855

A portion of this report is devoted to the premiums awarded at the Annual Exhibition in Milwaukee, September 18-20, 1855. The members really went in for exhibiting varieties in those days. J. C. Brayton had an exhibit of 61 varieties of apples, 46 only presented for competition. Mr. Starin had 39 varieties for competition and a total of 60. S. Child of Delafield, had 20 varieties. G. Vleit, Milwaukee had 28 varieties and A. G. Hanford, Waukesha, 37. Twenty-six other growers had from a few to 25 varieties on exhibit. Many varieties of pears were shown, and some peaches. Much of the discussion at the Convention was devoted to the comparative value of different varieties.

Observations of growers at that time were quite accurate. Mr. Brayton of Aztalan, discussed Northern Spies and said the tree was hardy, unproductive while young, but the quality of the best. On Fameuse or Snow he said: "does well in all soils; quality very good; not rich in flavor, but pleasant and agreeable." We note, however, that some of the varieties "recommended for general cultivation" have since been discontinued.

KEEP SCAB OUT WITH DU PONT "FERMATE"

TOUGH ON DISEASE. "Fermate" fungicide gives foliage and fruit of apples and pears sure protection against scab. It also controls cedar-apple rust, black rot, sooty blotch and bitter rot.

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COMPATIBLE WITH OTHER CHEMICALS. You can use "Fermate" safely with most pest-control products. For exceptional wetting and covering power, use Du Pont Spreader-Sticker in the spray mixture.

IDEAL FOR MANY FRUITS. "Fermate" also controls grape black rot, brown rot of stone fruits, peach scab, cherry leaf spot, cranberry fruit rots and raspberry anthracnose and leaf spot.

See your dealer now *for Du Pont "Fermate" fungicide and other proved Du Pont pest-control products. Ask him for free booklets, or write to Du Pont, Grasselli Chemicals Department, Wilmington, Delaware.*

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Fungicides: PARZATE® (Liquid and Dry), FERMATE,® ZERLATE,® Copper-A (Fixed Copper), SULFORON® and SULFORON®-X Wettable Sulfurs . . . *Insecticides:* DEENATE® DDT, MARLATE® Methoxychlor, LEXONE® Benzene Hexachloride, KRENITE® Dinitro Spray, EPN 300 Insecticide, Calcium Arsenate, Lead Arsenate . . . *Weed and Brush Killers:* AMMATE,® 2,4-D, TCA and 2,4,5-T . . . Also: Du Pont Cotton Dusts, Du Pont Spreader Sticker, PARMONE® Fruit Drop Inhibitor, and many others.

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On all chemicals always follow directions for application. Where warning or caution statements on use of the product are given, read them carefully.

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BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Apple Production In Wisconsin

Who grows the apples in Wisconsin?

The Federal State Crop Reporting Service has given us an analysis of apple production by orchard size groups in Wisconsin taken from the 1950 U. S. Census.

Large Number of Small Growers

There are 62,979 farms reporting less than 100 apple trees but producing 1,032,153 bushels of apples which is 46.8% of the total state production. That is indeed a vast number and a large production, and when the weather is favorable for the production of clean fruit, this crop can be an important factor in determining apple prices.

Commercial Growers

Only 4 orchards have more than 10,000 trees, but they produce 178,600 bushels.

There are 5 orchards with more than 7,500 trees and produce 64,700 bushels.

Then there are 5 farms with more than 5,000 trees, producing 75,000 bushels. Also 12 orchards with more than 3,000 trees, producing 126,532 bushels.

15 orchards have more than 2,000 trees and produce 97,900 bushels.

55 orchards have more than 1,000 trees, and produce 180,716 bushels.

95 orchards have over 500 trees, and produce 173,474 bushels.

268 orchards have over 200 trees, and produce 178,630 bushels.

364 orchards have over 100 trees, and produce 98,522 bushels.

The census gave a total of 63,802 farms which reported having apple trees, and they reported a production of 2,206,227 bushels.

According to law, the crop reporting service can estimate only the commercial crop in Wisconsin for publication.

This commercial crop is that produced in commercial counties of which there are only 7 in the state. As a result, our crop reporting service has been limited by law to give statements on only a portion of the real crop in the state. In fact, the crop has been reported as from ½ to ¾ of a million bushels.

We think it is time that the law

be changed and our crop reporting service be permitted to give a more accurate picture of the Wisconsin apple crop. Also the actual crop in other states which enters commercial channels.

Side Line Orchards Numerous

From the figures given, it will be noticed that the larger percentage of the total production outside of any that grow only a few trees, come from the 4 large orchards with more than 10,000 trees, and from the small orchards from about 5 to 15 acres.

In the three groups having from 200 to 2,000 trees, we find a substantial number of growers producing a substantial percentage of the commercial crop. Note that the 55 farms reporting from 1,000 to 2,000 trees, produced 8.2% of the total—the largest of any commercial group. This would indicate that the interest is in the small orchards, either as a side-line or in connection with a dairy farm in Wisconsin.

GARDEN DAMAGE BY RABBITS

Repellents can be applied with fair to good success to stop rabbit damage to tender garden plants just getting started. A nicotine sulphate solution sprayed on plants in the early evening is quite effective. Daily applications for about 10 days or until plants are well leafed is suggested. The new repellent called "No-Nib-l" is good and requires only one application. **By W. D. Fitzwater, Asst. District Agent.**

KRILIUM

The free advertising given krilium is an example of the way garden writers go after anything that looks like big news. Even before it will be available to the public in quantity, it has been publicized in practically all magazines. "Writes W. A. Simons, Editor of the North and South Dakota Horticulture: "every magazine I have looked at recently, except my Sunday School magazine, has had full description of its effect on heavy clay soil, and I will examine carefully the latter magazine in full expectation that they, too, will publicize it." And now we hear that at the probable price of $2.00 per pound, it would cost about 6 to 8 hundred dollars per acre for an application, and that when used in potting soil, the roots of the plants penetrate the pots so it was almost impossible to remove the soil from them.

We regret the way some garden writers are inclined to over-publicize new discoveries, giving publicity to spray materials, chemicals, fertilizers, etc., before they are available and before very much is known about their practical application or real value.

Wisconsin Horticulture will not mention Krilium until it is on the market and has been tested at our Experiment Station and will then give reports on what it will do for horticulture.

Note: After this was written, full page advertisements appeared in newspapers that you may now have the privilege of buying 5 lbs. of Krilium for $6.95 plus 40c postage. This will treat a plot of about 6 x 7 feet to a depth of 6 inches.

Remember the first ball-pointed pen you could buy for $12.00.

An application of 3 inches of peat moss or other organic matter will give just as good results. It can be applied over a period of several years at about 1 inch per year.

POTATO BEETLE. **Question:** What is the easiest way to control potato beetles and leaf hoppers?

Answer: Both the Colorado Potato Beetle and the Potato Flea Beetle can be controlled by the application of DDT dusts or sprays.

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

QUESTIONS ABOUT VEGETABLES ANSWERED BY JOHN A. SCHOENEMANN

Nitrogen On Sweet Corn

QUESTION: Is it beneficial to give sweet corn an application of nitrogen fertilizer? What type of nitrogen is best and when should it be applied?

ANSWER: A normal well-balanced fertilization program in a vegetable garden should take care of the plant food needs of sweet corn as a garden crop. However, if the garden is on a sandy soil or the plants show signs of nitrogen hunger, application of 150 to 200 pounds per acre of ammonium nitrate just before tasselling time will aid in increasing production.

Fertilizers For Tomatoes

QUESTION: Is it advisable to use nitrogen fertilizer on tomato plants? If so, at what time?

ANSWER: The use of nitrogen fertilizers on tomatoes depends largely upon variety and the initial fertilizer program at planting time. It is possible to get a variety such as Rutgers into an over-vegetative state much more easily than some of the earlier varieties. In general, if any nitrogen need be applied it should definitely be withheld until after the main portion of the fruit on the plant is "set." Earlier applications may result in "all vines and no tomatoes."

Nitrogen On Cabbage

QUESTION: An application of nitrogen fertilizer to cabbage plants will give a darker green color. Is this advisable, and at what time should it be applied?

ANSWER: Again, a normal well-balanced fertilization program should take care of the plant food needs in a vegetable garden. In commercial production, however, many growers of early cabbage give the crop an application of ammonium nitrate fertilizer at the time heads begin to form. Used at the rate of 100 to 200 pounds per acre results in faster growth,

greener color, and higher production.

Asparagus

QUESTION: How late into the season should a four-year-old asparagus bed be cut? Also, what is the best way of fertilizing asparagus.

ANSWER: We usually figure on an eight-week cutting season for asparagus. Therefore, it depends upon the earliness at which cutting is begun as to when harvest should cease. In most seasons at Madison, harvest begins about May 1 and extends to early July.

It is important to allow sufficient time before the end of the season for the tops to grow up and manufacture enough food reserves for the next season's crop.

For this same reason, fertilization of asparagus should be done at the end of the cutting season. The use of about three or four pounds of 8-8-8 fertilizer per 100 square feet is good practice on most plantings.

Staking Tomatoes

QUESTION: I have a small garden with only a half dozen of tomato plants. I have heard that I will get a better crop if I stake them. What are the advantage of staking tomatoes?

ANSWER: There are some advantages to staking tomato plants. There are, however, some disadvantages too. It is up to the individual gardener to determine how these various points fit into his particular situation.

Some advantages of staking tomatoes are:

1. Earlier fruiting and ripening.
2. Fruit will be clean and free of ground spots.
3. Fruits will be larger on the average.
4. Ease of picking.
5. You can get higher production per unit of garden space, but it will take more plants to achieve this.

Some real disadvantages to staking are:

1. More work involved in pruning and tying.
2. Less fruit per plant.
3. More tendency for sun-scalded fruits and cracking.
4. More liklihood of blossom-end rot in most seasons.
5. More plants required for the same total production compared to growing plants on the ground.

FOR HIGH YIELDS FROM EVERBEARING STRAWBERRIES

The Iowa Experiment Station reports yields of 13,000 quarters per acre, or 120 quarts per 100 foot row.

A summer mulch is very important to conserve moisture in the everbearing strawberry bed during the warm, dry summer months. We must remember that strawberries contain about 80% water and have a shallow root system.

In the Iowa tests the plants were mulched one month after planting. Corn cobs, cracked by running them through a hammer-mill, were applied to a depth of 1½ to 2 inches and sawdust to a depth of 1 to 1½ inches, completely covering the soil around the plants. First, blossoms were removed to allow the plants to develop large crowns and leaf areas. The variety Superfection produced the largest yield. Runners were kept off during the entire season.

INSECT CONTROL ON STRAWBERRIES AND RASPBERRIES

Questions answered by E. L. Chambers, State Entomologist, Madison

QUESTION: Which is best to control strawberry insects and diseases, a dust or a spray? What diseases are controlled by spraying or dusting?

ANSWER: Dusts are more easily and quickly applied than sprays. Sprays are a little more effective and economical. Insecticide dusts are preferred by most growers for foliage feeders, while sprays are preferred for applying contact insecticides and fungicides, especially when used in combination with each other.

Leaf spot, leaf scorch, and the several rot fungi are the principal diseases controlled best by spraying, while leaf roller, spittle bug, and the strawberry weevil can be more satisfactorily controlled by dust.

QUESTION: What is the best way to control spittle bugs on strawberries?

ANSWER: Either a chlordane dust or spray is effective. A 5% chlordane dust is the usual recommendation, or a spray made up of 1½ teaspoonfuls of the 45% chlordane emulsion to a gallon. Where a rotenone dust is preferred, the .75% rotenone dust may be used.

QUESTION: What is the small beetle that eats into the ripe raspberry fruit, and how can it be controlled?

ANSWER: The insect is apparently the raspberry fruitworm (**Byturus unicolor**). Dusts containing ½ % rotenone in talc applied in three applications at weekly intervals, beginning ten days after the first blossoms appear, gives best results.

QUESTION: How do you control borers in strawberries? When should a dust or spray be applied?

ANSWER: To avoid damage from this pest, set only plants dug before the first beetles are active in the spring. Destroy the old planting nearby promptly after the last picking and set the new bed on soil that has been in cultivation for at least one year and at a distance of at least 1,000 feet from a source of infestation.

The most promising spray or dust treatment is chlordane, using 3 tablespoonfuls of the 45% wettable powder in 5 gallons of water, or a 5% chlordane dust.

SUMMER MEETING — VEGETABLE SECTION

Wisconsin Berry and Vegetable Growers Association

University Farm, Madison

THURSDAY, JULY 24, 1952

A.M. Open for visits and conferences.

1 P.M. Assemble at U. W. Horticultural Gardens near U. S. Forest Products Laboratory. (Area fenced in for berries and vegetables.) Park along Walnut Street off University Avenue. Sign at junction of University Ave. and Walnut Street.

See vegetable research plots on upland soil; vegetable varieties; onion breeding; weed control on vegetabls; beet breeding; squash breeding; garden varieties of chrysanthemums; soil treatment with Krilium for vegetables and flowers.

2 P.M. Visit research plots on muck soil. Located on marsh nearby.

See chemical weed control; carrot breeding; beet breeding; onion fertilization.

3:30 P.M. If time permits. Trip to Charmany Farms on Speedway Road.

See additional horticultural research on both vegetables and gladilous.

Cooperating: Professor O. B. Combs, Chairman, Department of Horticulture; W. H. Gabelman, Vegetable Crops; Gail Beck, Floriculture; J. A. Schoenemann, Vegetable Crops; L. G. Holm, Growth Regulators on Horticultural Crops; Professor J. G. Moore, Small Fruit and Vegetables; Graduate Students on special research projects.

SUMMER MEETING
BERRY GROWERS SECTION

Wisconsin Berry and Vegetable Growers Association

STURGEON BAY, TUESDAY, JULY 1

9:00 A.M. Assemble at Branch Experiment Station. Highway 42, North of Sturgeon Bay. Inspection of buildings.

10:00 A.M. What we shall see: Strawberries: variety trial; weed control; fertilizer trials.

Raspberries: weed control and several varieties. Also grain and fruit tree experimental plots, for those who care to see them. Tour in charge of Professor Frank Gilbert, Station Superintendent and Staff.

12:00 M. Meet at Reynolds Brothers, Inc. factory. Bring picnic lunch. There will be hot dogs, hamburgers, pop and coffee at the Reynold's Brothers stand for sale.

1:15 P.M. Business session.

1:45 P.M. Tour of two commercial berry farms.

Places to be visited: Reynolds Brothers Farm with about 13 acres of strawberries.

The Thalman-Swingle Berry Farms, Little Sturgeon Bay. About 10 acres of new strawberry varieties planted in 1952 with harvest of 3 acres of 10 varieties—Thomas, Wis. No. 214, No. 261, No. 537; Sparkle, Robinson, Premier, Dunlap, Beaver and Nectarina.

CONTROL OF VEGETABLE INSECTS

Answers by Dr. R. Keith Chapman, Dept. Entomology, U.W.

SQUASH VINE BORER. **Question:** Last season a borer got into my pumpkin and squash vines and almost destroyed many of them. The plants seemed to do all right, and some vines seemed to grow quite long, but suddenly an entire vine would wilt as if attacked by wilt disease. How can this be controlled?

Answer: The squash vine borer can be controlled by a light application of a 3% DDT dust to the crown of the plant and the base of the runners. Applications should begin about the third week in June, or when the plants begin to vine out, and 3 or 4 treatments should be applied at 10-day intervals.

CABBAGE WORMS. **Question:** We have had considerable trouble on our cabbage plants by having a green

(Continued on page 254)

From the Editor's Desk

OUR COVER PICTURE

This month we helped the Nieman Brothers celebrate their 100th Anniversary of Orchard Homestead at Cedarburg.

Our cover picture shows the vast extent of this successful orchard containing one of the largest plantings of Cortland apples in this section of the country.

The first trees of the present 115 acres of apple orchard were planted in 1923. Planting continued for 20 years thus creating an orchard with trees in full bearing and some just coming into bearing. The bulk of the planting is Cortland, which grows and colors well in the Lake Shore Counties. The remainder of the trees are made up of McIntosh, N.W. Greening, Red Delicious, Jonathon, Kendal and Melba.

On another page we begin a story of the 100 years of this farm and orchard.

THE MC KAY NURSERY COMPANY OBSERVES 50TH ANNIVERSARY

In 1902 Mr. William G. McKay having left his Columbia County farm, founded the McKay Nursery Company and he is still the head of the firm after 50 years. Now the largest single nursery in Wisconsin, the McKay Nursery Company has more than 600 acres of land around Waterloo in nursery stock and in crops for rotation and soil improvement. More than 200 salesmen are scattered about the country.

"The nursery business has changed a lot in 50 years," says Mr. McKay. "Back in the 1900's people bought shrubs or trees and stuck them anywhere. Now they want a landscaped plan as thorough as their house plan." The company maintains a staff of landscape architects.

Among the traditions started by Mr. McKay is the distribution of thousands of peony blooms to hospital patients throughout the Madison area during the blooming season.

NO MAGAZINE IN JULY

There will not be an issue of Wisconsin Horticulture in July. Some years ago we found it necessary to omit this issue as an economy measure.

FROM A MEMBER

"I am enclosing my membership dues to the Wisconsin Beekeepers Association. Would not like to miss an issue of Wisconsin **Horticulture.** Get lots of good from it and enjoy every department in it." Signed, Robert Frisbie, R. 1, Juneau, Wisconsin.

WISCONSIN NURSERYMEN'S MEETING

Annual summer meeting of the Wisconsin Nurserymens Association will be held at Deer Trail Lodge at Heafford Junction, Wisconsin — just north of Tomahawk, according to Mr. Thomas S. Pinney, Secretary, Sturgeon Bay. The dates are June 20 through 22—Friday through Sunday.

The meeting will be for both business and recreation. There will be special fishing trips and entertainment for the evening session.

Officers of the Association are: Howard W. Anderson, President, Wisconsin Rapids; Robert H. Gieringer, Vice-President, Milwaukee; and Mr. Pinney, Secretary-Treasurer.

It has been said: "Smoking makes women's voices harsh and shrill, according to an expert on the subject . . . Especially if you get ashes all over the carpet."

HORTICULTURE AT THE STATE FAIR

The famed Flower Show at the 1952 Wisconsin Sate Fair in Milwaukee on August 16-24 will not be supervised by E. L. Chambers for the first time in more than a quarter of a century. Mr. Chambers has resigned after performing an outstanding job that lifted the Flower Building into the very top rank of exhibits at the annual exposition of the Nation's Greatest Fair year after year after year.

But the Flower Show will be in good hands, never fear. As Superintendent for 1952, appointment has been made of Ted Osmundson, widely known Sturtevant florist and horticulturist, who has recently been Ernie Chambers' top assistant, and who is widely known for his ability to make any floral exhibit, big or small, an artistic masterpiece.

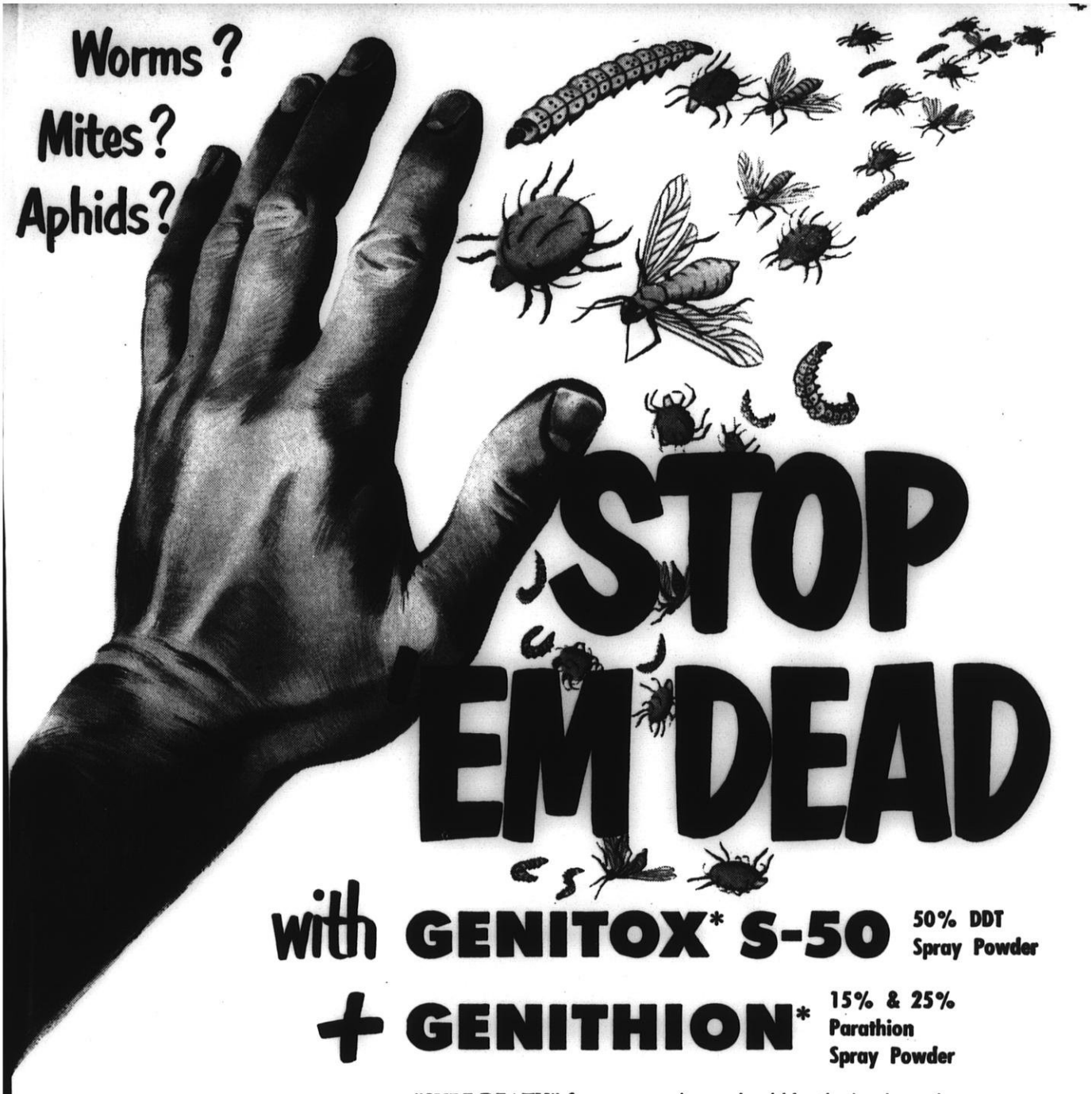
The Bee and Honey exhibit will be set up in an entirely new building this year, announces Willard M. Masterson, new manager of the Wisconsin State Fair, which will give this very popular display more opportunity for display.

Both the Dairy building and the Youth building will have complete interior renovations, and added emphasis will be placed on Dairy projects for boys and Home Economics display for the girls. Alice in Dairyland will again reign over the Dairy Building as she has the past four years, but this year Alice will have a Court of Six Princesses to lend their charm and beauty.

STRAWBERRY FESTIVAL
Alma Center, Wis.—June 21 and June 22

The annual strawberry festival of the Alma Center Fruit Growers Co-op, sponsored by the American Legion will be held on Saturday and Sunday, June 21-22.

There will be a strawberry show with prizes for the best berries and there will be plenty of berries available for sale to all who come. **By Lee J. Ramos, Sec.**



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Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

CHAPTER OFFICERS WISCONSIN GLADIOLUS SOCIETY

Madison Gladiolus Society

Mr. H. E. Halliday, President; Mr. Gerald Wilke, Vice-Pres.; Miss B. E. Struckmeyer, Sec.-Treas., all of Madison.

Manitowoc Gladiolus Society

John Gates, President, Two Rivers; Jess Hamilton, Manitowoc, Vice-President; Mary Rezek, Manitowoc, Secretary; Gil Thompson, Manitowoc, Treasurer.

Marathon County Gladiolus Society

Lloyd Prahl, President; Arthur Schulz, Vice-Pres.; Mrs. Lloyd Prahl, Sec.; Albert Scholtze, Treas. Edward Schaepe and Carl Jahnke, Directors at Large. All of Wausau, Wis.

Sheboygan County Gladiolus Society

Walter Axel, Sheboygan, Pres.; Jacob Kertz, Elkhart Lake, Vice-Pres.; Mrs. Harvey Pierce, Sheboygan, Sec.-Treas. Otto Kapschitzke and William Bonanze of Sheboygan, Directors.

Southern Wisconsin - Northern Illinois Gladiolus Society

Leland Shaw, Pres., Milton; Anton Koepke, Vice-Pres., Elkhorn; Oren Baxter, Sec., Janesville; Dewey Sleezer, Treas., Lake Geneva.

Directors: Everett Van Ness, Clinton; Lloyd Pateman, Dousman; David Puerner, Milwaukee; Aubry Dickman and Carl Christensen, Rockford, Ill.; John Brinkman, Chicago, Ill.

Twin Cities Gladiolus Chapter

Mrs. Palmer Garland, Marinette, President; Jerry Merchart, Marinette, and Ray Casmir, Spalding, Michigan, Vice-Presidents; Miss Dolores Sommerfeldt, Marinette, Sec.; E. A. Sommerfeldt, Marinette, Treas.; Nels Nelson and Mrs. Ed Hanson, Marinette, Directors.

JUNE IN YOUR GLAD GARDEN

By Dave Puerner, Milwaukee

This is probably the most important month for your gladiolus and the success you are to enjoy during their blooming season.

Most of your May planted glads will be up and growing early in June. Cultivation and a regular schedule of spraying and dusting should begin, also a well-planned system for feeding the plants.

If you have a fairly weed-free location, cultivation should consist mostly of a light stirring of the soil to keep the ground loose to help prevent weed germination. If you feel that you did not plant your bulbs at sufficient depths, the soil can gradually be hilled around the glads as they continue to grow. Many growers use this system for weed control. That is, they plant the large bulbs five to six inches deep, they gradually keep filling the soil around the plants as they grow. With this system you can prevent practically all hand weeding.

Fertilizing

The gladiolus produces a large plant with a large flower head in quite a short growing season, sixty to ninety days. In addition it must also reproduce another bulb, together with its new bulblets. For this reason the plant must have sufficient as well as proper fertilizers to do the job. Your soil must also have sufficient moisture content to make the nutrients soluble and available to the plant roots.

It is quite generally agreed that the first several weeks growth comes almost entirely from the mother bulb. Presuming this to be true it is apparent that the plant begins its feeding from the soil early in June, so the time is at hand to have fertilizer available. For most gardens any of the regular commercial fertilizers will do a good job. For a small planting of a few dozen bulbs a few handfuls sprinkled around the plants, then worked into the soil will be sufficient. This should be followed with a good soaking of the soil to dissolve the fertilizer and get it down to the plant roots.

Thrips

I feel that June is the most important month for the control of gladiolus thrips. If one or two adult thrips have survived your pre-planting treatment, or wintered over in your garden, this is the time to catch them. It's like swatting that early fly, thereby preventing the future generations totaling in the millions. The best known and easiest to obtain material is DDT dust or spray. The 5% dust applied early in the morning when the plants are wet with dew will give practically perfect control.

Toward the end of June it is a good plan to give your glads a careful inspection for diseased plants. Rogue them out immediately to keep the troubles from spreading. Disease which shows up now is usually the result of bad corms. Several of the foliage diseases won't be in evidence until later in the season, after hot weather has set in.

Deep Planting

The deep planting of the bulbs keeps the roots down where the ground is cool during the hot summer days, but you must remember, also, to plan on an inch of water per week in

order that it will soak down to this depth, carrying the fertilizer in solution down to the plant's roots. The deep planting also provides good anchorage to prevent injury during stormy weather.

Just one more note. Don't make your plant too self sufficient at all times. Once or twice during mid-growing season it is a good plan to with-hold water. This will cause the plant to increase its root growth in search of moisture and food and good root structure is an absolute requisite in obtaining top results. Feeding should be done in June as outlined above, followed by a fairly heavy feeding at the time the plant sends its spike up through the leaves, and another after blooming and the plant goes on to replenish the new bulb and grows its bulblets.

THE STATE GLADIOLUS SHOW

Arrangements have now been completed to hold our state Gladiolus Show at the Wisconsin State Fair in the Horticultural Building on August 16, 17, and 18. The show will be set up Friday night, August 15. Judging will begin Saturday morning at 9 A.M. We have been allotted the west side of the building with use of 24 of the 8′ x 16′ spaces, which gives us an excellent setting and where the show can be seen by many thousands of people.

Details about admission tickets, committees etc., will be published in our next issue. We will try to arrange for a banquet on the Fair Grounds. Schedules will be available for all members. The classification list will be the same as in the past. **By Walter Kurtz, Pres.**

WISCONSIN GLADIOLUS SHOWS

August 3-4. Madison Gladiolus Society Show. First National Bank, Madison, Wis.

August 3. Seedling and R. I. Show, Elementary School Building, Jefferson, Wis., by the S. Wisconsin and N. Illinois Gladiolus Society.

August 9-10. Central International Gladiolus Show, Sioux City, Iowa.

August 9-10. Regional Show. Sheboygan and Manitowoc Chapters. Immanuel Hall, Sheboygan, Wis.

August 16-17. Gladiolus show for Junior Growers by the Manitowoc Gladiolus Society.

August 16, 17, 18. Wisconsin Gladiolus Society Show, at Wisconsin State Fair, West Allis.

August 31 - September 1. Annual Show, S. Wis. & N. Ill. Society at Walworth County Fair, Elkhorn, Wis.

MANITOWOC GLADIOLUS SOCIETY PROGRAM

Our Gladiolus Chapter now has 48 Junior members and 54 Senior members. We hold our meetings the last Sunday of each month with a pot-luck supper. One basket social is held each year, the proceeds going to the society.

Mr. Joe Rezek has purchased a camera and colored pictures will be taken of all prize winning glads and of our Junior member's gardens for showing at meetings. A show for our Junior growers is being planned about August 16-17.

Our society is discussing a project of having a trial garden which our president hopes will soon materialize.

All our meetings have been very interesting. Colored slides have been shown and at one meeting we invited the public and had 146 present. We hope someday we can hit a high mark of 500 members. By Mrs. Mary Rezek, Sec.

REPORT ON GLADIOLUS VIRUSES

Cucumber Mosaic May Cause Flower Breaks

Dr. Philip Brierley, Pathologist for the USDA, has reported on the significance of the cucumber mosaic and tobacco ring spot viruses in gladiolus.

The plants that yielded cucumber mosaic virus all showed white streaking in leaves, but other plants with similar leaf symptoms failed to yield cucumber mosaic virus.

From the experiments carried on —published in the February 15th issue of the Plant Disease Reporter, Brierley concluded that it is likely that cucumber mosaic virus may be responsible for at least some of the white streaking seen in gladiolus leaves and for some of the more damaging flower breaks. Although tobacco ring spot virus did not cause symptoms in the seedling clone, it may cause them in other gladiolus varieties.

S. WISCONSIN-N. ILLINOIS GLADIOLUS SOCIETY REPORT

Two gladiolus shows are planned for the coming season. The Seedling and Recent Introduction Show will be held in the Elementary School, Jefferson, Wis., Sunday, August 3. Our late show will be held at the Walworth County Fair at Elkhorn, August 29 to September 1. August 29-30 will be the show for commercial exhibits, baskets and arrangements. On August 31 and September 1, the 1 and 3 spike classes will be shown. A total of $250.00 will be awarded as prizes, with ribbons.

Summer Activities

The Society will have organized field trips to gladiolus fields with detailed instructions of the various types of culture seen. We plan to select spikes from the garden, score them and give explanations so that members can learn the merits of a top variety. They will also be given opportunity to score spikes themselves—in other words this will be a scoring school. We expect these trips to furnish some very enjoyable afternoons, bringing our members closer together and giving all an opportunity to learn from other growers.

Mr. Tony Koepke has been selected for developing a future test garden for NAGC. **By Oren Baxter, Secretary, Janesville.**

ANSWERS TO QUIZ ON PAGE 259

1—Rose. 2—Poppies. 3—Rose. 4—Pansies. 5—Tulip. 6—Lilacs. 7—Rose. 8—Forget Me Nots. 9—Buttercup, Buttercup. 10—Cowslip. 11—Violet. 12—Lilies. 13—Daisies. 14—Clover. 15—Daffodils.

CONTROL OF VEGETABLE INSECTS

(Continued from page 249)

colored caterpillor attack the leaves and heads. The worms ate holes into the leaves and the head itself. How can it be controlled?

Answer: Cabbage worms can easily be controlled by an application of 3% DDT dust whenever the worms appear.

CABBAGE APHIDS. **Question:** What is the best way to control aphids on cabbage?

Answer: Cabbage aphids can be controlled by an application of a 1% parathion dust or a TEPP spray at the rate of ½ pint to 100 gallons of water. Both of these materials are hazardous when breathed or when they come in contact with the skin, and should be used with caution, heeding all of the manufacturer's precautionary statements.

CORN EAR WORM. **Question:** Many of our ears of sweet corn were ruined by a worm which ate along the cobs. How can they be controlled?

Answer: For small plantings of sweet corn inject about one-half of a medicine dropperful of heavy white mineral oil into the silk channel after the silks have turned brown. For light infestations of ear worm, the use of four applications of 5 to 10% DDT dust at 3—day intervals during the green silk period will be somewhat effective.

NITROGEN FERTILIZER BENEFICIAL TO VEGETABLES

Mr. Harry Barlament, Green Bay President of the Wisconsin Berry and Vegetable Association writes that an application of nitrogen to sweet corn at tasseling time, or at the time of the last cultivation, is very beneficial. He uses tractor equipment, with fertilizer attachment and cultivates the fertilizer into the ground.

On tomatoes, Mr. Barlament uses a nitrogen fertilizer immediately after blossoming at the last cultivation in the same way as sweet corn.

Two years ago, he used nitrogen on cabbage and found that it gave much darker green leaves, which the buyers liked.

When your friends laugh at your jokes you have good jokes . . . or good friends.

EXPERIENCE WITH CHEMICAL WEED CONTROL ON STRAWBERRIES

Mr. Virgil Fieldhouse of Dodgeville, Wis., writes that their strawberry bed sprayed with a pre-blossom spray of Crag herbicide No. 1., is very free of annual grasses and weeds, especially oat and wheat plants usually seen after mulching. By using a pre-emergence spray of TCA on the potatoes last year and two Crag sprays on the new strawberry beds, they cleaned out the foxtail and crab grass. The fruiting strawberry beds, seem to have more narrow rows, with plants rather nicely spaced this year. Due to the Crag, Mr. Fieldhouse states they do not have the usual influx of late small strawberry plants that have usually widened the rows. However, some growers have had runner setting stopped too much by the sprays, so one must be very cautious to see that the early setting runners are not injured.

STRAWBERRY VARIETIES IN LINCOLN'S DAY

Are any of the varieties of strawberries grown during the time of Abraham Lincoln still being grown today?

The answer is no. Mr. George Hafstad, Pathologist in the State Entomologist's Office, State Capitol, sends us a list of strawberry varieties listed in an agricultural report to President Abraham Lincoln in 1863. A total of 48 varieties are listed. We do not recognize a single one as having been grown during the past 20 years.

Here are a few of the varieties listed: Austin, Amazon, Bartlett, Duke de Brabant, Fillbasket, Jucunda, Jenny Lind, Lady's Finger, May Queen, Oscar, Sir Harry, Wonderful, Walker and Wizard of the North.

During the Middle Ages, Violets were chopped up with onions and lettuce for salad, or cooked with fennel and savory for broth.

HOW TO GET STRAWBERRY PICKERS

An idea that has more merit than it first appears was expressed in an editorial in the chicago Packer recently. It points out that strawberry picking is always a problem in commercial states. There usually are plenty of pickers on hand when it is easy to pick a lot of berries fast, but when the picking gets a little hard, they disappear.

The new idea advanced is that growers should raise just as many berries on half as many acres. This of course, will take careful soil selection and very efficient management of the strawberry fields. However, the fact remains that growers who are producing large yields have little trouble getting pickers.

So we join with the Packer in: "Grow more berries on less ground and it won't be so hard to get pickers."

ACTIVE DEMAND FOR GLADIOLUS BULBS THIS YEAR

"Demand for gladiolus bulbs this year is much better than in previous years, and I don't know the reason why", said Roger Russell of Madison, in early May. He added that the number of orders received and the size of each order is almost double that of previous years. Folks who formerly bought $1.00 worth are now placing orders for up to $5.00, and those who placed orders for from $5.00 to $10.00 are this year buying from $20.00 to $30.00 worth of bulbs.

Perhaps the weather had something to do with it, as good weather in late April and early May always stimulates interest in gardening. Dealers in garden supplies also reported greatly increased buying, and nurseries had sold out of many items in early May.

Garden Club News

ANNUAL CONVENTION GARDEN CLUB OF WISCONSIN

Oshkosh-Mid-September

The Executive Committee of the Wisconsin Horticultural Society meeting with the Garden Club Advisory Committee, Garden Club of Wisconsin in Fond du Lac May 2, voted to hold the Annual Convention of the Garden Club of Wisconsin in Oshkosh in mid-September, — possible date, September 19th. Arrangements will be made by Miss Bessie Pease, Route 1, Stony Beach, Oshkosh, Board member for the Winnebago Land Region.

Judging from the informal discussion about the program and flower show, it promises to be a real exciting convention. It was suggested that the flower show feature African Violets and Annuals. Details in our August issue.

A SUCCESSFUL PROJECT

Flower Arrangement Schools By Dorothy Biddle Outstanding

Almost 1,000 highly interested gardeners and garden club members had the opportunity of hearing Dorothy Biddle in her six appearances in Wisconsin during the third week of May.

We congratulate the committees for the Milwaukee Region, the Sheboygan Garden Club, Winnebagoland Region, the North Central Region and the Marinette-Twin City Garden Club for their achievement.

Outstanding was the intense interest Miss Biddle created in her listeners throughout the day on a variety of subjects in flower arrangement—ranging all the way from fundamental principles through judging arrangements, design relationship of container to flowers, types of arrangements for various settings and occasions, and table setting.

Financially the meetings were all successful. Educationally they constitute an important factor in creating greater interest in gardening, flower growing, the use of flowers and flower shows.

A goodly number of garden club members took an examination following the lecture and a passing grade fulfills the first requirement towards obtaining an accredited judge's certificate from the Garden Club of Wisconsin and the State Horticultural Society.

The feeling of friendliness and good will, so in evidence at all of the meetings brought forth many favorable remarks from garden club members. We were pleased to note the many friendships made and the satisfaction members received by attendance at the meetings.

FOR YOUR FLOWER SHOW ENTRY TAGS AND AWARD CARDS AVAILABLE

The Wisconsin State Horticultural Society has available for garden clubs and other affiliated organizations entry tags and premium award cards for shows. The entry tags are 50c per 100, and award cards in blue, red or white are 60c per 100. Some premium ribbons of paper will also be available in blue, red or white.

HOW TO OBTAIN AN ACCREDITED JUDGES CERTIFICATE

The Garden Club Advisory Board and the Wisconsin State Horticultural Society Executive Board met on May 2 and outlined the requirements for garden club members obtaining an accredited judges certificate.

The following are the requirements.

1. Attendance at a flower arrangement school with examination (The Dorothy Biddle Lectures in May will constitute such a school.)

2. Attendance and passing an examination at a flower arrangement design school.

3. Attendance at a school on color, with examination.

4. Attendance and passing an examination on perfection of bloom judging school.

5. Reading a book on flower arrangement.

It was decided that graduation from any design school which may have been held will meet the requirements.

The committee to have charge of the state judging schools for accredited judges is to consist of the members of the Garden Club Advisory Board or someone appointed by them for their region.

Several perfection of bloom judging schools are now being planned for next August or September. At these schools, expert judges will demonstrate how to score and judge classes of flowers such as gladiolus, roses, and annuals.

WAUWATOSA GARDEN CLUB NEWS

At the March meeting of the Wauwatosa Garden Club Mr. E. B. Stiefvater, Milwaukee County Agent, discussed perennials and annuals. He suggested that early and late varieties of perennials and annuals be planted to give a succession of bloom. He also told about insecticides, reminding the members to avail themselves of current material on the subject.

To the delightful tune of "Wedding of the Winds", the Wauwatosa Garden Club saw roses of different types, sizes, and color unfold on the screen at the April meeting. This was through the courtesy of Jackson & Perkins of Newark, New York. This place is known as the Rose Capitol of America. Looking at figures, one can understand why. Of 50,000 experiments, there are 35,000 plants, bearin, 15,000,000 blooms. For that reason it is possible to hold a rose festival annually which is attended by 500,000 persons.

The rose has always been considered the queen of flowers and is traced back to 600 B.C. In the Bible is recorded "The desert shall rejoice and blossom like a rose". Earliest art motifs and designs revealed the rose in its patterns.

There are predominantly four different types of roses; i.e. the tree, climber, floribunda, (or everblooming) and tea rose. Of these, the climber improves with age, and the tree rose is the ultimate in perfection of bloom.

In color, the newest rose to be seen next on the market is grey-pearl.

In addition, several members brought cherished plants for others to enjoy. Mrs. A. Frinken showed some African Violets and told how she grew them.

The attendance prize was an ivy, the original of which had been brought from Germany by Mr. and Mrs. Geo. Kruell. How? It (the original slip) had been tucked in a corsage and in that way passed customs inspectors. The Kruells did the rest.

On May 20 the annual plant sale and round table discussion was held followed with a social hour and refreshments. — By Martha Getzlaff Koch.

GARDEN TOUR AT OSHKOSH JULY 19

By Ralph A. Norem

The Oshkosh Horticultural Society invites members of Garden Clubs and the State Horticultural Society throughout Wisconsin to a garden tour to be held at **Oshkosh, Saturday, July 19.** Registration will take place at the N. A. Rasmussen Fruit farms and nursery at 1:00 p.m., and a registration fee of 25 cents will be charged.

The Rasmussen farms are situated on Highway 21 on the south side of the road halfway between Oshkosh and Omro, and are clearly marked.

Details have not all been worked out, but a rich and full afternoon is planned. They know how to grow things, these Rasmussens, and there will be much you can learn. After touring their gardens, a visit will be made to the Paine Art Center and Arboretum, which is one of the more distinctive show places in Wisconsin. Other points of interest will include the organically operated gardens of Russell Derber. Here you will see organic gardening applied in practice without the use of chemical fertilizers or poisonous sprays.

Picnic supper will be eaten on the grounds of the M. A. Haller home. True, tables and chairs may be at a premium, but you can bring your own. The committee will serve coffee and dessert. Don't expect too much: it all has to come out of the registration fee. A demonstration of flower arrangement will follow the supper.

The committee should know how many to plan for. If you plan to come, write to the society's secretary and tell her how many you expect to bring. Her name and address is: Miss Agnes Phillipson, 1673 Ninth Street, Oshkosh.

MARINETTE - TWIN CITY GARDEN CLUB

Dorothy Biddle lectured here on Flower Arrangement on May 23rd, sponsored by the Garden Club with the Women's Club as co-sponsor.

Mr. H. J. Rahmlow talked at our Garden Club meeting June 3rd at the Pine Beach Recreational Hall, with pot luck luncheon and a small flower show.

A tour of some of the interesting gardens in Green Bay was held on June 8th. Our annual August picnic will be held at the summer home of Mr. and Mrs. George Everard on Highway 35, Menominee, Mich. **By Mary O'Connell, Sec.-Treas.**

PLANTS FOR GROWING IN PARTIAL SHADE

These varieties of annuals will do well in partial shade: petunia, cornflower, nicotiana, aster, sweet alyssum, larkspur, snapdragon, calendula, pansy and begonias.

Some of the perennials that do well in partial shade are: columbine, lily-of-the-valley, dwarf bleeding-heart, foxglove, trillium, for-get-me-not, meadowrue and shooting stars.

Among the shrubs that might be grown beneath trees where the soil is dry are the: Amur maple, chokeberry (aronia), cotoneaster, coralberry, several honeysuckles, buckthorn and alpine currant.

Carnations

The Carnation was cultivated as early as 1600 in England. Those early Carnations were small and had single petals, in comparison with the huge, many petaled Carnations of today. It was then called Coronation Flower because of the custom of using this flower in crowning ceremonies.

WANTED — FLOWER SHOW DATES

If your club is planning a flower show for after August 12, send us the dates by July 10 for publication in the August issue of this magazine. We do not have an issue in July.

ANNUAL ROSE SHOW
By The Milwaukee Rose Society
WHITNALL PARK,
HALES CORNERS,
JUNE 21

The Milwaukee Rose Society will present its 5th Annual Exhibition and Rose Show at Whitnall Park, Hales Corners on June 21, 1952 from 1 P.M. to 9:30 P.M.

The show is open to the public without charge.

Not only will our members be interested in seeing the show but also one of Wisconsin's largest and most interesting rose gardens adjoining the building in which the show will be held. A trip through these gardens is a must for all Wisconsin Horticulturists.

June In The Garden

Now Is The Time To:

SPRAY ROSES. If the humid rainy weather we had in May continues during June, fungus diseases will cause a great deal of damage on many plants, especially black spot of roses. Dust with sulphur or Ferbam or other good fungicides at seven to ten day intervals to keep the plants protected. An insect poison such as DDT will control aphids and other insects.

PLANT PETUNIAS. If you have not already done so, buy some plants of Rose Charm, Ballerina or some of your favorite petunia varieties for long period bloom in the garden. After they have bloomed for several weeks and begin to get leggy, cut them back for compactness and longer bloom in the fall.

OAK TREES OFTEN STRUCK BY LIGHTNING. Records in England indicate that one-half of all the people hit by lightning while standing under trees were under oak trees. The elm seems the next most dangerous, while the beech tree has the fewest casualties.

FERTILIZER FOR AFRICAN VIOLETS. The best type of soil for African Violets is one having a PH of 6.5 or 7. However, these violets are quite tolerant of various soil conditions and do not need nearly as much fertilizer as we have recommended in the past. Soil with plenty of organic matter and a fair amount of fertilizer should grow them well. Other factors, such as temperature, light and water are most important. We see no value in adding vinegar as has been suggested.

STRAWBERRIES NEED MOISTURE. According to reports from the State Department of Entomology considerable winter injury has been found on strawberry crowns and roots due to the early freeze last November. This may be serious about the time the berries ripen if the soil becomes dry, so give plenty of water

at that time. Strawberries contain about 80% water.

LET'S SOW ANNUAL FLOWER SEEDS NOW. There is still time to sow seeds of Zinnia, Marigold, Calendula, Sweet Allysum, etc., for late summer and fall bloom. The plants will be ready for transplanting in a few weeks and will bloom when there is usually a lack of bloom in a garden devoted largely to bulbs and perennials.

INDOOR GARDENING
TROPICAL PLANTS WILL DO WELL

If you like an indoor garden, plant some of the tropical plants which do best at high temperatures. Most of our homes are kept quite warm these days — 70 degrees F. or more. Our grandmothers probably had better luck with many flowering plants because their homes were cooler and there was higher humidity due to the old cookstove with its reservoir and simmering teakettle.

The kind of plants that do well in our modern homes include these: Fiddle-leaf Fig; Rubber Plant; Aspidistra; Bow String Hemp; Kentia Palm; and Dracina. Many of the succulent plants now available at florists and stores do very well. The African Violet is well adapted to most modern homes, which is the reason it has become America's most popular flowering plant.

These plants will stand temperatures higher than 60 degrees, but not lower. The soil should contain considerable organic matter such as acid peat. Not much fertilizer is required. An application of liquid fertilizer about once in two or three months is enough. Wash the foliage in warm water occasionally.

SHOULD TULIPS BE DUG OR LEFT IN?

The answer to the question of digging tulips or allowing them to remain in the ground for the Summer depends on several things. Scientists working at the garden research center of Vaughan's Seed Store, Western Springs, Ill., point out that if bulbs are planted deep, if the bed is shaded, and if shallow-rooted annuals are sown over them, tulips are probably better off it left in. The problem is one of temperature. At the recommended depth of planting (6" to 8" below the surface) soil temperatures do not ordinarily go above 80 degrees if protected with a ground cover of shallow annuals, or if shaded by trees and shrubs.

In exposed beds, temperatures of over 80 degrees hurt the flower bud being formed for next year's bloom. Under such conditions bulbs are better off if dug and stored in the cellar. Ideal storage temperatures are above 60 degrees but below 75. At temperatures below 60 degrees, growth of leaves may be stimulated at the expense of flowering.

If the bulbs are dug they must be thoroughly ripened, to pull back into the bulb the sugars and starches needed for next year's growth. Digging should be delayed for a week after the leaves lose their green color. It is not necessary to wait until they are brown and dry, however.

In the very near future, men will eat baked beans and say, "Ah, dear, these are just like mother used to open."

"So you asked Geraldine to marry you?"

"Yes, but I didn't have any luck."

"Why? Didn't you tell her about your rich uncle?"

"I did. Geraldine's my aunt now."

The Daisy was called "eie of the daie" by Chaucer.

AFRICAN VIOLETS SHOW ATTRACTS LARGE ATTENDANCE

Two African Violet Shows were held in April—the Milwaukee County African Violet Society Show in Milwaukee, and the National African Violet Society Show in Chicago. Both attracted large crowds—more than 2,500 persons attended the Milwaukee show in one day. In fact, more people are attending African Violet shows than any other type of flower show.

African Violet Show Schedule Used By The Milwaukee County Society

CLASS I. PURPLES. Section 1, Blue Boy; 2, Viking; 3, Blue Girl; 4, Blue Amazon; 5, Any other variety not listed.

CLASS II. REDDISH PURPLES. Section 6, Commodore; 7, Red Bird; 8, Neptune; 9, Mentor Boy, etc.; 10, Any other variety not listed.

CLASS III. LIGHT BLUE. Section 11, Tinted Lady; 12, Blue Eyes; 13, Forget-me-not; 14, Ruffles, etc.; 15, Any other variety not listed.

CLASS IV. BLUES (MEDIUM TO DARK BLUE). Section 16, Norseman; 17, Sailor Boy; 18, Ionantha; 19, Blue Velvet, etc.; 20, Any other variety not listed.

CLASS V. LIGHT ORCHIDS. Section 21, Amethyst; 22, Bi-Color; 23, West Coast Amethyst; 24, Orchid Flute; 25, Any other variety not listed.

CLASS VI. REDS AND REDDISH ORCHIDS. Section 26, Red Head; 27, Orchid Beauty; 28, Red Lands; 29, Fredia; 30, Red Dupont; 31, Gorgeous; 33, Any other variety not listed.

CLASS VII PINKS. Section 34, Pink Beauty; 35, Pink Girl; 36, Blushing Maiden; 37, Pink Delight; 38, Gypsy Pink; 39, Any other variety not listed.

CLASS VIII. WHITES. Section 40, White Lady; 41, White King; 42, White Supereme; 43, Show Queen; 44, Show Prince; 45, White Girl, etc.; 46, Any other variety not listed.

CLASS IX. DOUBLES. Section 47, Double Russian; 48, Double Orchid Beauty; 49, Double Neptune; 50, Double light blue, etc.; 51, Any other variety not listed.

Scale of Points For Judging

Leaf pattern of form (Symmetry of Plant) 30
Floriferousness (Quantity of bloom according to variety) 25

Condition (Cultural perfection; freedom from diseases, insects and marred foliage) 20
Size of bloom (According to variety) 15
Color (Color of bloom according to variety) 10
100

GARDEN CLUB QUIZ — WHAT FLOWER IS IT?

At the April meeting of the Madison Garden Club prizes were awarded for those who filled in most correctly the name of the flower in each of the quotations listed below. There is a hint in each quotation and the number of dashes represent the number of letters in the missing word. Allow 5 points for each correct answer. 75 or better is excellent.

1. "'Tis the last ————— of summer
   Left blooming alone."—Moore
2. 'In Flanders fields the
   ————————— blow
   Between the crosses, row on row."
   —McCrae
3. "No ————— without a thorn."
   —Proverb
4. "Pray love, remember; and there is ————————,
   That's for thoughts."
   —Shakespeare
5. "The wild ————— at the end of its tube,
   Blows out its great red bell.
   Like a thin clear bubble of blood
   For the children to pick and sell."
   —Browning
6. "When ————————— last in the dooryard bloom'd." — Whitman
7. O my love is like a red, red
   —————
   That's newly sprung in June."
   —Burns
8. "The sweet ————————— ——
   —————
   That grow for happy lovers." —
   —Tennyson
9. "I'm called little
   ————————,
   Dear little ————————
   Though I could never tell why."
   —Gilbert
10. 'Where the bee sucks, there suck I,
    In a ————————'s bell I lie."
    —Shakespeare
11. "A ————————— by a mossy stone
    Half hidden from the eye."
    Wordsworth
12. "Consider the ————————— of the field,
    How they grow."—The Bible
13. "Kiss me once darling,
    ————————
    Won't tell." — Owen
14. "The ————————— is a homely little flower,
    But which flower has more honey?" — Shedd
15. "When all at once I saw a crowd
    A host of golden
    ———————— ."
    —Wordsworth

The Lily Industry

Since World War II, a thriving Lily bulb growing industry has been developed in the United States. Before that time, only Japanese Lilies were available to help Americans celebrate Easter. When the wartime embargo caught the Japanese boats with their year's crop of Lily bulbs and chased them back to Japan, the United States Department of Agriculture luckily had a thousand bulbs of the Croft Lily with which they were experimenting. This is today's popular Easter Lily, and a large percentage of the 6,000,000 Lilies which decorate our churches and homes at Easter time are now American grown.

During the winter and spring of 1944 and 1945, the hungry residents of the Netherlands, where bulb growing is the principal industry, ground Crocuses into flour. They ate boiled and mashed Tulip bulbs like potatoes by first peeling off the skins and cutting out the embryo flowers and roots.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

June In The Apiary

JUNE IN THE APIARY

June is the most critical month of the year for the honey producer. Since last September we have been working and planning for the honey flow from clover which will come this month. We have fed our colonies with pollen supplement to help them build large populations of field bees to gather the nectar. Some of our colonies may be teeming with bees, overflowing three brood chambers, while others with poor queens, or of poor stock, may still be struggling to build a population that can produce a profitable crop.

Far too often, the small beekeeper neglects his bees at this most critical time. He may well have a great deal of work on the farm — making hay, and the numerous jobs that come up in mid-summer. However, ten minutes spent with each colony of bees may be worth a great deal more money than any other work which he may do — if that ten minutes will prevent swarming or an overcrowded condition leading to swarming later. Swarming may reduce the crop by as much as 50 to 75% or by that many pounds of honey.

Swarming Caused By Crowding

Dr. C. L. Farrar, in Circular Number 702 writes as follows about preparations for swarming.

"Under extracted-honey production swarming is usually brought about by crowding. Strong colonies may become congested prior to the honey flow when drawn combs are not available for the clustering of bees above the second brood chamber. During a heavy flow **colonies not strong enough** to force the bees to occupy the super may store too much honey in the brood nest; consequently brood

rearing becomes restricted. Such colonies, when supered with foundation, frequently do not draw the new combs fast enough to hold the incoming nectar, and more honey is forced into the brood nest. Colonies supered with foundation are more likely to swarm than those abundantly provided with drawn combs.

"Occasionally the comb space for brood rearing provided by two brood chambers becomes temporarily restricted with pollen. **The use of three brood chambers is the logical solution** to this problem. It would be fortunate if the accumulation of pollen required the use of larger hives more often.

"Supersedure of a failing queen just before or during the honey flow is frequently a cause of swarming. The colony may swarm with the old queen or, if she is lost, a swarm may leave when a virgin queen takes her mating flight. Several days of inclement weather during a good honey flow may induce swarm preparation, because the field bees are forced to remain in the hive.

"Colonies can be examined for evidence of swarm preparation by tipping up the brood chambers. A large percentage of the queen cells built under the swarming impulse will be located along the lower edge of the combs. If such cells are in evidence, the combs must be removed and all the queen cells destroyed before the brood nest and the super space are reorganized."

NEW HONEY PROMOTION

The American Honey Institute has a brand new piece of promotion in the form of a "Favorite Honey Recipes" box. The box itself is colorful and attractive, and is printed in three colors. Each box will contain a set of index cards and sixty four recipe cards, thirty-two of which will have a honey recipe printed on one side and the picture of the finished product on the other. The remaining thirty-two cards will have a honey recipe or menus or use of honey in some way printed on one side.

The box will be mailed in a heavy corrugated container, postage paid, for $1.00. These boxes are made with either red or green as the predominating color.

Why not send your order today so that you may receive one of the first boxes! A price on orders of twelve or more may be had by writing **American Honey Institute, Madison 3, Wisconsin.**

There's an old saying: "Taste makes waist."

A vacation consists of a number of 2's. 2 weeks that are 2 short, and when they're over you're 2 tired to go back 2 work and 2 broke not 2.

Sign in a Colorado truck stop: "If our steak is too tough for you, get out; this is no place for weaklings."

Dollar bills are no longer germ carriers. Not even a germ can live on a dollar.

THE 1952 HONEY PRICE SUPPORT PROGRAM

Both loans and purchase agreements on honey will be available for Wisconsin Beekeepers from July 1 to December 31, handled through State and County PMA Committees.

Prices

Support prices will be, per pound:

1. White or lighter table honey 12.¼c
2. Darker than white, table hon. 11.¾c
3. Non table honey 10.¼c

"Non table honey" is honey having "limited national acceptability for table use" but may be considered table honey where produced, such as Aster, Buckwheat, Goldenrod and Heartsease.

How To Proceed

If you want a loan in Wisconsin you must:

1. Apply to your **PMA County Committee.** They will draw samples, send them in for analysis of grade, color, etc.

2. Provide or secure a suitable storage on your own place or near by. No government storages in Wisconsin.

3. Group the different grades and colors of honey you have in the storage.

4. It is your responsibility that the honey be kept in good condition.

5. Containers must be sound, clean and not less than the 60 lb. can or larger than the 70 gallon barrels.

6. Loans mature on demand but not later than March 31, 1953. Interest rates are 3½% plus a small service charge.

7. The purchase agreement is a simple one page form and provides that if the producer **can not find** a market, he can offer the honey to the government after December 31, 1952 and receive the prices stated.

This is a brief statement of the main points. Those who plan to apply should send for a copy of the program to the County PMA Committee or to the Fruit and Vegetable Branch PMA, Washington 25, D.C.

Note: It looks like a good program to stabilize and increase the price of honey. All beekeepers should be informed of it so that some will not sell at low prices to buyers who can then undersell those who pay the floor prices.

SUMMER MEETINGS
WISCONSIN STATE BEEKEEPERS ASS'N

TUESDAY, JULY 22, HONEY ACRES, MENOMONEE FALLS

(Walter Diehnelt's Honey Acres is located on Highway 166 southeast of Menomonee Falls.)

WEDNESDAY, JULY 23, EAU CLAIRE LAKE'S PARK

(On Highway 27, about 5 miles north of Augusta.)

Indoor accommodations available at both places in case of rain.

The Program

10:30 A.M. Meeting called to order by the President. Forum by beekeepers. Summary of crop and weather conditions.

11:00 A.M. Report from the American Beekeepers Federation.

Noon Luncheon

12:00 M. Pot luck cafeteria style luncheon at each meeting. Bring a dish such as potato salad, baked beans, sandwiches, cake, etc. Bring enough for your family and a little more. Local committee will furnish free coffee and lemonade. Bring your own plates, cups and silverware.

A charge of 75c per person will be made to all who do not bring food. This will be used to pay for extra food furnished by committee. Everyone is welcome to stay.

Afternoon Program

1:30 P.M. Discussion by scientists on beekeeping methods.

Report on the work of the Advisory Committee. By Joe Mills, Ripon, Ch'm.

Talks by out-of-state speakers; representatives of various bee-supply companies and beekeeping magazines.

Program prepared by the Board of Directors, Wisconsin State Beekeepers Ass'n.

Special Session, Women's Auxiliary

There will be a special session of the Womens Auxiliary during the afternoon.

State Auxiliary Officers are: Mrs. Emerson Grebel, Beaver Dam, Pres.; Mrs. Wallace Freund, West Bend, Vice-Pres.; Mrs. Ray Gibbons, La Valle, Sec.-Treas.

The N. W. District Womens Auxiliary Officers are: Mrs. William Lorenz, Bruce, Pres.; Mrs. Ivan Wisherd, Bruce, Vice-Pres.; Mrs. Henry Schaefer, Osseo, Sec.-Treas.

Luncheon Committees

Menomonee Falls Meeting: Mrs. Lawrence Figge, Milwaukee, Chairman. Other committee members from nearby County Associations.

Eau Claire Lakes Meeting: Mrs. Robert Knutson, Ladysmith; Mrs. Henry Schaefer, Osseo; Mrs. Frank Keyes, Winter; and Mrs. Gerald Prilliman.

BEEKEEPERS MEETINGS

Does This Sound Like Something You Have Experienced Before

Mr. E. C. Martin, Extension Beekeeping Specialist at Michigan State College comments on Beekeepers Meetings in the May issue of Gleanings in Bee Culture in a way that makes us realize meetings are the same everywhere. Here is what he writes.

"It always surprises me to find very similar types and personalities at bee meetings regardless of the location. Generally there is an overworked secretary who is often criticized and rarely thanked; the apiary inspector; someone from the college; two or three representatives of supply companies; someone who is very anxious to promote bigger and better schemes; someone who is "agin" all of them; an old timer who always tells how the same thing was done much better back in 1913; often much aggravating discussion of a contentious resolution, but generally a very sane final decision."

At Extracting Time

Beekeepers Answer Questions

Extractors

Question. What is the best extractor for a beekeeper with about 200 colonies of bees?

Answer. By E. L. Schroeder, Marshfield. I think for 200 colonies a 30 frame radial would work out nicely. I like the one made by Mr. Neises of Marshfield because it is so convenient to clean up without taking apart.

Answer. A large radial extractor is my choice. By Robert Knutson, Ladysmith.

Answer. A big radial extractor would do the job best and the fastest. A small radial is economical, however. I have an 8 frame 12" basket "lifetime" and like it very much, but it demands much more attention that a radial. By Ivan Whiting, Roscoe, Illinois.

Answer. For 200 colonies would recommend a radial extractor of 45 to 50 frame capacity. By Edw. Ranum, Mount Horeb.

WHEN TO REMOVE HONEY

Question. How soon can honey be removed after the honey flow begins and is it best to wait until it ripens in the fall?

ANSWER. By E. L. Schroeder, Honey should be extracted as soon as the combs are sealed with wax. About 10 to 12 days after the heavy flow ends the honey should be sufficiently ripened providing the hives have been properly ventilated and the colonies are normal.

ANSWER. The honey should be removed as soon as the combs are full. By Robert Knutson.

Answer. It is all right to remove the honey when ⅞ sealed. If it is heated to 150 degrees right away. I never found time to extract before the last of July. By Ivan Whiting.

Answer. I get the thickest honey at the earliest extracting in most years. If the combs are at least ⅞'s sealed, the honey should be heavy-bodied. We find that honey extracted after September 15 is usually thinner than that extracted earlier, even when the combs are all sealed—this may be due to moisture absorption during damp weather. By Edw. Ranum.

HEATING AND STRAINING

Question. I would like to heat my honey before it is strained to my storage tanks. What is the best way of doing this and what is the best type of strainer?

Answer. By E. L. Schroeder. I have the Neises Gravity Clarifier which is water jacketed and by heating the water with steam or gas so the honey is about 100 to 110 degrees it strains nicely. If it gets hotter than 120 the particles of propolis have a tendency to effect the flavor of the honey and so it should be strained out first. I have not yet tried Mr. Neises strainer but I think it is a good one. I use several thicknesses of cheese cloth.

Answer. We like a steam coil with agitation of the honey. By Robert Knutson.

Answer. I think a clarifier like Mr. Neises of Marshfield, makes is best. However, I've been using a strainer (O.A.C.) and I heat my honey after it is in 60 lbs. cans. However, I'm going to use a clarifier. It takes too much time to clean a strainer when it can't be left open all the time. By Ivan Whiting.

Answer. I think honey should not be heated to more than 130 degrees after straining. A higher temperature will cause the wax propolis to melt and impart a certain amount of off-flavor. We use a vat-type clarifier with baffles to receive the honey from the extractor. This clarifier is water jacketed and we keep the water hot enough to bring the temperature of the honey up to 120-130 degrees at the outlet. It then runs into a basket type strainer—two baskets. Then to the sump tank which is equipped with a float to operate the switch for the pump. By Edw. Ranum.

(To be Continued)

Gathering the first spring flowers to give to a loved one on May 1st is an old European custom.

HONEY NEEDED FOR STATE FAIR DISPLAY

Yes, the Wisconsin State Beekeepers Association is going to be permitted to sell honey at the State Fair, August 16-24. It will be sold under the State Association label only, and profits will belong to the State Association. Listed below are the quantities of the various types of honey needed together with conditions under which the orders will be placed.

Cases of Wis. No. 1 Honey Needed

20, White, Comb Honey
75, 1 lb., Granulated Honey
20, 8 oz., White, in Glass Jars
40, 1 lb., White, in Glass Jars
15, 2 lb., White, in Glass Jars
25, 5 lb., White, in Glass Jars
35, 5 lb., White, in Tins
20, 10 lb., White, in Tins
15, 1 lb., Amber, in Glass Jars
10, 5 lb., Amber, in Pails
2, 10 lb., Amber, in Pails

1. One half of the amount of honey purchased by the State Fair Committee must be delivered to the fair grounds on Friday morning, August 15, 1952, and the balance on request.

2. Bidder must be willing to furnish additional quantities of like quality on 24 hour notice. Bidder must be willing to take back unsold honey at the end of the Fair.

3. Labels will be provided by the Association, but must be applied by the person furnishing the honey.

4. Bids close midnight, July 10, and are to be mailed to Art Kehl, Chairman, Wisconsin State Fair Committee, c/o G. B. Lewis Company, Watertown, Wisconsin. Envelopes containing bids must be marked, "Bid for State Fair Honey, not to be opened until July 14."

5. Bids will be opened by a committee of three members of the State Association on Monday, July 14, and the lowest bidder will be notified by mail of his successful bid.

It is sincerely hoped by the State Fair Committee that beekeepers who are in a position to supply this quantity of honey will take advantage of the opportunity to help their State Association. By Art. Kehl, Watertown, Wis.

Lillies were used in garlands by the ancient Romans. History tells us that King Minos of Crete was a Lily-enthusiast.

SOME IDEAS ON SELLING HONEY

Organization Proposed For Efficient Bottling And Marketing

By M. H. Lyons, Loganville, Wis.

There are many ways of selling honey, but if complete records of all costs were kept, I believe that selling in bulk to bottlers will give the best returns. Heating, straining,bottling, labeling and delivering in small amounts is inefficient and expensive due to the amount of handwork and small quantity purchases.

Most stores would rather buy from an organization that can give year round service. I have developed an excellent market for honey of distinctive flavors, put up in various sized containers. With a distinctive label they sell well. Have been selling honey labeled by flavor for four years and am now servicing over 250 stores over a large territory.

Plans To Incorporate

To handle this increased business, would like to expand by incorporating and selling stock to obtain the most modern equipment for efficient heating, bottling and labeling. Will also need several salesmen in exclusive territories where they will represent the company selling honey to stores, selling bee supplies to beekeepers, and buying the honey from them.

If you are interested in helping this project write to M. H. Lyons, Loganville, Wisconsin.

EXTRACTOR FOR SALE

For Sale: Root 8-fr. power extractor, with motor, honey pump, piping and storage tanks, etc. Also, used 8-fr. equipment; bodies, bottoms and covers. All reasonably priced. Ranum's Bee Farm, Mount Horeb, Wisconsin.

HONEY WANTED

State amount you have at your place, what flavor it is and prices in 60's. Will pick up and pay cash. M. H. Yyons, Loganville, Wis.

FOR SALE — EXTRACTOR AND KNIFE

For sale. One two-frame reversible honey extractor, hand power, and one steam uncapping knife. State inspected. Oliver Stelter, Fair Water, Wis.

The inheritance tax is another one of those pay-as-you-go taxes.

Wisconsin horticulture

August, 1952

ORCHARD FOR SALE

Orchard of 42 acres near Bayfield, Wis. 15 acres of trees with crop of apples. 5 room house. Price $3,500.00. Write Art Besse, 420 West Second St., Ashland, Wis.

Grow some of your house plants from seed. By starting seed now in cold frame or seed bed, you can have a fine array of cheerful flowers indoors this winter.

The story is told of the burglar who entered the home of a poor minister late at night. Hearing the minister stir, the burglar exclaimed: "Lay still, mister, and you won't get hurt. I've got a gun, and I'm searching for your money."

To which the minister said, "My good man, let me strike a match, and I'll search with you."

Sign on peaches at the super market: "Don't squeeze me till I'm yours."

WISCONSIN HORTICULTURE

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Minimizing The Ripening
Effect Of Hormones On Apples

By R. M. Smock, L. J. Edgerton and M. B. Hoffman
New York Experiment Station
From Annual Report, N. Y. Hort. Society (condensed)

The use of hormones to prevent **premature dropping of apples** has become almost a standard practice. Like other good practices the use of hormones has certain limitations, however. The possible ripening effect of these hormones has been recognized since their innovation some 10 years ago. It is easy to see that if apples hang on the tree longer than they normally would that they will be riper than normal. This is the simple "age" factor and is an **indirect** effect of the hormones. The fact that these hormones can **directly** ripen apples has not always been appreciated. That is, the hormones can directly stimulate ripening as a chemical effect on respiration.

Factors Affecting The Ripening Effect of Hormones

Variety: Some varieties show a greater ripening response to a given concentration of the given hormone than others. In general, early season varieties show more marked response than late season. For example, Duchess will show a more marked ripening response to 10 ppm of 2, 4, 5, TP (materials such as **Color-Set**) than will Northern Spy. This may be partly a weather effect also since the late season varieties mature in cooler weather.

Type of Hormones: Some hormones directly stimulate ripening rate more than others. This effect of type of hormone is somewhat complicated by the fact that some varieties respond to a given hormone more than another. In a given case on McIntosh, the ripening effect of 2, 4, 5 T might not be any greater than with NAA. It is fairly safe to say that 2, 4, 5, TP (materials like Color-Set) is the most powerful ripening agent we have tried on McIntosh.

Concentration: This effect is quite clear cut. The more a grower uses of any of these hormones the more striking is the ripening effect. For example, triple strength NAA (30

ppm) has a much greater ripening effect than normal strength (10 ppm).

Interval between Spraying and Harvest: The longer interval between spraying and the date of harvest the more striking is the ripening effect of hormones. If a hormone spray is put on fall and winter varieties 5 days before harvest with a normal concentration the effect on ripening is often negligible. If the interval is 2 weeks the effect of the same concentration is often marked. With an interval of 24 days between spraying and harvest 20 ppm of Color-Set advanced maturity 7 days on the tree. These fruits going into storage would not keep as long as they should if for no other reason than that they were ripe when they went in.

Date of Picking: In a sense this is a repetition of the last factor but it needs to be emphasized in another connection. At this point the indirect effect of the hormone is emphasized. If apples are sprayed with hormones and picked a week past their best picking date, they are bound to be riper. We know that on a given McIntosh tree we have an optimum picking period of only about 5 days. If the fruits are picked 10 days after this period (having been "tied" on the trees with hormones) they are bound to be a poor storage risk. The apples are riper simply because they are older.

Temperature of Fruit After Harvest: You will notice in the respiration (rate of ripening) data given in the figures that the apples were usually held at 74 degrees F. to measure respiration. At these high temperatures it is relatively easy to measure respiration stimulation from hormones. If the apples are promptly put into cold storage the after harvest ripening effect of hormones is certainly minimized.

Use of maleic hydrazide: During the 1950 season we started looking for materials that could be incorporated with the hormone to lessen the ripening effect. Maleic hydrazide seems to show some promise in this connection. Hoffman and Edgerton have shown that this material does not interfere with the desired drop control by the hormone when the two materials are sprayed together.

Effect Of Various Hormones And Maleic Hydrazide On Early McIntosh

The use of maleic hydrazide should still be considered experimental but the work has gone far enough to warrant a few growers trying a tank or two of the material to see what effects they get. It may be purchased from Naugatuck Chemical Company of Naugatuck, Connecticut for $20.00 a gallon. The material is now practically "hand made" and if it shows commercial promise the price will come down drastically. If one were using 100 ppm the cost per 100 gallons of spray mix would be 55 cents per 100 gallons which is less than that for a material like Color-Set. For a concentration of 100 ppm one would use only 104 cubic centimeters of maleic hydrazide (30%) per 100 gallons of spray. For 200 ppm he would use 208 cubic centimeters per gallon. High concentrations may be actually harmful. It is mixed in with the hormone in the tank and the spreader with the hormone acts as a

spreader for the maleic hydrazide. If the manufacturer would sell a more dilute form, it would mean the grower could use a more easily measured volume such as ½ pint of material per 100 gallons.

A great deal of experimental work needs to be done before a new material such as this can be recommended for trial.

Intentional Ripening

The question frequently arises as to the possibility of intentionally ripening up apples for early sale. Growers using this idea recognize that the apples must be moved quickly. Where 2, 4, 5 TP (materials like Color-Set) has been used a month or more ahead of an early harvest date at a high concentration on McIntosh it has resulted in mushy fruit that showed some splitting open on the tree. Probably the most outstanding results have been seen on a variety like Early McIntosh where early coloring was advanced 5-7 days and allowed for almost complete harvest in one picking. On other varieties like Milton the coloring effect may be insignificant even though the ripening effect is considerable. We need still more evidence on the practicality of this intentional ripening effect on a number of varieties.

COST OF ORCHARD PEST CONTROL

In studying the cost of production of apples at the Cornell Experiment Station in New York it was found that the way to insure low cost production was early scab control and maintenance of a fairly open tree not much above 20 feet high.

In two years of survey the total cost of pest control averaged close to $100.00 per acre. About $63.00 of this was for materials, $20.00 for spraying and dusting equipment, $10.00 for labor and $7.00 for tractor plower.

It cost $85.60 per acre when concentrate sprayers were used, which was the lowest of any method. Dilute air blast sprayers had the second lowest cost, and the highest equipment cost per acre. The concentrate sprayers had low cost for labor, tractor-plower, and materials. However, the higher price for machinery may make them uneconomical for small orchards.

How To Increase Apple Sales

Studies at Cornell University Answer Questions on Selling Methods

Professor Max Brunk of Cornell University has carried on three years of testing the best methods of selling apples in grocery stores. It is the most intelligent experimental work in retail selling yet done, and reports what over 150,000 customers actually did when buying apples.

Dr. Brunk's conclusion is that **both bulk and bags** must be included in a successful apple sales lay-out. Many customers want to pick their own apples while others want them ready-bagged.

Here are the results of the investigation:

Merchandising practice	Pounds Sold per 100 Customers	Per Cent above Standard
Standard Display*	20	0
Modifications of standard display		
Standard plus variety and use marking	20	0
Standard plus window streamers	20	0
Standard doubled in size	21	5
Standard with window display of apples	25	25
Bulk Only		
Priced in two-pound units	11	−45
Priced in four-pound units	13	−35
Package Only		
Four-pound Cellophane bags	18	−10
Size of Package		
Two-pound Cellophane bags and bulk	13	−35
Six-pound open baskets and bulk	21	5
Four-pound Polythene bags and bulk	23	15
Six-pound Polythene bags and bulk	28	40
Quality and price		
Standard display of 2¼-inch min. apples priced 35 per cent under 2½-inch min.	17	−15
Standard display of bruise-free apples	24	20
Standard display priced 35 per cent lower	29	45
Standard display of very highly color apples	33	65

*Consisted of combination four-pound Cellophane bags and bulk fruit.

Important Conclusions

Not what **high color** does — it increased the sale of apples **65% above the standard.** By pricing the apples 35% less than standard the sales increased only 45%. Note that in 6 pound polythane bags and bulk display, sales were 40% above standard. When apples were priced in **2 pound units there was a drop of 45%** under the standard display. People seemed to buy in the size of bag or unit advertised. So if you display apples in a 2 pound bag they will buy them in that size, but if you display them in a 6 pound bag they will buy 6 pounds.

APPLE BRUISING

Recent Bulletins: Michigan Experiment Station, East Lansing, has recently distributed Special Bulletin 374, Sept. 1951 on How to Reduce Apple Bruising. When this reaches you the harvest will be nearly done, but one of the significant things about this report is that a lot of bruising originates from dumping the buckets into the field containers. This was more or less the story in the Maine Bulletin which came out earlier this year which showed that bruising was not reduced by the use of buckets as compared with bags. This is also in conformity with work done at the Ohio Station a few years ago. The difficulty is that pickers hurry too much in emptying the bucket. We understand that the bucket is being discarded in some areas where speed in getting the crop harvested is essential. From Bulletin of Ohio Horticultural Society.

WISCONSIN APPLE INSTITUTE NEWS

Renewal Of Memberships Since Our Last Listing

Nine more Wisconsin fruit growers joined the Wisconsin Apple Institute during June and July.

The Institute is carrying on an extensive program this year and funds are badly needed. All Wisconsin apple growers are urged to send dues to the treasurer, Armin Frenz, Route 2, Cedarburg. Membership dues are $5.00 plus 50c per acre of bearing orchard.

Those joining are: Louis R. Fischer, Croix Farms, Hastings, Minn.; Hugo E. Wunsch, Sheboygan, Wis.; Frederick M. Gygax, Waukesha; Herbert J. Hasslinger, Nashotah; Albert J. Theys, Luxemurg; Arno Meyer, Waldo Orchards, Waldo; Young Brothers, Decoral and Orchards, Galesville; Bigelow Lourie, Rosa Orchards, Gays Mills, and Bayward Sprengel, Waukesha.

Apples — Production by Orchard Size Groups Wisconsin, 1950 Census

Farm orchard size groups	Number of Farms Reporting Production	Production in	Production % of state total
Number of trees		bushels	%
10,000- +	4	178,600	8.1
7,500-9,999	5	64,700	2.9
5,500-7,499	5	75,000	3.4
3,000-4,999	12	126,532	5.7
2,000-2,999	15	97,900	4.4
1,000-1,999	55	180,716	8.2
500- 999	95	173,474	7.9
200- 499	268	178,630	8.1
100- 199	364	98,522	4.5
Less than 100	62,979	1,032,153	46.8
Total	63,802	2,206,227	100.

Water power dates to when man was first moved by woman's tears.

Real intelligence is like a river; the deeper it is, the less noise it makes.

The National Apple Crop

Wisconsin Crop Good. Promotion Program Planned

Estimated Crop Smaller Than Last Year

The June guesstimate made by the National Apple Institute at its Annual Convention in Yakima, Washington, indicated a national apple crop of 103 million bushels for 1952. President Harold Schubert of the Wisconsin Apple Institute estimated the Wisconsin crop as smaller than last year, 650 thousand as compared to 710 thousand last year.

This figure, 650 thousand, is the estimate of the **commercial** crop on a comparative basis with past years and serves the purpose of indicating a smaller or larger crop. It does not indicate the true total crop, either commercial or non-commercial. (See page 246, June, Wisconsin Horticulture). The 1950 U.S. census report stated that 63,802 farms reported a production of 2,206,227 bushels. **Farms with more than 100 trees** produced a total of 1,174,074 bushels.

Crop Smaller But Ample

The June estimate of 103 million is the smallest in several years—last year it was 112 million, in 1950 it was 123 million and in 1949 it was 133 million. Does that mean a shortage of apples for the coming year? Evidently not. A Cornell University, New York, study shows that the United States consumes only about 100 million bushels per year.

Speakers at the National Apple Institute meeting in Yakima advocated reducing the crop by cutting out worthless varieties and poor trees—a move in the right direction. However, it was pointed out that this alone won't solve the problem. We need more apples of good varieties and better quality to increase consumer production. The speakers also stated that we should try to increase the demands by making the public more apple conscious. This can be done by carrying on radio, television, newspaper and magazine publicity.

Wisconsin Apple Institute Begins Promotion Program

The Wisconsin Apple Institute, with headquarters in the offices of the Wisconsin State Horticultural Society has employed Mrs. Marjorie Slaughter, a graduate in Home Economics at the University of Wisconsin to carry on its apple promotion and advertising program for this year.

A new recipe book with new cover and new recipes has already been prepared and should be available when this issue reaches our members. A copy will be sent to all members of the Wisconsin Apple Institute. We will be glad to send a copy on request to all apple growers. You may purchase copies at cost price to give to customers.

THINNING APPLES WITH CHEMICALS

Bayfield Fruit Growers Observe Tests On Orchard Tour

Bayfield Fruit growers held a berry and orchard tour under the auspices of County Agent Roy Holvenstot and the Wisconsin State Horticultural Society on Saturday, June 28th. The observations on apple thinning with chemicals was an interesting feature of the tour. Mr. Dawson Hauser, who has been testing chemical thinning for four years, reports as follows. "Biennial Varieties thin very nicely during the year of heavy bearing, but becomes a bit of a problem in the "Off" year with a light bloom. This was the condition on our Duchess this year and the result was that we overthinned. Other contributing factors to over-thinning are the vigor of the tree, the amount of material applied and probably there is some influence when the chemical is applied with other spray materials. Trees which had wet feet a part of last year due to excessive rains, thinned out very much and showed a considerable amount of leaf injury. Trees on soil that was deeper, sprayed on the same day with the same material did not thin nearly as much and did not show leaf injury. Of the biennial varieties, Wealthy is the hardest on which to obtain uniform thinning."

We observed a case of over-thinning in the orchard of Mr. John Krueger, due, no doubt, to a lack of tree vigor as described by Mr. Hauser because there was a period of draught during the month of May this year. Trees which lack vigor are easily overthinned with chemicals, so caution must be used in the amount of material applied.

ORCHARD TOUR

Wisconsin State Horticultural Society—Minnesota Fruit Growers Association

Wednesday, September 3

The annual orchard tour sponsored by the Minnesota Fruit Growers Association and the Wisconsin State Horticultural Society will be held in Minnesota Orchards on Wednesday, September 3, 1952. Attended by orchardists from the two neighboring apple producing areas, this get-to-gether to observe at first hand the problems and practices of interest to commercial producers has become a traditional annual affair. Orchardists in each state are hosts to the touring group on alternate years.

The Place

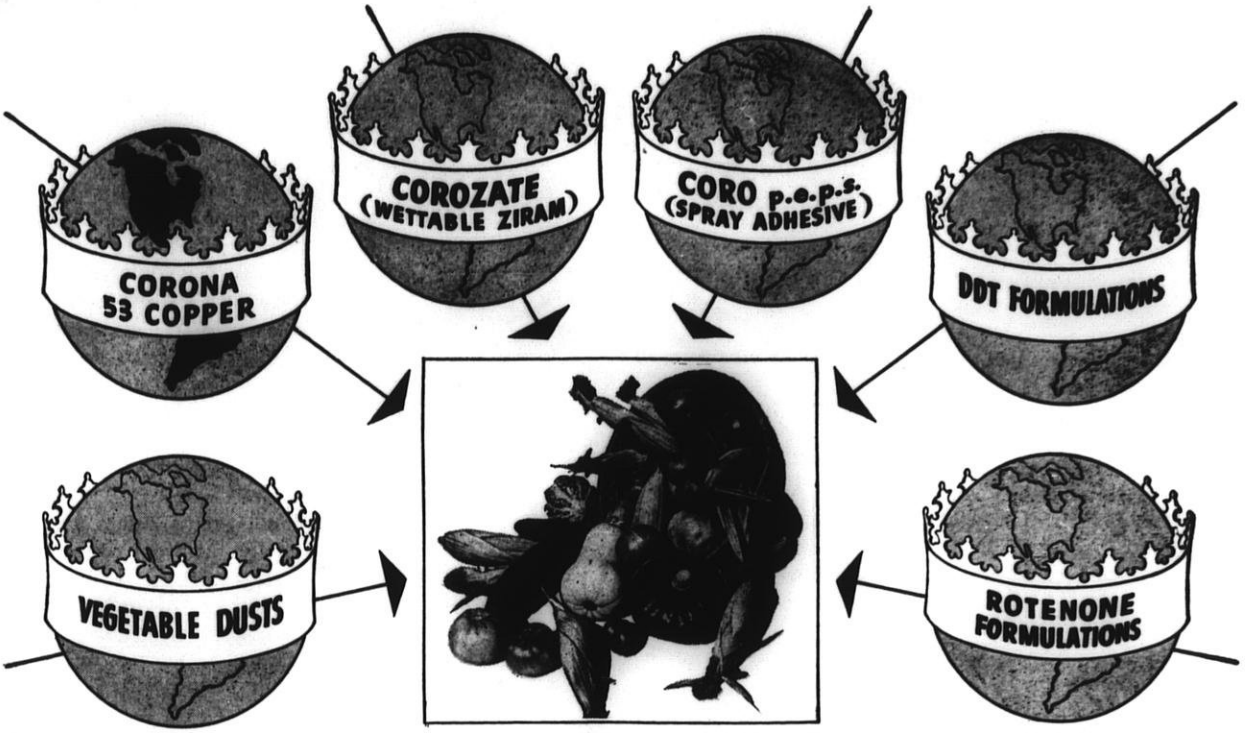
The 1952 tour will assemble at the Felix Isaacs Pine Tree Orchard, 9 miles north of Stillwater, at 9:30 a.m., September 3. Instructions: Take highway 96 west out of Stillwater; turn right at the golf course where there is a white barn with a black silo on the left side of the road. Then follow the Pine Tree Orchard signs. **Dinner:** The ladies of one of the local churches will serve dinner at Cottage Grove. In the afternoon we will visit the Fischer and Benitt orchards.

The Program

Some items of interest to be seen are: An orchard operated without any other enterprise; an orchard operated in connection with a commercial flower business, and an orchard operated in connection with a diversified farm. Several packing and storage sheds will be seen, also the effect of north and south slopes on color and size, various types of spray and grading machinery, thinning and hormone sprays, and brush removal.

WISCONSIN WILL HAVE GOOD APPLE CROP

The U. S. and Wisconsin reporting service estimated on July 1 that the Wisconsin crop will be slightly larger than last year. Most of our growers feel this is an error; so we are waiting for the August report. Most interesting is the change in the method of reporting the Wisconsin crop—from 7 to 12 counties. On this basis the 1952 commercial crop is estimated at 1,336,000 bushels. Changing the figures to the same basis for the past two years the crop reporting service estimates our 1950 crop at 1,297,000 bushels. The average crop for the years 1941 to 1950 is estimated at 936,000 bushels.



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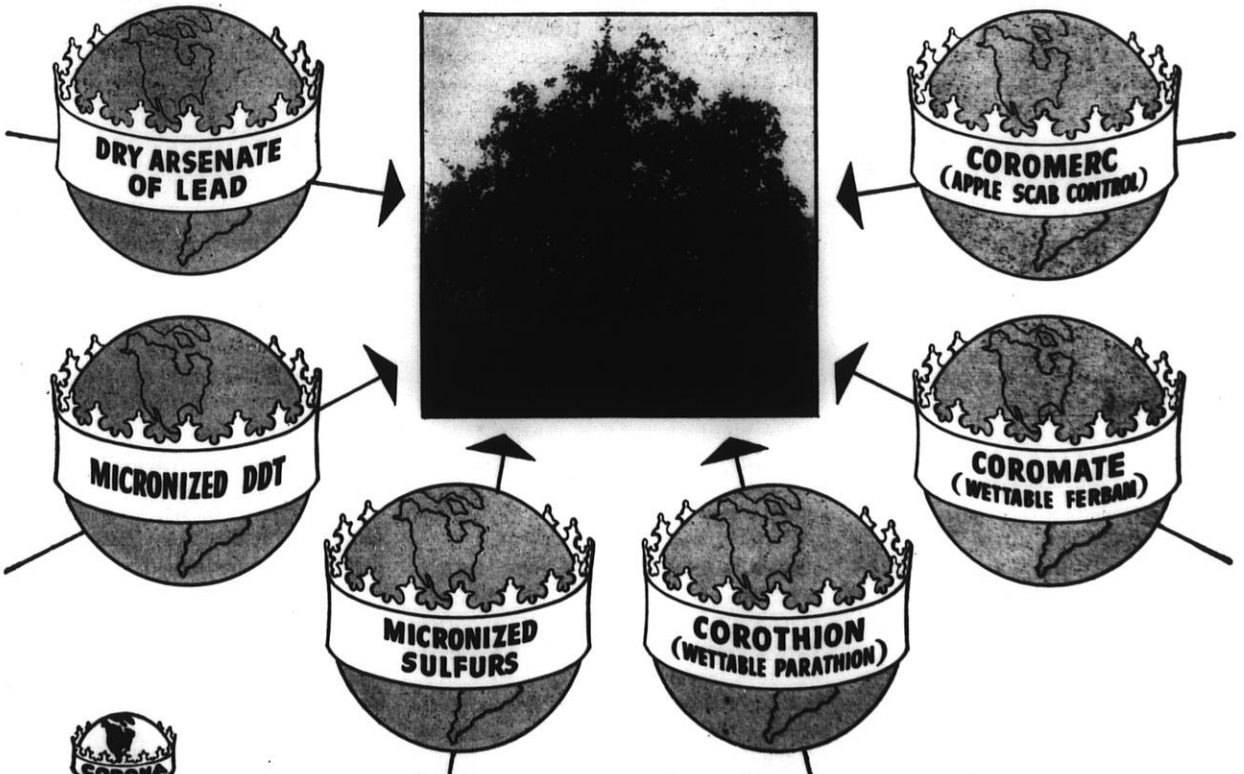


CORONA

CORONA CHEMICAL DIVISION

PPG PITTSBURGH PLATE GLASS COMPANY

MILWAUKEE, WIS. MOORESTOWN, N. J.

Winter Injury In Orchards and Berry Plantings

By C. L. Kuehner

Many of the fruit inquiries from all parts of the state during the past month or so dealt with troubles diagnosed as winter injury. Strawberries, raspberries, apples, pears, peaches, and plums as well as Chinese elms, cultivated willows, and ornamentals were affected.

It is believed that the unusual amount of winter injury and killing during the past winter was largely caused by the severely cold days in late October and early November. It will be remembered that many trees still had green leaves when the November freeze occurred. The growth in the trunk and bark and narrow crotches of late growing trees had not hardened off; that is, it was still soft and immature when the freezes occurred. Hhe losses in dead or injured trees varies with varieties, soil drainage, cultivation, and fertilization practices. Anything that contributes to late growth such as late cultivation, poorly drained wet soil, late application of nitrogen fertilizers, or extremely low vitality because of an over-load of fruit or early defoliation followed by new growth late in the season makes plants very susceptible to cold injury.

Only recently we were in several well cared for young apple orchards in which occasional trees showed light colored foliage and short spindly terminal growth. Upon examination of the trunks of these trees, it was found that most of them had very little or no live bark at the base four to eight inches from the ground. These trees are still alive. They continue to get moisture from the ground but most of them will be completely dead next spring because leaf products do not have a chance to get down to the root system. Replacement is the only practical answer.

Raspberry Canes Injury

Many raspberry plantings failed, too, because of excessive cold injury to the canes. However, some plantings came through without injury. Our observation is that raspberry plants winter best where they are on deep well drained soils and

where they have some form of shelter from the south and southwest in late winter and early spring. Raspberry plants need to be handled so they will mature in early fall rather than late fall. For this reason, late summer and early fall cultivation should be avoided and nitrogen fertilizers should be applied in early spring. If manure mulches are used, they should be applied in winter or early spring. Moderate applications are safest.

Strawberry Injury

Many strawberry plantations did not winter very well because of much low temperature injury to the root system late last fall. Much, if not most, of this injury to the strawberry plants could have been avoided by more timely and more adequate mulching. Research work has shown that mulch should be applied ahead of the first temperature drop to 20° F. or lower. It is also our observation that effective protection by mulching requires more mulch covering than is commonly the practice in strawberry plantations. Apparently, a shallow mulch of one to two inches is not as effective as a mulch cover of double this amount.

POLLINATION FEES FOR BEES

In the U.S. Department of Agriculture's P & MA semi-monthly honey report for July 1 we find a page on fees received by beekeepers for pollination services. This statement is made. "In a number of states reports indicated beekeepers were receiving no remuneration for their bees other than a location to keep them. Demand for locations by beekeepers was greater than demand by farmers for bees for pollination services."

In western states where acreages for seed production are large and the percentage of bees is smaller, considerable has been done to work out payments to beekeepers. In Colorado, for example, minimum fees for alfalfa and other legume crops were: 1 colony per acre at $5.00; 2 colonies per acre at $5.50; 3 colonies per acre at $6.00; 4 colonies per acre at $7.00.

For Wisconsin: Occasionally a fruit grower paid from $5.00 to $15.00 for moving colonies onto his property. For apples, some beekeepers received $3.00 per colony as payment. No reports of bees for other crop pollination.

The pollination problem in Wisconsin is vastly different from that in western states. Here it will depend upon the size of the orchard or seed fields, the availability of bees, how far they must be hauled, and a number of other factors.

SOIL FERTILITY EFFECTS FOOD VALUE OF FRUITS AND VEGETABLES

Question: Will the fertility of the soil have an effect on the nutritive or food value of vegetables and berries?

Answer: Yes. High yields of high quality vegetables and fruits can be produced only under conditions of an ample balanced supply of the nutrients needed for proper plant growth, namely, nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, manganese, boron, iron, copper and zinc. Furthermore fruits and vegetables grown on soils deficient in one or more of these needed nutrients will be low or deficient in those particular elements. and, therefore, may have less nutritive value as a food. However, since plants usually absorb mineral elements in balanced amounts, it does not necessarily follow that applying any one of them in large amounts will cause a crop plant to be significantly richer in that particular element.

While soil fertility is reflected by the mineral content of crop plants, it is not the sole factor determining their vitamin content.

It has been shown that the vitamin content of many plants is dependent upon variety and climatic conditions as well as proper soil fertility.

By John A. Schoenemann, Extension Specialist In Vegetable Crops.

Niemans Observe Centennial

(Continued from June Issue)

Charles J. Nieman, one of John's sons, while pursuing general farming, also became interested in apple growing and planted a good sized farm orchard during the years of 1902 and 1905. These trees were coming into full bearing at about the time that Arnold and Roland Nieman, the present owners of Nieman Brothers Orchards, were beginning to take an active part in the management of the home farm.

Early Orchard Experiences

It was in this orchard that their first hand powered 50 gallon barrel sprayer with the bamboo spray pole was used. Three sprays were applied and gave pretty good control; they were a liquid lime sulphur dormant spray, and an arsenate of lead calyx and an arsenate of lead 2 weeks spray. In this orchard were also tried the new pruning methods advised by the Horticulture Department of the College of Agriculture and taught to growers at pruning demonstrations by Dr. Conrad L. Kuehner. The pruning and fertilizing was pursued with such enthusiasm that a bad case of fire blight resulted.

In 1923 the first trees of the present 115 acres of apple orchard were planted. The planting process continued for 20 years; thus creating an orchard with trees in full bearing and those that are just coming into bearing. The bulk of the planting is Cortland which grows and colors well in the lake shore counties; the remainder of the trees are made up of McIntosh, N. W. Greening, Red Delicious, Jonathan, Kendal and Melba.

In the early '30's the first small tractor powered sprayer was secured and this was followed by larger machines as the orchard grew in size and the sprays per season became more numerous. In 1946 a Speed-Sprayer was secured which was the latest word in spraying equipment. As scab troubles became more acute in rainy weather a duster was added, but in spite of all this equipment, scab was still the Number One worry. A new type of high-pressure air blast concentrate sprayer is being used for the first time, in this year of 1952, and much faith has been placed in it being a success.

Better Apple Storage

The storage of fruit in natural air-cooled damp storages was used at first, then fans were employed to force air through the stacked boxes of apples to hasten the cooling process, but both of these methods did not work too well with Cortland and McIntosh. A try at orchard cold storage was made in 1939 and this proved quite successful; thus, at the present time, cold storage space for 15,000 bushels has been provided. The remainder of the crop is sold as harvested.

Even though the last three years have been hard on the apple grower, in that supplies and labor costs have greatly increased and the crop has been so good that surpluses have driven down the price of apples; still, a new season holds forth new hopes. The men who have planted and developed this orchard and devoted their lives to its successful operation feel that their efforts have not been lost, but that future generations may profit by their experiences.

LITTLE HONEY IN LADINO CLOVER

Pollen was the chief interest of bees when they visited Ladino clover and very little honey can be expected, is the conclusion reached in a report by G. H. Vansell of the U. S. Bureau of Entomology and Plant Quarantine stationed at Davis, Cal. The report continues: "A small number of honey bees pollinated Ladino clover florets daily. The bees visited the clover about 9:30 a.m. to nearly sundown: 2 to 3 bees per square yard were present at the height of visitation. Pollen was the chief interest; even with a few colonies, however, very little honey can be expected. No clover buds opened before 9:30 a.m. and very few before 11 a.m. The visited blossoms closed permanently at nightfall.

"No nectar was found in the freshly opened florets. By 1 p.m. 33-55% of the florets had a trace; at midafternoon 75-100% showed a trace. By next morning all bagged florets had nectar, and during the following days a large drop collected in each."

MARKETING TESTS

Spinach prepackaged in plain or unprinted transparent film bags outsold that in similar transparent bags printed heavily with words and designs in a merchandising test conducted by PMA, USDA and Maryland Agricultural Exp. Station. Officials were trying to find out whether presumed advertising value of heavily printed bags was lost by reduced visibility of contents. A "saddle-header" label of three colors on a white background was used on the printed bags.

Prepackaging plant that cooperated would have saved some $20,000 to $25,000 a year in printing costs by using plain bags. Sales test was carried out in six Baltimore retail stores. In another phase of the study consumer acceptance of prepackaged, frozen and bulk spinach and kale was evaluated according to sales in two Washington, D.C. super markets. Prepackaged fresh kale outsold bulk kale even at about twice retail price per edible pound.

Combined sales of prepackaged fresh spinach and frozen spinach exceeded sales of bulk fresh spinach, with prepackaged product selling at about twice the price per edible pound of bulk. Comparisons were made only during time locally grown, moderately priced, bulk fresh spinach and kale were sold in the two stores because the bulk produce was not carried other seasons. It is apparent that about half the patrons were willing to pay twice as much for extra services obtained in buying ready-to-cook prepackaged or frozen spinach and kale as for bulk greens.

Data on costs of prepackaging spinach and kale, retailing costs, spoilage, consumer reactions is available in the report, "Prepackaging Spinach and Kale," available from Office of Information Services, Production and Marketing Adm., U. S. Department of Agriculture, Washington 25, D. C. or from Maryland Agr. Exp. Stn., College Park, Md.—**From Market Growers Journal.**

A black cat is considered to bring bad luck, but it depends on whether you are a man or a mouse.

Berries and Vegetables

Wisconsin Berry and Vegetable Growers Ass'n.

VARIETY TESTS FEATURE BERRY GROWERS MEETING

There was an excellent attendance at the Annual Meeting and Field Tour of the Wisconsin Berry and Vegetable Growers Association at Sturgeon Bay, Tuesday, July 1.

The fore-noon session was held at the Peninsula Branch Experiment Station with Dr. Frank Gilbert, acting as host. Cherry virus study plots were visited. The potato variety plots and greenhouse studies were inspected, and discussions were given by J. Duane Moore, Don Dever, Earl Wade, C. L. Kuehner and others.

Principle interest centered in the Strawberry variety trials and weed control plots. Dr. Gilbert has an article on the variety trials in this issue.

At The Reynolds Farms

Following a luncheon at the Reynold's Brothers grounds Mr. Don Reynolds welcomed the group and gave a short history of the Reynolds Brothers organization and how they developed 600 acres of cherries, more than 200 acres of apples and other crops and the cherry canning and apple juice processing plants. The group was then taken on a tour of inspection by Mr. Ransome Severson, manager of the farms. We aiso saw 14 acres of cucumbers, 30 acres of potatoes, and 13 acres of strawberries.

Dresden was the principle variety being grown. Mainly, according to the grower, Ed Keppers, because it had performed well during the past few years. He liked Wis. Number 214, and would grow more of Wis Number 537 excepting for the yellowing of the leaves. Wis. No. 261 was fruiting very well and may become more popular in the future.

The method of marketing berries was of considerable interest. A fancy pack in a cardboard carton holding 8 quarts was bringing a premium on the market. Small berries were being frozen.

At The Swingle Berry Farm

Dr. Charles Swingle gave an excellent discussion to the group at his farm at Little Sturgeon Bay. Fruiting were Wis. No. 537, 214 and 261, Robinson, Thomas, Premier, Nectarina, Beaver and Dunlap. Good results were observed from the use of Crag Herbicide applied in early June on a newly planted field to prevent growth of weeds from seed. We will have articles from Dr. Swingle in later issues on the details of his experience with varieties, irrigation and the use of geese for weeding.

Taking part in the program at the Peninsula Experiment Station, Sturgeon Bay as speakers for the annual summer meeting and tour for the Wisconsin Berry and Vegetable Growers Association were, seated from left: Dr. F. A. Gilbert, Mr. G. D. Mullendore and Mr. Roman Ross.

Standing from left: Mr. D. A. Dever, Prof. Earl Wade, Mr. J. Duffus, Dr. R. Hougas and Dr. J. D. Moore.

New Strawberry Varieties Bayfield Fruit Growers Hold Meeting and Tour

Following a meeting of the Fruit Growers Association of Bayfield on June 27, County Agent Roy Holvenstot arranged a tour to strawberry fields and orchards on Saturday afternoon, June 28. There was a brief stop at the strawberry variety plots on the William Shuga Farm planted by Dr. Frank Gilbert of the Experiment Station at Sturgeon Bay. Growers were keenly interested in the new varieties. Quart samples of more than a dozen new kinds had been exhibited at the meeting and there was considerable discussion among the growers as to their merits.

Wisconsin seedling numbers 214, 261 and 537 were doing well, and many growers will be planting test pl-t- of them next spring. Sparkle looks good. Catskill continues to be a favorite variety at Bayfield, with Premier and Beaver forming the main plantings on a number of farms. Robinson produced excellent appearing fruit. Senator Dunlap in third year plantings was producing very inferior fruit — small and with many late flowers not developing. This fruit was being processed.

Nitrogen Fertilizer Increased Production

On the Kuehn Company farm Catskill formed the main planting and was doing very well. A 3 yr. old field of what was supposed to be Premier but was probably Senator Dunlap, was producing very inferior quality fruit, too small for the fresh market. On this farm there was a striking demonstration of the value of nitrogen applied after the plants were established and again after the harvest season following the first year's

picking. Where nitrogen fertilizer was added at the rate of about 200 pounds per acre, the berry plants were much more vigorous, with darker green leaves and produced much better berries than the balance of the field that had not received fertilizer.

Many farmers in the Bayfield area are installing irrigation equipment to insure good plant growth during the dry spells of summer on their lighter soils.

The strawberry market held up very well this year in the Bayfield section and the quality of the fruit was good.

STRAWBERRY CULTURE 100 YEARS AGO

In the Annual Report of the Wisconsin Fruit Growers Association for the year 1855, Loomis and Remington of Genesee, Waukesha County, gave a report of their experience growing strawberries in 1852—just one hundred years ago. Relative to their method of culture they had this to say.

"The result of our experience would go to prove that a sandy loam moderately rich, with a southern or southeastern declination is the best suited to the strawberry culture. They need deep clean tillage, and mulching, with some winter protection; (a light covering of straw is as good as anything,) and watering, if there is dry weather, between the blossoming and the ripening of the fruit. Each plant should be at least one foot from all other plants; the runners ought to be kept off.

We have the following varieties on trial: Hovey's Seedling, Burr's New-Pine, Boston Pine, Early Scarlet, Orange Prolific, Crimson Cone and Alice Maud, but the frost was so severe this year that we could not tell much about them."

Samuel Edwards of La Moille, Illinois, evidently a member, had this to say, in part.

"For market, we now plant exclusively of Necked Pine, which with ordinary field culture has yielded **one hundred bushels** per acre, and the fruit of such quality that Messrs. J. N. Davidson & Co. of 117 Michigan Street, Chicago, wholesaled for me the crop of last year from five acres, **at from 25c to 31c per quart."**

VEGETABLE GROWERS HOLD INTERESTING MEETING

The vegetable growers section of the Wisconsin Berry and Vegetable Growers Association held a most interesting and instructive meeting at the research plots of the Department of Horticulture, U. W. at Madison on July 24. Attendance should have been much larger, as the value of the work being done is outstanding.

Inspected were the results of Krilium treated plots of flowers and vegetables. There was a marked difference in plant stands—greater size and vigor of beans, cabbage and flower varieties.

Hundreds of plots showing the effect of chemicals used for weed control were seen. Hybrid onions are being tested and we saw the production of in-bred onions.

There were so many different plots of vegetable varieties, weed control, flower varieties, and weed control in flowers, that visitors found it difficult to absorb all the information given. We owe a vote of appreciation to Prof O. B. Combs and staff for their splendid work and helpfulness.

CONTROL OF SLUGS IN THE GARDEN

Slugs are not easily controlled with the common materials we use for dusting or spraying in the garden. In the bulletin of the Department of Entomology, Cornell University, New York, we find this method of control given.

Control

"Slugs are sometimes destructive to young bean and cabbage plants and to tomato fruits, especially in wet periods or in the more moist parts of fields of heavy soils. A metaldehyde bait is effective. It consists of 7 metaldehyde tablets (28 grams) mixed with 1 pound (about 2 qts.) of corn meal or bran. The mixture should be moistened slightly. About 40 or 50 pounds are needed per acre. Commercially prepared slug baits are known as Snarol and Bait-M.

"A strong bordeaux mixture (10-10-100 formula) can be applied to some crops as a spray. It repels and kills snails. A strong copper sulfate spray 10 lbs. to 100 gallons or water is also effective, but this solution should be applied only on the ground. It is likely to burn foliage of some plants.

"Snails (or slugs) are active only at night or on cloudy days."

VEGETABLE GROWERS NEWS ITEM

CABBAGE ACREAGE BELOW AVERAGE. The USDA reports on the cabbage outlook for July 10th stated the 1952 acreage of cabbage to be harvested for kraut and the fresh market is expected to total 155,110 acres. This is slightly less than the 1951 acreage, but 20% less than the average for the past 10 years, 1941-50.

Processors of cabbage reported they have 10,650 acres under contract or on their own land this year which is 3% more than last year.

ONION CROP BELOW AVERAGE. The USDA reported that in early summer areas onion yields were turning out better than expected earlies. Production is now placed at 1,708,000 sacks of 50 pounds which is a 7% larger crop than estimated on June 1st and 2% above the 1951 crop. However, it is still 15% below the 10 year average, 1941-50 of 2 million sacks.

The five central states including Wisconsin have reduced plantings an average of 8%. There has been considerable insect damage in Wisconsin.

POTATO ACREAGE INCREASED for the first time since 1943, reports the USDA. From the July 1st condition of the crop, a national production of 339,048,000 bushels is indicated. This is 4% larger than last year's short crop of 325 million bushel but 18% below the 1941-50 average. An indicated yield per acre of 239 bushels is expected and has been exceeded only by last year's yield of 241 bushels and the record of 253 bushels in 1950.

WORLD'S BIGGEST SALAD

Milwaukee Vegetable Growers to Prepare Six Foot Salad Bowl

Two years ago at the 42nd annual convention of the Vegetable Growers of America which was held in Milwaukee, growers in that area prepared as a banquet feature a six foot bowl of salad. This was an outstanding feature and will be repeated by Milwaukee growers this year at the convention to be held in Tampa, Florida on December 2-6. Milwaukee growers are already planning the salad.

From the Editor's Desk

ANNUAL CONVENTION
Wisconsin State Horticultural Society
RETLAW HOTEL, FOND DU LAC
Monday-Tuesday, November 17-18

The Board of Directors of the Wisconsin State Horticultural Society met at President Arnold Nieman's home at Cedarburg on Sunday, July 13, and voted to hold the Annual Convention of the Society at the Retlaw Hotel, Fond Du Lac Monday and Tuesday, November 17-18.

Honorary recognition certificates were voted to two outstanding horticulturists to be presented at the Annual Convention. The Board voted to extend an invitation to the Wisconsin Apple Institute to hold their annual meeting in conjunction with the Horticultural Society.

Nominating Committee Appointed

The President appointed and the Board approved a nominating committee to be composed of the outgoing directors Marshall Hall, Casco; Aloys Pfeiffer, Racine; and William Leonard of Fort Atkinson. Members who have suggestions for the committee should contact them.

A financial report was presented in detail by the Secretary and the Board accepted the budget for the coming fiscal year which will be about $385.00 more than expected receipts. Society finances have been cut to the bone and so many activities are being carried on which the Board does not wish to curtail that they adopted this budget which will leave only a very small balance in the treasury next July 1.

BOARD OF DIRECTORS, WISCONSIN STATE HORTICULTURAL SOCIETY

Annual summer meeting of the Board of Directors of the Wisconsin State Horticultural Society was held at the Arnold Nieman home, Cedarburg, on Sunday, July 13, combined with a picnic and pot luck luncheon.

Seated from left, Mrs. O. B. Combs, Mrs. Marshall Hall, Mrs. H. J. Rahmlow, Mrs. Fred Magnus, Mrs. Arnold Nieman, Mrs. Arno Meyer and Mrs. E. L. Chambers.

Standing from left, Prof. O. B. Combs, Mr. Aloys Pfeiffer, Mr. E. L. Chambers, Mr. William Connell, Mr. Fred Magnus, Mr. Arno Meyer, Mr. Marshall Hall and Mr. Arnold Nieman. Mr. H. J. Rahmlow took photo.

OUR COVER PICTURE

Twinkles is the name of the gladiolus variety shown on our cover. Originator is Butt and the year 1948. The arrangement was made by Mr. Carl Starker. We think it's a beautiful arrangement in a modernistic manner, but we know too that some of our glad growers will think we are going modern. But then why should we all agree—let's have some differences of opinion.

We found the picture in the 1952 issue of The Gladiolus, year-book of the New England Gladiolus Society and James H. Odell, the editor very kindly loaned us the cut. Of course we could have made a picture of an arrangement at one of our Wisconsin shows, but then it's a lot easier to just borrow a cut. So we thank Jim for helping us out, and we'll do the same for him, perhaps in the near future.

We know many of the ladies exhibiting at our Wisconsin Gladiolus shows will make arrangements equally as good as this one and perhaps someday the men will try it too.

CRANBERRY GROWING EXPANDS IN WISCONSIN

In 1951 Wisconsin produced 190,000 barrels of cranberries from 3,500 acres. The average yield was 54.3 barrels per acre.

Consumer demand has picked up since the industry started marketing cranberries in one pound packages using cellophane bags or a box with a transparent window.

WELCOME NEARNORTH GARDEN CLUB, CRIVITZ

The Nearnorth Garden Club of Crivitz has affiliated with the Wisconsin State Horticultural Society and the officers wish to welcome this club to membership. The officers of the club are: President, Fred Steffer, Middle Inlet; Vice-President, Miss Louise Panis, Niagara; Sec.-Treas., Mrs. Frank Sperka, Crivitz.

HEAVY PEONY HARVEST

Mr. E. L. White of Burr Oak Gardens of Fort Atkinson reports a good peony season. He cut and took to Milwaukee, alone, 729 dozens of blooms.

We know that a fool and his money are soon parted, but what would be interesting to learn is how they got together in the first place.

COMING EVENTS

August 16-24. Wisconsin State Fair, Milwaukee. Outstanding Horticultural Exhibits.

August 16-17-18. Wisconsin Glad. show at the Wisconsin State Fair.

August 23-24. Marathon County Glad. Show. YMCA Gym. Wausau.

August 31-September 1. Glad show by the S. Wis., N. Ill. Glad Society at the Walworth County Fair. Elkhorn.

September 3.—Orchard Tour. Minnesota Fruit Growers Ass'n. and Wisconsin State Horticultural Society. Pine Tree Orchards, Stillwater, Minn. (See announcement)

September 19. Annual Convention, Garden Club of Wisconsin, affiliated with the Wisconsin State Horticultural Society. Athearn Hotel, Oshkosh.

VISIT OUR WISCONSIN STATE PARKS

Wisconsin has many beautiful state parks. Now is the time to visit them. Write to the Wisconsin Conservation Department, State Office Building, Madison, Wisconsin and ask for circulars describing various parks in the section of the state which you may be able to visit.

Latest circular to reach our desk is one describing Lizard Mound State Park, named for its most outstanding Indian mounds, containing 31 fine examples of effigy mounds.

The park is located on County Trunk A, 1 mile east of State Highway 144 and north out of West Bend in Washington County.

MERLE RASMUSSEN

The many friends of the N. A. Rasmussen family of Oshkosh were shocked to hear, early in July, that their daughter, Merle Rasmussen had been killed by accident with a shotgun.

Miss Rasmussen had been prominent for many years in horticultural circles. Graduating in landscaping from Iowa State College she was the landscape architect for the Rasmussen Nursery. She was very active in garden club circles, traveling a great deal to speak at meetings and judge flower shows.

The Board of Directors of the Wisconsin State Horticultural Society at its July meeting extended a vote of sympathy to the Rasmussens in their bereavement.

Are You A Garden Fadist

Do you believe in organic gardening as the only safe way to produce pure food?

Do you believe that it is necessary to use fertilizers with trace-elements in order to get results?

Do you believe that earthworms are necessary in the soil to make it fertile?

Do you believe that the plow should be abolished from agriculture and plowless farming substituted?

If you believe these fads, and they certainly have received much publicity, then you are a garden fadist. There may be considerable value in being a fadist. It increases your interest in gardening, gives you much to talk about with your friends and makes you a better gardener. even though you eventually discover that you can grow plants quite well in other ways.

We do not mention here gardening by the phases of the moon, although a certain widely read national magazine has recently been carrying articles on how to plant according to phases of the moon. That idea should have died long ago, but it still bobs up even though its advocates can't prove a thing experimentally.

THE ORGANIC GARDENER has succeeded where many experiment stations have failed—they have inspired many home gardeners to improve their soil by the use of more organic matter. However, the assertion that chemical fertilizers are detrimental to our health is not borne out by many carefully controlled experiments. There just isn't enough organic matter to go around to prepare the soils of the world for food production by that method. We would probably starve if it weren't for chemical fertilizers.

The plant takes up its minerals from the soil dissolved in water. The moisture with these elements is transported up to the leaves. Here, with the aid of sunlight, the carbon dioxide in the air, and the water and elements from the soil are synthesized into food products — carbohydrates (sugars) proteins, vitamins and acids. —all quite different from any fertilizers in the soil.

Trace Elements

There are 14 elements essential to plant growth. Most of these elements are found in the productive soils, with the exception of three, nitrogen, phosphorus and potash. These are often lacking to the extent that their application improves plant growth. It is well known that some soils are deficient in certain elements such as boron, iron and manganese. When this is discovered, as evidenced by chemical tests and appearance of the plants, these elements are applied in very small amounts and very carefully because an oversupply may cause injury to the plants.

The gardener is still the experimenter in most of these cases. One garden writer claims that the secret of growing good lilies is to use trace element fertilizer. Our best lily growers, however, think that good drainage and disease control are the most essential factors for success. The best way is to consult your County Agent or experiment station if you think you need trace elements.

THE EARTHWORM enthusiast has many arguments to prove his point that earthworms are necessary for plant growth. His enthusiasm may be greatly increased if he is producing earthworms for sale to gardeners. Actually scientists do not know whether earthworms are any more beneficial in decomposing organic matter in the soil than are the other organism's present such as bacteria.

In the South decomposition of organic matter is quite rapid and so earthworms are detrimental. Of course we know that many soils do not have any earthworms and still produce good crops.

THE PLOWLESS FARMING enthusiasts have received wide publicity. Here was a new fad. Its advocates were supported by the dust storms of the early '30's which they said were due to the plow. However, farmers and gardeners in the East tried out plowless farming with disappointing results. The kind of tillage our land requires depends upon the type of soil we have and the kind of crops we wish to produce. In the East there are many soils which are called worn

(Continued on Page 280)

Gladiolus Tidings

For the WISCONSIN GLADIOLUS SOCIETY

President
WALTER A. KURTZ
Chilton

Vice President
JOHN GATES
Two Rivers

Secretary
MRS. A. E. PIEPKORN
613 N. Mil. St., Plymouth

TREASURER
MRS. LEONARD WIGHTMAN
Rt. 3, Plymouth

LOOKING FOR THE PERFECT HOBBY? TRY GLADIOLUS BREEDING!

By Leo G. Klein, New York

Breeding Gladiolus has become a tremendously popular hobby attracting more amateurs than is the case with any other flower. The reason is that the Gladiolus is very easy to work with and produces results, from cross to bloom, comparatively quickly.

Because of the ancestry of modern varieties is mixed, crossing any two Gladiolus will usually result in seedlings of great variation in color and type.

Most varieties, however, will not produce seedlings of any particular merit. In fact, many well-planned crosses will not produce seedlings as good as the existing varieties for almost invariably the good seedlings come from very few well-chosen crosses.

Since there is no way to determine which crosses are likely to produce good seedlings except thru experience, a beginner should, perhaps, use varieties in combinations that have given other breeders good seedlings.

How To Make Crosses

The mechanics of Gladiolus breeding are comparatively simple. Each flower contains, arising from its center, three stamens with pollen-bearing anthers (male element) and a single pistil with a 3-forked stigma (female element).

In order to avoid self pollination, the flower that is to be used as the female or seed parent must be emasculated (have its stamens removed).

At this time, too, the pistil should be fastened to the uppermost petal with a toothpick to keep it out of the way of visiting pollen-laden insects. If this is done, insects may alight on the lower petal and enter the flower without having to brush against the stigma.

Unlike the pollen of many other flowers, that of the Gladiolus is heavy and is not very likely to be blown about by the wind. It, therefore, is not necessary to bag or cover the emasculated florets to protect them from pollination by the wind.

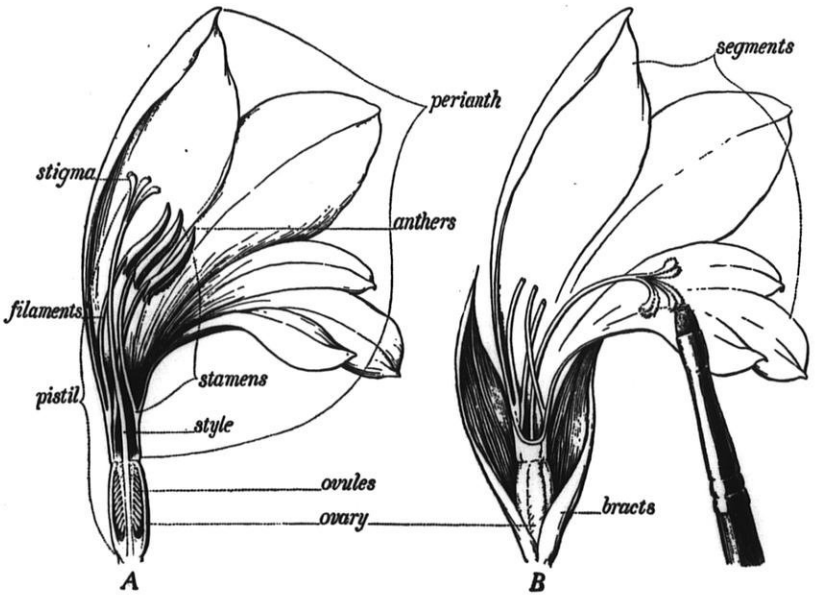
When the stigma becomes feathery, it is receptive and ready for pollen from a selected parent. Pollination is usually done by simply brushing the stigma with the anther.

For best results, the stamens should be collected several hours before they are needed, as pollen from freshly gathered stamens does not brush off too easily. To avoid all danger, stamens from flowers which have not opened outdoors should be used. Outdoors, pollen may be contaminated by bees or other insects which may deposit foreign pollen on the anther of the Gladiolus selected for breeding purposes. A good plan is to keep a supply of blooms indoors to serve as a source of supply of uncontaminated pollen. The spikes, of course, should be cut and taken indoors before the floret opens.

Best Time For Pollination

Time of pollination has a marked effect on subsequent seed set. It has been found that pollinations made before 9 a.m. and after 7 p.m. are more likely to give a good set of seed than pollination made during the middle of the day. This is particularly true in hot weather.

As soon as the spike has been pollinated, it should be labeled with the names of both parents and the date of pollination. Write the name of the female parent first on the tag,



followed by an X and then the make variety's name. That portion of the spike above the uppermost pollinated floret should be removed to permit maximum seed development.

Five weeks after pollination, the seed pods will be ready for harvesting and as soon as they begin to split, may be taken indoors to dry out. When the pods are thoroughly dry, the seed will slip out. It should be stored in a cool, dry place until planting time. Condensed from Bulletin, Empire State Glad. Soc.

HYBRIDIZING, WITH EMPHASIS ON GENETIC FUNDAMENTALS

By Dr. L. F. Randolph, New York

The basic number of chromosomes in African species of Gladiolus is 15. All varieties in commerce are tetraploids; that is, they have 2 sets of chromosomes with a total of 60. The species Primulinus is a tetraploid, but some other species are diploids. All commercial varieties are hybrids of various species, and may be as many as 20 generations away from a specie ancestor. For this reason (the complicated hybrid origin) one cannot expect the simple Mendelian ratios to hold in hybridizing. The best the hybridizer can hope for are breaks — fortunate combinations of exceptional characteristics.

No improvement in heredity can be obtained from 'selection'. This process may succeed in eliminating disease, but cannot change the inherited nature of the variety. If the seed and pollen parents have the same number of chromosomes, there is no difference in the results to be expected, regardless of which way the cross is made. If the chromosomes differ in number there is a reason for difference. **From Bulletin, Empire State Glad. Soc.**

GLADIOLUS SHOW AT WAUSAU

Marathon County Show on August 23-24

The Marathon County Chapter of the Wisconsin State Horticultural Society will hold its annual gladiolus show in **Wausau YMCA gym on August 23-24.**

On **Sunday, August 10th** the chapter will hold its annual judging school and picnic in Marathon County Park, Wausau.

THE GLADIOLUS

27th Annual Edition from the NEGS —An Outsanding Volume

The annual edition of The Gladiolus published by the New England Gladiolus Society, Horticultural Hall, Boston, Mass., appeared in July. Again it is an outstanding volume and credit is due to the officers and to Editor James H. Odell.

A good deal of this year's issue is devoted to hybridizing and parentages. Variety ratings and national gladiolus selections; gladiolus culture and personalities are discussed thoroughly. It is a volume every gladiolus grower should have.

The book contains full page illustrations of varieties Rosita by Ted Woods of Madison, Skippy and Honey by Melk Brothers, Milwaukee.

We notice too some very excellent arrangements of gladiolus in the modern manner. Obviously gladiolus growers are getting away from the standard baskets and are learning how to make arrangements that are quite outstanding .

SHEBOYGAN CHAPTER SHOW

The Sheboygan County Chapter of the Wisconsin Gladiolus Society held its annual Gladiolus show as a regional show with the Manitowoc County Chapter, in the Immanuel Hall in Sheboygan on August 9-10.

The show committee was: Superintendent, Fred Hagedorn; Supervisor of judges, Mrs. A. E. Piepkorn; Show secretary, Mrs. Harvey Pierce; Show schedule and Co-chairman of show, William Banonse and Otto Kapschitzke; Committeemen, Joe Wegman, William Marquardt, Jake Kertz, Oscar Schaubs, Walter Kurtz, and Peter De Pagter; Publicity, Emil Jaschinski.—**Reported by E. E. Jaschinski, Sheboygan.**

GLADIOLUS SHOWS

August 16, 17, 18. Wisconsin Gladiolus Society Show at the Wisconsin State Fair, West Allis.

August 16-17. Gladiolus Show for Junior Growers by the Manitowoc Gladiolus Society.

August 31—September 1. Annual Show S. Wis. and N. Ill. Gladiolus Society at Walworth County Fair, Elkhorn, Wis.

DR. GEORGE H. SCHEER

Dr. George H. Scheer of Sheboygan, one of the State's leading gladiolus growers and hybridizers, passed away on April 7th. He received the honorary recognition certificate of the Wisconsin State Horticultural Society in 1946 for his achievements in the field of gladiolus hybridizing.

WISCONSIN GLADIOLUS SHOW BY THE WISCONSIN GLADOLUS SOCIETY WISCONSIN STATE FAIR— HORTICULTURAL BUILDING AUGUST 16, 17, 18

Be sure to attend the Wisconsin State Gladiolus Show at the State Fair—Horticulture Building, on August 16-18. The show will be set up Friday night, August 15. Judging will begin Saturday morning at 9 a.m. The show will fill 24 of the 8x16 ft. spaces in conjunction with the **regular State Fair Gladiolus Show.** Exhibitors will obtain admission to the grounds from the show committee.

The NAGC classifications will be used as in the past, and sizes and color classes as listed in NAGC listing. Premium schedules have been mailed to all members of this society. Entry tags will be sent in advance upon request to Mrs. A. E. Piepkorn, Sec., 613 N. Milwaukee Street, Plymouth, Wisc.

Show Committees

Chapter Presidents: H. E. Halliday, Madison Glad. Soc.; John Gates, Manitowoc Co. Glad. Soc.; Lloyd Prahl, Marathon Co. Glad. Soc.; Walter Axel, Sheboygan Co. Glad. Soc.; Leland Shaw, S. Wis.-N. Illinois Glad. Soc.; Mrs. Palmer Garland, Twin City Glad. Chapter.

Show Manager: Dave Puerner, Chairman; Walter Krueger, Melk Brothers, Assistant Show Chairmen.

Committee on Premium Schedules: Dave Puerner, Walter Krueger, Melk Brothers.

Supervisor of Judges: Walter Krueger.

Judges will be selected by show managers and supervisors of judges.

American Home Achievement Award, State Trophy, Ribbons and entry tags, Mrs. A. E. Piepkorn, Plymouth.

Tabulation of points, Otto Kapschitzke, Jr., W. Banonse, and Walter Axel.

The rules are the same as at the previous shows.

GLADIOLUS INTRODUCTION RECEIVES RECOGNITION

In the April, 1952 issue of the Gladiolus Magazine, published by the New England Glad. Society, the cover picture shows a spike of Connie G, originated by Ted Woods of Madison, Wis. It was the grand champion spike at the 1951 Victoria B.C., Canada Gladiolus show.

WHAT ARE EXHIBITION GLADIOLUS

By Arnold Sartorius, Porterfield

Show time again, and it brings to mind a question often asked me by glad lovers; what is meant by exhibition and commercial varieties?

I believe that there are few varieties that will not give a large percentage of satisfactory show spikes. Show records list many of our best commercial varieties among the top winners.

Florists find little use for the "giants," and Smokies, and many will not use the deeper shades. I think these are true exhibition varieties whether in the garden or the show.

The variety spic and span is grown by the million for cut flowers and has a record few possess because it grows so well. However, large bulbs and too much water will make it too large for florists use. The same may be said for the beautiful Burma which attracts the attention of nearly everyone. Burma may be too dark for many florists, but I sell to one who never gets too many.

The Red Firebrand is near perfect for show, but still opens nice large spikes for bouquets. The pinks offer the largest list Spic and Span, Heart's Desire and Evangeline are good show glads—too large unless grown from small bulbs. Lavender Huntress, blue Ravel, Buckeye Bronze and several other smokies could be classed as "exhibition" but can be used satisfactorily in the home for bouquets or exhibited and win a "blue."

To sum this up I would say to the back yard gardener: if you want to exhibit, get varieties as "commercials," in colors you prefer. Grow them according to instructions and you should be able to have your own home decorations plus a garden show and some blue ribbons.

MERCHANTS WELCOME FLOWER SHOWS

Merchants are becoming interested in garden club flower shows. In the July "Flower Grower" we find this statement that Kresge's in Newark invited the New Jersey garden clubs to exhibit in their stores for four days. Ten "rooms" were set up and used by garden clubs for two day periods so that 20 clubs competed for cash prizes and for silver trophies given by Kresges. It was felt that this was an opportunity to reach a diversified public and proved rewarding for all concerned.

SUMMER CARE OF TUBEROUS BEGONIAS

Do you have difficulty in producing large healthy looking tuberous rooted begonia plants during the midsummer months? If so, in Wisconsin the trouble may be due to underwatering. Even a few days of drought may so injure the root system that the tips of the leaves turn brown and dead spots develop on the leaves.

Keep the begonias in shade at all times excepting early morning and late afternoon. With a spade, dig down 6 to 8 inches between the plants and examine the soil to see if it is as moist as you think it is from its appearance on the surface. In shady places there are frequently competing roots of trees and shrubs which take the moisture and plant food from the soil.

If there are many competing roots it is advisable to leave the begonias in large pots; in that case, however, it is necessary to water them every day, unless there is rainfall.

During hot weather it is advisable to sprinkle the plants once or twice during the day time. Remember these plants are native to tropical climates, grow in shade, with high humidity and almost daily rains. Plenty of watering will keep the leaves large and dark green looking.

An application of liquid fertilizer dissolved in the irrigation water or applied with a sprinkling can about once in two weeks will be of great help.

A move is underway to abolish the exclamation mark. People aren't surprised at anything anymore.

ALL-AMERICA ROSES FOR 1953

Chrysler Imperial and Ma Perkins are Winners

Two beautiful roses, Chrysler Imperial and Ma Perkins, have won the All-America rose award for 1953, All America Rose Selections have announced.

Chrysler Imperial is a crimson-red hybrid tea, while a Perkins is a floribunda of sparkling, coral shell pink. The two winners were placed under test in 1950 in competition with most of the world's other important new varieties.

Chrysler Imperial is a crimson-red hybrid tea that makes an excellent exhibition rose. Its parents are Mirandy and Charlotte Armstrong, both of which are previous All-America winners.

Ma Perkins is a floribunda with a sweetly pungent fragrance that is rich and unusual. It is a direct descendant of Red Radiance and Fashion, two of the hardiest varieties of roses.

The growth of Ma Perkins is strong yet compact. Flowers are cup-shaped and appear both in custers and singly throughout the season. Plants grow to 2½ to 3 feet and are bushy. The foliage is a rich green and plentiful, with leaves composed of five to seven leaflets.

ARE YOU A GARDEN FADIST?

(Continued from Page 277)

out—they really aren't worn out, they never were productive. The black soils in the mid-west and west which grew grasses in abundance were, however, very productive for crop plants.

On many soils in humid regions the use of organic matter, lime and fertilizer are necessary. These should be worked to a good depth by the plow or spade. On some soils deep turning is not necessary—that applies especially to the lighter sandy soils.

The wise gardener will follow the directions and recommendations of his experiment station rather than the spectacular statements of fadists.

Gems of wisdom are often lost by not listening to the other fellow.

Garden Club News

ANNUAL CONVENTION

Garden Club of Wisconsin

Atheran Hotel, Oshkosh

Friday, September 19, 1952

Plans for the big annual meeting of the Garden Club of Wisconsin, affiliated with the Wisconsin Horticultural Society, were made at a meeting of the Garden Club Advisory Board and Regional Presidents in July.

The Program

The program as planned will be outstanding. Full details in our September issue. The forenoon will be devoted to talks on "How we grow our favorite flowers". There will be a short business meeting at 11:45; a luncheon in the hotel dining room (price $1.50) followed by a short program and presentation of honorary recognition certificates to three outstanding garden club members.

The afternoon program will feature a film and talk on conservation followed by a demonstration on flower arrangements by an out-of-state speaker. All garden club members are invited to attend and become acquainted with the fine work being done by the members of the Garden Club of Wisconsin.

Present at the board meeting were: Mrs. R. H. Sewell and Mrs. S. Swenson representing the Milwaukee region; Miss Bessie Pease, and Mrs. M. A. Haller of Oshkosh, Winnebagoland Region; Mrs. G. Willett, Iola, Central Wisconsin Region; Mrs. Roy Schmidt, Jefferson, and Mrs. Maurice Smith, Lake Mills, of Region I.

Other items of business included decision to offer awards on yearbooks at the annual convention. Mrs. R. A. Sewell was appointed chairman of the yearbook—she to choose other members of the committee.

Flower Show

The flower show at the convention is to consist of arrangements and exhibits prepared by members of the Oshkosh Horticultural Society and near-by garden clubs. **A zinnia show**

is being planned. All members are asked to bring 3 specimens of large zinnias and 5 specimens of small types in a suitable container for exhibition.

JUDGING SCHOOL

PERFECTION OF BLOOM CLASSES

ADMINISTRATION BUILDING — WHITNALL PARK, HALES CORNERS

FRIDAY, SEPTEMBER 12

All garden club members affiliated with the Garden Club of Wisconsin and the Wisconsin State Horticultural Society are invited to attend our first Judging School for Perfection of Bloom Classes as given above.

The program will include:

9:30-11:30 A.M. Flower Show Practices.

12.00 A.M. Luncheon.

1:00 P.M. How To Judge Perfection of Bloom Classes: Gladiolus; Annuals and Dahlias.

3:00 P.M. Examinations.

BUS TOUR FOR GARDEN CLUB MEMBERS

The Sheboygan District Garden Club Federation announces a bus tour. The bus will leave Sheboygan on September 12 at 7 A.M. for Washington, D.C., New York, Boston, Niagara Falls and Detroit—a 15 day tour.

The tour is open to the public. For information write Mrs. E. B. Smith, 1430 N. 15th St., Sheboygan, Wis.

HOW TO ORGANIZE A GARDEN CLUB

Revised Bulletin Available from Wisconsin State Horticultural Society

A mimeographed circular entitled "How to Organize a Garden Club" was made available some years ago by the Wisconsin State Horticultural Society. There has been a very active demand through the years for this bulletin and all copies were sent out.

During the past few months the bulletin has been revised by the Society's Secretary and a new edition mimeographed. It is now available free of charge to anyone interested in organizing a garden club. Just drop a card for copy to Wisconsin Horticultural Society, 424 University Farm Place, Madison, Wis.

The bulletin contains suggestions for organizing clubs, program topics for each month of the year, a list of gardening books and a sample constitution and by-laws.

WAUPACA GARDEN CLUB HOLDS EXCELLENT FLOWER SHOW

On June 19th the Waupaca Garden Club held its annual Flower Show in the Armory—a very large and excellent building for a show. The theme of the show was "The Summer Garden Party". There were a large number of set tables: picnic tables for June, July, August and September; informal garden party and formal garden party tables.

Artistic arrangement classes included such interesting arrangements as "With one color predominating"; "With accent on line"; "Featuring contrasting color harmony". There were modernistic arrangements, arranegments in antique containers and many others.

Horticultural exhibits were featured and there were many excellent entries in house plants, roses and perennials. The exhibits of African Violets were especially good.

Mrs. G. J. Hathaway was show chairman. Chairmen of various sections were Mrs. C. H. Bacher, Mrs. Tom Browne, Mrs. Albert Kreeger, Mrs. Alton Hanson, and Mrs. Melvin Roman. Mrs. Leo Jackson is the club president, Mrs. Norman Jardine, Secretary.

There was an excellent attendance at the show and the silver offering brought in ample funds.

REQUIREMENTS FOR JUDGES CERTIFICATE

GARDEN CLUB OF WISCONSIN AND WISCONSIN STATE HORTICULTURAL SOCIETY

Points For Flower Arrangement Section

Design Course in Art Principles
Passing grade in Examinations
— or —
Passing grade in examination on
Book "Art of Color & Design" by Maitland Graves 5

Series of three lectures on flower arrangement
Passing grade in examination
— or —
Previous judging school courses, passed by examination, within the last 6 years shall be credited 5 points each 15

Blue Ribbon Requirements 6
1 for table setting
1 for composition in a niche
4 for artistic arrangements
All must be won at a Flower Arrangement Course, show sponsored by the Garden Club of Wisconsin or a Region.

Judging Practice.

Passing Exam in Flower Show Practice.
3 courses @ 1 point each 3
Acting judge in 5 flower shows 5

Passing of 3 judging exams to be given at Flower Show Practice School.
2 points each 6

Previous exams taken and passed on Flower Show practice and judging shall be given equal credit each.

Reading Examination.
List of books to be compiled later 10

Total ..... 50 points.

Submitted by the Judging School Committee of the Milwaukee Region, Garden Club of Wisconsin, for consideration.

GREEN THUMB — IRON RIVER GARDEN CLUB HOLDS FLOWER SHOW

Our most northern garden club the Green Thumb Garden Club at Iron River held its annual flower show meeting on June 25th. There were many nice exhibits of house plants, specimen bloom and arrangements. Judging was done by Mr. H. J. Rahmlow, Secretary Wisconsin State Horticultural Society. The merit system was used. There was a good attendance for the afternoon meeting at which the judge told how the awards were made, followed by a talk with colored slides on growing annuals and other plants and also flower arrangemcents. Officers of the club are: Mrs. Gertrude Lavin, President; Mrs. Dorothy Riedl, Vice President; Mrs. Gertrude Diamon, Sec.-Treas.

LODI GARDEN CLUB

The theme of the Lodi Garden Club for 1952 is "Flowers Beautify a City". One of the new projects this spring was the planting of almost a hundred flowering crabs. Object, to make Lodi a City of Flowering Crab each spring time. These were planted individually throughout the city, at the entrances on Highway 113 and in the city parks.

A very important recommendation made by the club was submitted to the board of the Lodi Union Fair. It was suggested that the flower competition be divided into two classes, first, entries by Garden Clubs of this area, second by other clubs of the surrounding country and towns. The hope is to attract entries from a large area and bring in a wealth of bloom.

The completion of the project begun by Mrs. T. O. Goeres, retiring president, was the landscaping of Haberman Park with emphasis in the Memorial Plaque area. This park is naturalized with spring filled lagoons, over hanging willows and bordered by Spring Creek with its trout and ducks.

The club has many projects—flowers for those ill at home and at the three nursing homes; flowers for the churches and weddings and a fine showing at the Lodi Union Fair. The high point of the year toward which the club is working is the Community Flower Show to be held in August. By Mrs. R. Groves, Pub. Chm.

Chlordane, which is the best ant killer, and destroys chiggers, grasshoppers, and most insects that crawl on the soil and live in it, has been proved to prevent the germination of crab grass seed.

Two Flower Arrangers Take A Trip

By Elizabeth Stewart, West Allis

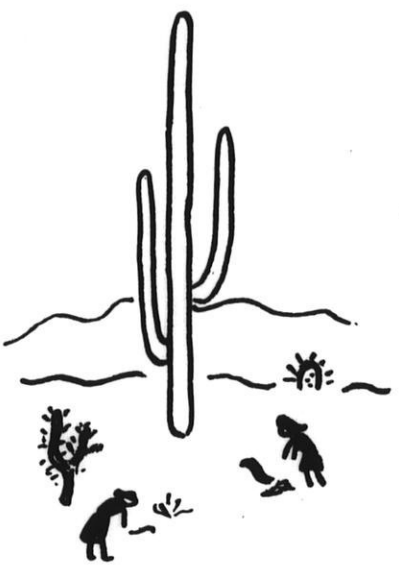
We did what anyone would expect flower arrangers would do while on a vacation. Of course, everyone knows that they, (F. A.'s) are a peculiar lot and their behavior is not expected to conform to normal behavior patterns.

Much to the embarrassment of a couple of husbands, two reasonably respectable wives suddenly lost all vestige of dignity and descended upon the stately main street of Hot Springs, Arkansas like a pair of hungry wolves. Why? The streets were lined with huge Magnolia trees. Although we arrived after dark, the street was well lighted and here and there were fallen leaves. So we proceeded to pick up as many precious Magnolia leaves from the gutters and sidewalks as we could possibly carry. We do not know what the townspeople thought of us but hope it was not too unkind. After all, we did do a street cleaning job of sorts. We suspect that along about this time our supposedly 'conditioned' spouses began to feel a little alarmed. From then on we were referred to as, "The Scavengers in the back seat." They, being front seat drivers, had the situation well under control.

However, things began to go our way again when we reached our destination, which was Tucson, Arizona. Our host and hostess were two of the most hospitable people one could find. We were taken on daily sightseeing tours for the entire week. And wouldn't you know, a flower show was included even though it was about 90 miles away in the Mexican border town of Nogales.

Flower Show in Mexico

Members of a church guild invited anyone interested to bring in exhibits. Entries came from all over Santa Cruz county as well as from Tucson. The garden editor of the Arizona Daily Star was present to give advice on garden problems for a small fee which was turned over to the guild for church improvements. A



twenty dollar cash sweepstake award was given the entrant who secured the greatest number of blue ribbons. Entry and admission fee was one dollar and permitted the entrant to make as many entries as desired.

The show was held at a lovely home high on a hillside with the mountains of Mexico in the distance. Guests had the freedom of the garden which was ablaze with ranunrculus, roses, iris, stock, snapdragons, sweet peas and pansies. The garden, in the rear of the home, extended down three terrace levels to a beautiful swimming pool which was protected by a high patio wall covered with blooming roses.

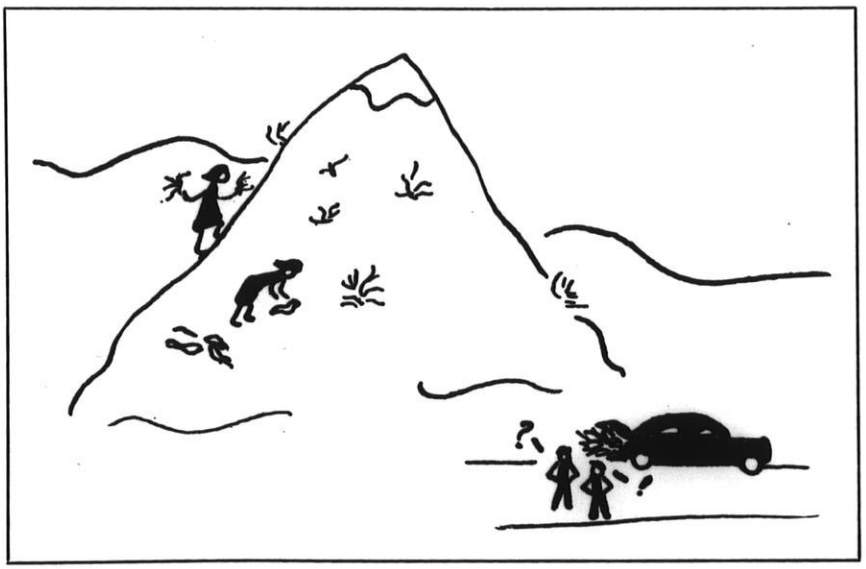
If the men in our group harbored any objections relative to being dragged to another flower show, they were quickly forgotten when we were greeted at the gate by attractive young girls attired in semi-formal pastel gowns wearing leis of yucca blossoms.

On the first terrace more of these lovely maidens served delicious punch or confronted guests with huge garden baskets filled with cookies and cakes. All this to the tunes of strolling troubadors in gay caballero costumes. The music was furnished by two University of Arizona students who played and sang Spanish songs.

Husbands' comment: "We'll take this kind of a flower show anyday!"

Wonderful Flowers

Flower arrangers comments: "The specimen bloom exhibit in the rumpus room was just out of this world!"



Never again will we look at old paintings of flower bouquets and say that the artist must have used artificial flowers or imagined them because the various types did not bloom together. Here, before our very eyes, on the fourth day of May, were specimen blooms of Iris, Lilacs, Snapdragons, Verbena, Nurembergia, Sweet Peas, Calendulas, Poppies, Mock Orange, Petunias, Hemerocallis, Yucca, Sweet William, Violets, Gerbia, Snow Ball, Geraniums, Larkspur and Carnations. There were also several very interesting arrangements and button gardens included in the artistic class.

Gathering Driftwood

We did not find any big rock candy mountain", but we did find something just as nice, to us anyway. In fact we found a whole mountain side of Mazanita wood and beautiful pieces of gnarled driftwood. What was it our fellow garden club members had instructed us to do before we left? "Instead of bringing back gifts of driftwood etc. we would rather offer the articles for sale at an auction for the benefit of the club treasury." Oh, if only we had a truck!

We did gather as much as we dared —driftwood from the mountains and desert, dried palm branches from refuse piles in a date palm grove, etc. Our hostess was a very tolerant and patient person. If she thought our behavior was a bit on the queer side she gave no indication other than to remark that one thing she would always remember about this trip was "the sight of those two women scrambling up the side of the mountain after junk!"

Home In Triumph

The constant question before the house was, "Where are you going to put it?" Meaning the junk, of course. By this time we had succeeded in wearing down any remaining resistance on the part of two slightly dazed husbands. No doubt they had reached the conclusion that things had gone from bad to worse and the only thing left to do was to humor us and let us take a trunkful of stuff home. However, it did mean that two weary but triumphant flower arrangers had just about enough room to stick out their heads amidst the luggage in the back seat!

TWENTY FAVORITE HEMEROCALLIS

The National Hemerocallis Society held a popularity poll in 1951 to determine the favorite varieties of daylilies. The twenty favorites are listed below and comprise varieties not too expensive and with a wide range in color, height and blooming season.

This list will make up a well balanced collection and one that composes varieties which hemerocallis lovers will wish to grow.

1. Painted Lady (Russell); large, ruffled yellow with overlay of cinammon.
2. Potentate (Nesmith); rich, pansy purple.
3. Garnet Robe (Milliken); deep, oxblood red.
4. Hesperus (Sass); cadmium yellow.
5. Caballero (Stout); bi-color of red and gold.
6. Pink Charm (Nesmith); deep, coral pink.
7. Colonial Dame (Milliken); light apricot and tan, subtle in its coloring.
8. Georgia (Stout); blend of buff, pink, and peach, a rich combination.
9. Mission Bells (Hall); medium yellow.
10. Dauntless (Stout); pale yellow.
11. Royal Ruby (Nesmith); glowing red.
12. Mrs. Hugh Johnson (Russell); dark red.
13. High Noon (Milliken); deep yellow.
14. Revolute (Sass); lemon yellow.
15. Prima Donna (Raylor); buff.
16. Orange Beauty (Sass); light orange.
17. Patricia (Stout); pale yellow, green throat.
18. Valiant (Cook); medium orange.
19. Gay Troubadour (Nesmith); brilliant red and yellow bi-color.
20. Dominion (Stout); rich, reddish brown.

Asters should be kept dusted with DDT or lindane to prevent leaf hoppers from infecting them with aster yellows. This disease sometimes attacks carrots. Leaf hoppers are juice drinkers, which also attack beans and potatoes, and are difficult to control except with DDT, or lindane, which kill them when they walk on the leaves.

THE BEST SOIL FOR AFRICAN VIOLETS

Does Not Require A Rich Soil

(From Bulletin, Missouri Botanical Gardens)

Saintpaulias are not nearly as particular in soil requirements as some people would have you believe. If this were so, these plants would not be the universal favorites they are. However, there are three soil requirements that should be met, if possible, in order to produce good plants with a minimum of effort. They are: high organic content, good aeration, and relatively low fertility. We have met them by using the following mixture: 2 parts of garden loam (the best we can find), 1 part peat moss (really moss peat), 1 part leaf mold, and 1 part clean sand.

We pasteurize the loam, the leafmold, and sometimes the sand (2 hours at 160 degrees F), but not the peat moss as it is generally free from harmful organisms unless it has been lying around with contaminated materials. Because of the difficulty in pasteurizing soil in the home, it is probably advisable to use what is at hand without pasteurization or buy the required amount of soil from a reliable nursery. However, if you have a pressure cooker and do not mind using it for soil, pasteurization is not too difficult. Fortunately, so far no harmful organism has been found that in its active state is not killed when exposed to 160 degrees F. for one or two hours. Heating the soil beyond this point only serves to eliminate the beneficial organisms along with the harmful ones. In fact, it is for this reason that soil which is completely sterilized, as when it is baked in an oven, often gives poorer results than does unpasteurized soil. Therefore, if pasteurization is attempted, it should be done by steam. How this is done by means of a pressure cooker, the average housewife knows more about than I do.

GREEN FINGERS—AND OTHER POEMS

The author of the novel Old Herbaceous", Reginald Arkell, has written a book of verses entitled "Green Fingers and Other Poems". It is a book of gay and amusing verses about gardens and gardeners. For this new volume, he has selected the best poems from his four volumes which have had wide popularity in England. Available from Harcourt, Brace and Company, 383 Madison Avenue, New York 17. Price $2.00.

Wisconsin Beekeeping

Official organ of the Wisconsin State Beekeepers Association

OFFICERS:

Henry Schaefer, Osseo, President
Wm. Judd, Stoughton, Vice-President
Mrs. Louise Brueggeman, Box 60, Menomonee Falls, Recording Secretary-Treasurer.

DISTRICT CHAIRMEN:

Newton Boggs, Viroqua
Wm. Judd, Stoughton
Robt. Knutson, Ladysmith
Len. Otto, Forest Junction
Herbert Reim, Watertown
E. Schroeder, Marshfield

AUGUST IN THE APIARY

This Is The Time To:

Extract all white honey as rapidly as possible and before any buckwheat honey is stored which will lower the quality of clover honey. Buckwheat honey should be extracted separately. Those who like buckwheat honey prefer it "straight". Delay in extracting will not improve your clover honey. In fact it may absorb moisture and lose flavor and darken in color.

It's time now to begin to prepare colonies for winter. Arrange brood chambers so as much honey as possible will be stored above the brood area so that fall feeding will not be necessary.

Auger hole entrances in the upper brood chamber should be closed now. If the bees are forced to enter on the bottom board they are more inclined to rear brood in the lower brood chambers, storing more honey for winter in the upper. In early October, open the upper entrances and close the lower for winter.

Remember, **fall honey is best stored in the brood chamber** for winter use. Fall honey, if extracted should be kept separate from table honey and sold to bakers or commercial users, if it lacks quality, as it often does.

Now is the time to **plan requeening operations.** As soon as the main honey flow is over we can begin to inspect colonies and rear queens or purchase them. Any queen that lacks vigor, has a spotted brood area or a small amount of brood should be replaced.

CUT-COMB HONEY EXTRACTOR FOR SALE

FOR SALE. Large extractor for drying cutcomb honey. Operated by hand or motor. The only way to really dry cut-combs. Only slightly used. Excellent condition. Write Wisconsin State Horticultural Society, 424 University Farm Place, Madison, Wisconsin.

THIS WILL HELP YOU SELL HONEY

Material available from the American Honey Institute, Madison 3, Wis.

Leaflets

Honey for Breakfast—6 pgs. @ 100 for $1.00 Honey to Start the Day Right—6 pgs. @ 100 for $1.00. Honey and Cereals—6 pgs. @ 100 for $1.00. Two Sweet Gifts—8 pgs. @ 100 for $1.00. Honey Fruit Cake—4 pgs. @ 100 for $1.00. Honey for Canning and Preserving—8 pgs. @ 100 for $1.00. Jellies and Marmalades—8 pgs. @ 100 for $1.00. Honey the Clock Around—6 pgs. @ 100 for $1.00. Two new Favorite Cake Recipes—4 pgs. @ 100 for .75. Creamed Honey—4 pgs. @ 100 for $1.00. A honey of a Chocolate Cake—4 pgs. @ 100 for .60. Use Honey in Infant Feeding—25 for $1.00. 1952 Calendars—100 for $1.00 Honey Recipes (for 5-lb. pail)—6 pgs. @ 100 for $1.00.

Display Cards

"Grown-ups"—four colors, each .25. "Honey Boy"—four colors, each .25. "New Season's Honey" Poster—17"x11", 3 for .25. "Everyone Enjoys Honey" Poster—17"x11", 3 for .25. "Start the Day Right with Honey for Breakfast" poster—17"x11", 3 for .25. Window Streamers—21"x4", 100 for $1.00. Send for some today!

We have seen a good deal of what is called "hot weather ventilation"—pushing brood chambers and supers forward or backward so as to leave an opening for ventilation; raising the covers etc. We wonder how much good this is doing? The bees don't seem to like these openings and if they are small will seal them with propolis when fall approaches. We have discontinued this type of ventilation. During rainy weather it is a decided detriment; where does the rain go but into the hives.

SUMMER MEETINGS WISCONSIN BEEKEEPERS ASSOCIATION WELL ATTENDED

A 95 degree temperature greeted the beekeeper's meeting at Walter Diehnelt's Honey Acres, Menomonee Falls for the annual summer meeting of the Association on July 22, but cooler weather came that evening for the meeting at Eau Claire Lakes. Both meetings were well attended.

Mr. and Mrs. Walter Diehnelt's hospitality was in evidence as usual. Honey-Lemonade and ice cream were free to everyone. Demonstrations of colony manipulation and extracting were given by Walter Diehnelt Jr. and John Long. President Henry Schaefer presided. Out-of-state speakers whose presence was greatly appreciated were Mr. Henry Dadant and Sons, Hamilton, Illinois and M. J. Deyell, Editor of Gleanings in Bee Culture, Medina, Ohio.

Reports from beekeepers indicated a short crop in northwestern Wisconsin, a fair crop but not as much as last year in most of the rest of the state with a good crop in southwestern Wisconsin. Mr. M. J. Deyell reported a crop failure around Medina, Ohio due to drought.

Demonstrations during the forenoon meeting proved most interesting. Installation of packaged bees was demonstrated at the western meeting by Mr. John Long and Mr. Robert Knutson of Ladysmith. Mr. Walter Diehnelt Jr. and Mr. Long demonstrated colony manipulation at the Menominee Falls meeting.

Questions on honey prices were not answered satisfactorily. The effect of the government price support program is not yet clear, but will take shape as time goes on. In the meantime beekeepers should remember the prices as given in our June issue and not sell honey at a low price.

Reflections Of A Beekeeper

By Marvin W. Kosanke, Ripon

Every now and then we are reminded not to forget the poetry in beekeeping. And yet I wonder how many of us do this very thing. Nearly all of us have become so deeply entrenched in this complicated business of making a living that we fail to enjoy the many things Mother Nature has provided for us. It is a great privilege to follow a profession that is in constant contact with her throughout the year. To learn her secrets and to know her ways is one of man's greatest pleasures. Our work should always be a pleasure as well as a means to provide a livelihood. When your work becomes a burden and you receive little or no pleasure from it your life is not much worthwhile.

Appreciation

We should be more appreciative of all the living things about us in the great outdoors and learn to enjoy them to the utmost with our beekeeping. Such ordinary things as a hawk circling majestically overhead, ever relentlessly searching out its prey, a frisky chipmunk scampering through the fallen leaves to his sanctuary in a hollow tree or a thrush flitting to his nest in a nearby thicket, all may seem commonplace or insignificant. However, everyone of them bring some form of pleasure to anyone who stops to observe them for a moment.

Too many people measure a successful man by the money or property he has accumulated during his lifetime but there is a far greater richness that is acquired by being close to Nature. By understanding and having a greater affinity to her ways in conjunction with our work gives us an opportunity to live a more contented life than we would have otherwise.

Perhaps the most pleasant place to enjoy beekeeping is to have an apiary in an orchard. I wonder how many beekeepers have taken the opportunity to spend an hour or so on a warm sunny spring day when the fruit trees are in bloom. An apiary of meticulously painted hives placed on a luxuriant green carpet of grass under a group of blossoming trees is a sight to behold. Sitting in the warm sunshine watching the bees bringing in the precious pollen and nectar and with the air filled by their pleasant hum and the enchanting fragrance of the blossoms is an occasion that is almost indescribable. It has to be experienced personally to be fully appreciated and can never be expressed by mere words.

Summer Meditation

To be sure, spring alone does not hold all of the pleasant moments. Summer has its compensation too. When working in an apiary during the hot summer days what is more restful than to spend a few moments in the welcome shade of a nearby tree? Watching the bees come flying in from all directions with their heavy loads seems to relieve one of all his weariness. The air seems alive with their seemingly endless hum and activity. There is no time for rest for there is much to be done and soon the days of summer will pass and autumn will be with us again.

Enjoyable Autumn Days

Next to spring the bright warm days of autumn are most enjoyable for that is the time when the bees have finished their work and fly lazily about the hives on the beautiful sunny days. They seem to have a feeling of self-satisfaction after having completed a season of fruitful labor. As you stand near the hives this same feeling of contentment seems to envelop you also. In addition, this same feeling of satisfaction is enriched by the beauty of the surrounding countryside now. The brilliant foliage of the trees against a background of bright blue sky flecked with billowing white clouds presents a challenge to the most talented of artists. These are days that alone seem to make life worthwhile.

In Winter

But all too soon autumn gives way to winter. This is the time of year when most of the earth seems to sleep. Many of the birds have long ago winged their way south. Only a few of the hardiest remain. A beautiful blanket of white covers the ground. On a clear sunny day the snow sparkles in the sunshine as if countless numbers of diamonds were strewn on the ground. As one walks past the hives only a raucous call of a jay in a distant tree disturbs the cathedral-like quiet about you. But as you turn to walk back home through crisp cold air your thoughts drift to the coming of spring. It is with the coming of spring that gives us expectation and renewed hope. We always live in hope and that is where our faith lies for better things and a better life in the future.

AN IDEAL GIFT FOR THE BRIDE

New Honey Recipe Box Available

"Favorite Honey Recipes" box has just been prepared by the American Honey Institute, Madison, Wis. The box is colorful and attractive, printed in three colors. It contains a set of index cards, 64 recipe cards, 32 of which will have a honey recipe printed on one side and a picture of the finished product on the other side.

The box is mailed in heavy containers postpaid for $1.00, and is available in either red or green as the predominating color. It will make a most acceptable gift for any occasion, especially for the bride just starting housekeeping.

We congratulate the American Honey Institute on this excellent piece of promotion material.

the honey pump, or from allowing the honey to fall some distance into a tank. Running the stream along the side of the tank or down an inclined piece of metal will help. Proper settling in large storage tanks is helpful in avoiding foam. By Edw. Ranum.

HEATING FOR BOTTLING

QUESTION. In bottling honey in 5# glass jars, I heat it to a temperature of 150 degrees and let it stand several hours, before bottling. After it has cooled, I still find white foam at the top of the honey in the jar. What causes this and how can it be eliminated?

ANSWER. By E. L. Schroeder. I find that if honey stands longer—overnight —there will be less foam. But when it is bottled at this cooler temperature there will be a tendency to granulate sooner than when bottled and sealed hot. I feel that I have more to learn about this.

ANSWER. I wish I knew the best way! By Robert Knutson.

ANSWER. I think the amount of foam depends upon the amount of moisture in the honey and incorporation of air. I heat my honey in 60's as soon as extracted. That reduces the amount of moisture and does not cause foam and there is very little on the top of 5# jars. By Ivan Whiting.

PRODUCED COMB HONEY BY FEEDING BACK EXTRACTED HONEY

A. W. Woodrow of Columbus, Ohio, reported in the American Bee Journal that they fed back to the bees unmarketable thin extracted honey which was converted into comb honey. The feeding was done at the end of the clover flow by using feeders placed in the hive above the comb honey super. In 1949 one colony fed 285 pounds of honey yielded 187 marketable sections. A yield of about two sections per 3 pounds of honey fed is believed to be profitable and practical. Rapid feeding of good quality honey is essential for producing a good product. Rapid granulation sometimes occurs afterward.

FERMENTATION IN HONEY CONTROLLED BY HEATING AND DRYING

Summarized in **The Bee World,** England, we get this information about the method of controlling fermentation in New Zealand.

Investigations showed that honey in completely sealed combs could have a sufficiently high water content to allow fermentation, whether extracted or not, by yeasts which are invariably present naturally in honey. It was found moreover that the water content of samples from different parts of the same sealed comb frequently varied considerably.

The fact that the honey on top of settling tanks contains more water is due to the **settling out of layers of different concentration,** and not to the absorption of water vapor from the air. Honeys heated together to a temperature of 160 degrees F. or more do not separate in this way. With a view to decreasing the water content of honey, small-scale experiments were made on drying out comb honey and honey in tanks and, as a result of these, a full-size plant was developed. The drying was carried out by the circulation in the chambers of warmer, drier air. In the comb-drying rooms air at 95 degrees F. and 40-45% relative humidity was used, and in the tank drying rooms air at 97 degrees F. and 40% relative humidity. The combs were dried before extraction, and the extracted honey while it settled in the tanks. Owing to the greater surface presented, water was removed more readily from the combs than from the honey in tanks.

NEW ANTIBIOTIC TESTED FOR CONTROL OF NOSEMA

Workers at the Department of Agriculture in Ottawa, Canada, tested a new antibiotic, fumagillin against **Nosema apis.** It was dissolved in methyl alcohol and added to 60% sugar syrup. The preparation was fed to caged bees.

The fumagillin caused a striking reduction in the number of bees infected with **Nosema apis.** The antibiotic is being studied further in the U.S. at the present time. We hope it will become a practical control.

EXTRACTING HONEY

From Leonard Otto, Forest Junction, Wis.—I believe that the radical extractor is ideal for most any beekeeper—with enough colonies to be able to afford one.

The honey should be extracted as soon as it is two-thirds sealed.

From Newton Boggs, Viroqua, Wis.—I think a radial extractor would be best for a beekeeper with two hundred colonies—at least one holding thirty frames.

To clarify our honey we let it settle in large storgae tanks for three or four days. Then we heat and strain while hot in a tall narrow tank. Let it settle over night and then bottle from the bottom to produce clear honey.

We like to wait for three or four days after the main honey flow before extracting. I like to have all the honey off the colonies by September 1.