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APPLES WANTED

Wanted: All varieties of apples in season for roadside stand. Apple Jack's Super Farm Market, Franksville, Wisconsin. (Hwy. 41—9½ miles south of College Ave. Milwaukee City Limits.)

WATER

WE DON'T BELIEVE THIS but last summer during the drought, a farmer sent a sample of well water to be tested for purity. The report he received showed only 40% moisture in the sample. He stopped worrying about the purity. —From The Maryland Fruit Grower.

Though we travel the world over to find the beautiful, we must carry it with us, or we find it not.

-Dodgeville Chronicle.

"Yes, my maiden aunt adores her goldfish so much that she keeps them in her bathtub."

"What does she do about the fish when she takes a bath?"

"Oh, I think she blindfolds them." —Successful Farming



WISCONSIN HORTICULTURE

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Wisconsin Horticultur

Fruit Prospects Good Apple Maggot Needs Watching

WISCONSIN HAS A GOOD APPLE CROP

Wisconsin's apple crop will be larger and of better quality than last year but the National crop will be smaller— $105\frac{1}{2}$ million this year compared to $109\frac{1}{2}$ million last year. The 10 year average crop was 106.4 million.

The big reduction this year is in eastern states, which have only 44.5 million compared to 54.2 million last year. In the central states the crop is also down, especially in Illinois and southward where the March frost destroyed the crop. The entire central area, according to the US Crop Reporting Service is estimated to have 14.4 million bushel this year compared to 16.2 million bushel last year.

There will be an increase in the apple crop in western states; Washington, Oregon and California. The estimate is a crop of 46.7 million bushel this year compared to 39 million bushel last year. The Michigan crop is smaller than last years short crop but not much: 5.9 million in 1955 compared to 6 million last year.

The Wisconsin crop is estimated by the USDA Crop Reporting Service as 1.3 million this year compared to 1 million last year.

Observations In Large Orchards

Wisconsin has some large orchardsthe Kickapoo Development Co. at Gays Mills expects to have more than 100,000 bushel of apples this year. Driving through commercial orchard sections today one is impressed with the quality of the crop and the appearance of the trees, indicating sound orchard practices in nost orchards. Now types of spray maerials and proper fertilization have improved the color and size of the leaves. in years gone by one frequently observed eaf injury from liquid lime sulphur. Better pruning methods are in evidence -a 30 foot ladder is no longer necessary or picking. The center of the trees have pened up to allow sunshine into the lower branches of the trees. One is impressed with the knowledge of pest control methods displayed by growers.

APPLE MAGGOT EARLY

Dr. C. L. Fluke of the Dept. of Entomology, U.W. reported that the first flies of apple maggot were seen in bait traps at Madison on June 26th. This is the earliest on record. In years past the first flies were usually observed about the middle of July and some 10 years ago one or two sprays with arsenate of lead controlled them. The situation has changed completely and flies now seem to emerge continuously for a period of two months or more. This makes it very difficult for anyone not following a complete spray program to control this very serious pest.

Dr. Fluke has told growers that indications are methoxychlor will control the apple maggot flies better than arsenate of lead or DDT. If you have been having trouble with apple maggots try methoxychlor, especially late in the season on varieties to be picked within two weeks.

RED MITE has been serious in southern Wisconsin. In some orchards red mites were so numerous that not only were the leaves bronzed but showed signs of wilting in mid-July. Even Mc-Intosh, unsually resistant, showed infection. Some growers have used miticides: dimite, aramite or ovatran with good results. Malathion was used where aphids were also serious.

Apple Promotion Program

The Board of Directors of the Wisconsin Apple Institute met in Sturgeon Bay, July 7th. They voted to pay Wisconsin's share for National Apple Promotion to the National Apple Institute, the amount being \$1,270. The national fund will be used to tell the story of dental health and the health value of apples to consumers through parents, teachers, dental and medical magazines. The board also voted to purchase another motion picture film "Gateway To Health" to be used in Wisconsin schools and meetings. The demands for the film now available from the Bureau of Visual Instruction far exceeds its availability.

A Promotion Director has been employed for the coming three months. She will appear on television stations throughout the state to demonstrate some of the many uses of apples. Articles about apples and their uses will be sent to radio stations and to newspapers. This together with the Wisconsin Apple Dessert Demonstration Contest should do a great deal of good to help market this bumper crop. All apple growers should join the Wisconsin Apple Institute.

WISCONSIN HAS LARGE CHERRY CROP

According to the USDA Crop Reporting Service the Wisconsin cherry crop this year is a large one. Estimates in July for 1955: 40 million lbs. compared to 22.6 million lbs. in 1954.

The Michigan cherry crop for this year is estimated at 140 million lbs. compared to 98 million last year. The New York crop is estimated at 61.8 million lbs. compared to 49.4 million last year.

The total national crop for 1955 is estimated at 289.6 million lbs. compared to 215.4 million lbs. in 1954. The 1944 to 1953, ten year average crop was estimated at 234 million lbs.

It would seem that while the crop is larger than last year the national crop is not much larger than the 10 year average when one considers the increase in the national population. A good job of merchandising and promotion should sell the crop with fair returns to growers.

Girl: "I maintain that love-making is just the same as it always was."

Boy: "How do you know?"

Girl: "I just read about a Greek maiden who sat and listened to a lyre all evening."

AUTOMATIC BOX FILLER DEVELOPED

By Fruit Industries Research Foundation

An automatic box filler which virtualy eliminates labor costs in loose filling of wood or fibreboard containers with apples is the latest cost reducing innovation to be introduced into apple packing plants through United States Department of Agriculture contract market research. The filler is a development of the Fruit Industries Research Foundation, Yakima, Wash. as part of the Washington State Apple Commission research program.

Without the aid of an attendant, empty boxes roll into filling position in the new machine and are automatically filled with fruit to the desired weight and ejected onto a conveyor for moving to another part of the plant.

How The Automatic Filler Works: The automatic box filler is of simple design. Empty boxes slide by gravity into filling position. A filling chute that can be adjusted keeps the drop of the fruit at a minimum. Full boxes are ejected by a solenoid that temporarily halts the flow of apples through the filling chute.

The box filler worked so successfully that it is going into commercial production this year and will be used in large volume. It is estimated that it will save the Washington State apple industry from \$100,000 to \$200,000 during the coming season.

Capacity: Depending upon the flow of fruit, the box filler operated at a rate of 3 to 4 boxes a minute. Only 4 seconds are required for the filled box to be ejected and an empty one to fall in o place.

Weight: The boxes are filled uniformly. In a sample run, 88% of the boxes had the desired weight, 6% were one-half pound overweight and 6% were one-half pound underweight.

Gentleness: On tests with bruise free apples, only 2% additional bruising was caused by the box filler. Manual packin; would certainly cause this much or morburuising.

Coming Events

ORCHARD TOUR MACHINERY DEMONSTRATION APPLE DESSERT DEMONSTRATION CONTEST Hasslinger's Orchards, Nashotah

Wednesday, August 17th

10:00 a.m. Begin orchard tour. Leaders, Mr. Marshall Hall, Casco., Pres. Wis. Horticultural Society; Mr. Art Bassett, Jr., V. Pres.; Mr. Herbert Hasslinger, Orchard owner. M. C. Prof. George Klingbeil, Dept. of Horticulture.

Demonstration of mouse baiting machine for orchard mouse control by W. D. Fitzwater and G. C. Oderkirk, U.S. Rodent Control Service, Lafayette, Indiana.

Discussion of pollination, fertilizers, pruning and insect and disease control as demonstrated in the orchard. Discussion by Dr. J. D. Moore, Dept. of Plant Pathology; Dr. Don Dever, Dept. of entomology, and Dr. R. H. Roberts.

12:00 m. Noon luncheon. Plate lunch and drinks available at the lodge. Plenty of picnic tables in park.

1:30 p.m. Orchard machinery demonstration. Power pruners, power saws, various types of sprayers, etc.

Apple Dessert Demonstration Contest

Southern Regional Contest, Wisconsin Apple Dessert Demonstration Contest in the pavilion, at Hasslinger's Moose Lake Lodge.

The ladies are especially invited to attend this demonstration. Winner will demonstrate in the final contest with the winner of the Northern District over Milwaukee Journal TV at 11:00 a.m., Thursday, September 22, on Breta Griems program "What's New In The Kitchen".

Directions for Reaching Hasslinger's Moose Lake Lodge And Orchard

Nashotah is west of Hartland and east of Oconomowoc on Highway 16. Coming from either direction drive south into Nashotah on County Trunk PPP until you hit **County Trunk C.** Turn north, which takes you under the overpass on Highway 16. Continue two miles on C and you will see the sign: Hasslinger's Moose Lake Beach.

MINNESOTA ORCHARD TOUR LaCrescent, Minn., Monday, August 22

Wisconsin apple growers are invited to attend the Minnesota Fruit Growers Association summer orchard tour on Monday, August 22. This is the regular joint summer meeting held each year in Western Wisconsin or eastern Minnesota.

The Program

9:45 a.m. Assemble at Little Swiss Fruit Farm (Vollenweider Orchard) at LaCrescent. Tour starts at 10:00 a.m. sharp.

Second stop: L. R. Lautz Orchard which is nearby.

Noon luncheon at the LaCrescent Methodist Church. After luncheon tour will go to Fruit Acres, Gordon Yates, Manager. Demonstrations will be made of various special types of equipment.

ANNUAL CONVENTION Minnesota Fruit Growers Ass'n.— Western Section Wis. Horticultural Society Stoddard Hotel, LaCrosse, Wis. October, 31-November 1, 1955

Mark your calendar now for the very popular annual meeting of fruit growers with the Minnesota Fruit Growers Association which will be held as stated above. There will be a fruit show, commercial exhibits and as usual a very good program.

Dad labored for eighteen years To keep the wolf away; Then daughter up and married one And brought him home to stay.

If you want a thing well done, don't do it unless you know how!

Orchard Notes

THE STORY OF A FRESH APPLE

A true story from the long ago will, we think, delight you as it did us. It seems that in the homesteading days in southern Alberta, when food supplies were scarce, money scarcer, and neighbors miles apart, there lived a happy little pioneer family. The small son was soon to be six, and his mother told him she would bake him a birthday cakewhatever kind he wished. He told her that he didn't want a cake-that he wanted some apples cooked like he had had them on a visit to their neighbor, some five miles away. Fresh apples were almost non-existant in this prairie country, but somehow his father managed to find some. The young mother tried baking them, but the little boy shook his head. No, it wasn't that. Finally, they made a special trip to see the neighbor and find out just what marvel she had wrought. Only to find out that the apples had not been cooked at all, but had merely been in a bowl on the table, polished and shining. It had been the only time in his life that the little boy had had a fresh apple .- From "Apple Sass", Washington State Apple Com.

HINTS ON PROPPING APPLE BRANCHES

There is evidence that too many growers do not appreciate the value of propping and many don't do the job right. Props are essential orchard equipment and should be stored carefully from year to year-seasoned props are better than green poles. The prop should be at least as large and preferably larger than the limb to be supported at the point of contact. This should be in back of (closest to trunk) a strong side branch. It should be placed with the butt end closer to the trunk, by a quarter or third, than the point of contact with the limb supported and as near directly under it as possible. The weight of apples increases very rapidly in the last week or ten days

before maturity and props which sag novewill fail when needed most.

WHAT IT COSTS TO PRODUCE APPLES But What Do We Spend To Sell Them?

How many of you could operate your orchard for the same amount of money you did in 1939? In 1939 lead arsenate was eight to ten cents a pound. Today lead arsenate sells for twenty-two to twenty-seven cents a pound. Also, in 1939 none of the expensive organic compounds that we use in our spray tanks today were in existence.

In 1939, bushel baskets were selling for about \$1.50 a dozen. Today these same bushel baskets cost about \$3.25 a dozen.

In 1939 it cost six to eight cents to get a bushel of apples picked. Today the size of the bushel remains the same, but the apple picker wants twenty to twentyfive cents to fill it.

In 1939 it cost you between \$.75 and a \$1.00 to get a bushel of apples ready to move to market. Today the cost of getting a bushel of apples ready for market is between \$1.75 and \$2.00. So you see, we spend between \$1.75 and \$2.00 to get a bushel of apples ready for sale, but only one cent to help sell it.

-From address by H. F. Patterson at Mich. Hort. Society Convention.

FUTURE GOLDEN DELICIOUS PRODUCTION

The Golden Delicious is a favorite variety in new plantings in Eastern producing areas. This and the recent heavier plantings in Washington State have raised a question in minds of many as to the future of the Golden Delicious variety. For that reason, past production and future prospects of Golden Delicious production are reviewed here. Ten years from now Washington may be harvesting more Goldens than is now produced by all other growing areas combined.

The Central States region is the heav-

iest producer of the Golden Delicious variety raising from 1,200,000 to 1,500,000 bushels each year. Among these states, Illinois is the most important.

The South Atlantic region which includes all of the Appalachian area except for some production in Pennsylvania is the next most important producer and has had noticeably increasing tonnage the last few years.

Production in Washington State ran along about the same as that in the South Atlantic region until 1949 when the Appalachian belt production rose above that of Washington State. Incidentally, it is interesting to note that the large and small crops in the South Atlantic region and Washington State tend to coincide while production in the Central States region tends to alternate with that in Washington State.

Summary And Conclusions

An analysis of tree count and new plantings suggest a steady increase in the production of Golden Delicious apples. The Central States, led by Illinois, are presently the heaviest producers followed by the South Atlantic region. While Washington State was third largest producer of Goldens in 1954, tentative estimates indicate that in 10 years production may increase to 2,400,000 bushels —more than all other areas produce today.—From Apple Research Digest. By Fruit Industries Research Foundation, Yakima, Wash.

POWDERY MILDEW ON APPLES

Under the heading, Powdery Mildew Rears Its Ugly Head, an article in the June issue of the New York Horticultural Society Newsletter, states that powdery mildew is building up to serious proportions in many New York orchards. Jonathan and Cortland are particularly susceptible, some blocks showing almost 100% infection of terminals. The article states that the continued use of organic fungicides during the last few years, without the use of sulfur in any form, has apparently allowed powdery mildew to build up. Pathologists have included sulfur in their program this year and karathane also can be used.

One grower remarked "Every year brings new problems or an old one back. This makes fruit growing interesting and expensive."

CAN WE STOP HAIL

There is a new weather modification wrinkle—that of using silver iodide to suppress hail storms.

Hail is a constant menace to fruit growers. Last year a number of Wisconsin apple growers had their entire crop ruined by hail. Hail in the cherry orchards of Door County causes great damage.

Some California and Oregon fruit growers are contracting for the second year to have airplanes seed silver iodide in the storm clouds to flatten them before they produce hail. The project is still in the "experimental stage" and growers aren't getting their hopes too high. It requires an organization of growers to finance the project. Important improvements have been made in the static meter which is the main device for detecting an approaching storm.

It will be worth while watching developments along this line.



Injury by Fruit Tree Leaf Roller

August in the

Orchard and Berry Patch

With George Klingbeil

According to reports Wisconsin apple producers have the prospects of a good crop of fruit. Scab control this season is probably above average. The first apple maggot flies were found in the Madison area during the last week in June; the earliest on record and were found in the Bayfield area on July 12. According to C. L. Fluke, Department of Entomology, two pounds of 50% wettable DDT or arsenate of lead per 100 gallons of spray will control the pest if applied at the proper time. (For smaller amounts use 2 tablespoons of either insecticide for every gallon of spray mixture). If it is necessary to spray near picking time use methoxychlor, 2 pounds to 100 gallons of water. In small orchards it is suggested that "drops" be collected and destroyed beginning about the first of August. The apple maggot continues to be one of the most serious insect pests especially in smaller orchards where often an abbreviated spray schedule is followed.

Strawberries

The 1955 strawberry crop was one of the best in recent years. Many growers have or plan to increase their acreage. In addition there is a considerable interest in this fruit as a cash crop for small or part time farmers. It is estimated that strawberry acreage increased 15 to 20 per cent over last year. Many growers near urban areas harvested the crop on the "pick yourself plan" with favorable results. Prices for "pick yourself" ran from 25 to 40 cents a quart.

4-H members will be offered the opportunity to grow strawberries as a project for the 1956 season. The project will be offered to all age groups; the only difference being the size of the planting. A strawberry manual, record book, and other material will be available



through the club agents. This project should acquaint our young people with the latest know how in growing strawberries as well as provide future experienced berry growers.

There were a considerable number of variety trials around the state this past season with many interesting results. Complete records are as yet not available and will be given at a later date. In the northern areas of the state Beaver and Sparkle appeared to be the top producer and in the southern areas the Wisconsin No. 537 ranked high. Most successful growers used irrigation and a total of about 800 to 1000 pounds of fertilizer per acre. About 400 to 500 pounds of 10-10-10 or similar analysis applied prior to planting. This was followed by about 200 pounds of amonium nitrate side dressed in late June and the same amount top dressed in early August. Fertilizer applications, the spring of the bearing year, must be determined by the condition of the planting.

The most serious insect pests on strawberries were again spittle bug, leaf roller, and bud weevil. All of these pests can be readily controlled. Most serious diseases were leaf spot and berry rot. Berry rot mainly **Botrytis** rot was well controlled where captan was used.

Black Raspberries

Dr. M. N. Dana reports that the new Logan variety was the best producer in his variety test block at Madison this year. This variety was also the earliest The varieties in order of their production were: New Logan, Blackhawk, Cumberland, Bristol, and Morrison. The New Logan produced about two and a half times the amount of fruit as the Morrison.

Growing Better Vegetables

By John Schoenemann

Still time to plant some late vegetables. Even after the early part of August it is still time to use vacant spaces in the vegetable garden for producing some short-season frost-tolerant crops. Radishes, leaf lettuce, and turnips are 'a few crops that will help round out the season's production. For late summer seeding try Cavalier or Scarlet Globe radish, Black Seeded Simpson lettuce, and Purple Top White Globe turnip.

When late seedings must be made in dry soil home gardeners might try filling the seed trench with water and letting it soak in before planting. Careful covering with fine soil should bring fast sprouting. Covering rows that have been freshly seeded during dry weather with a mulch of lawn clippings or other material will help to hold moisture.

Blossom-end rot of tomatoes is often a problem. This trouble is due to a highly fluctuating soil moisture supply. High moisture followed by a severe and sudden dry spell is sure to bring trouble. The difficulty can be minimized by: careful and timely watering of tomato plants, mulching and having the soil well supplied with organic matter before planting is done. Any practice which will help hold a higher and more even supply of moisture in the soil will help.

Late blight on tomatoes is caused by a fungus disease organism. This disease becomes most troublesome in periods of cool, wet weather. Cool, damp nights after tomato plants are well developed and bushy can also provide ideal conditions for its development and spread. For protection and control of late blight, use a dust or spray containing zineb or copper at regular 7 to 10-day intervals. The same



disease attacks potatoes, and the same control program applies here.

Insect problems continue. A late summer pest of considerable importance is the cabbage aphid. This pest frequently builds up in vast numbers in late season on cabbage, cauliflower, broccoli and other related crops. For best control use several applications of a 4% to 5% malathion dust. Commercial growers may want to use malathion in the spray form.

New combination insecticide fungicide material for seed treatment recently announced. "Delsan" is a new product containing Arasan fungicide and dieldrin insecticide is on the market. The material is suggested for treating seed of corn, peas, beans and various other crops against both damping off and injury from seed maggots, wireworms and similar pests.

CUTTING TOPS HELPS CARROTS

Merely removing the tops from carrots, whether they are packaged or not, will help prolong their shelf life. This finding is one result of a study of carrot prepackaging made by R. E. Hardenburg, M. Lieberman, and H. A. Schomer of the Plant Industry Station.

Leaving carrot tops on results in greater overall weight loss and shriveling of the roots. The experiments show that tops should be cut off completely before prepackaging, since even when clipped to a length of 1 inch they are the first part of the vegetable to show darkening, drying, sprouting, or decay.

The researchers found that various perforated packages tested, and also nonperforated Lumarith bags, had an oxygen

Continued on page 24



Wisconsin Berry and Vegetable Growers Ass'n.

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BERRY GROWERS HOLD SUMMER MEETING

The annual summer meeting of the Wisconsin Berry and Vegetable Growers Association was held at the Branch Experiment Station, Sturgeon Bay, July 6th. There was a good attendance and the program and field tour of strawberry varieties, fertilizer and chemical weed control plots gave helpful information.

Annual Convention

At the business meeting the members decided to hold the Annual meeting of the Association at the Retlaw Hotel, Fond du Lac, on Wednesday, November 9th. The program will appear in later issues. Nominating Committee Appointed

The nominating committee appointed by the president, consists of the directors whose terms expire in November. The Constitution provides they cannot succeed themselves. Committee: C. H. Braman, Waupaca; Mr. C. F. Greiling, Green Bay and Mr. G. Hipp, Janesville.

The Program

President, Mr. Elmer Whitby introduced Dr. Frank Gilbert, Superintendent of the Experiment Station, who then called on staff members for discussion.

Dr. Dewey Moore described the virus disease project of strawberries and showed plants of Fragaria vesca, usually used as indicator plants to determine if varieties have virus infection. Five viruses have been found in strawberries. The ordinary mellon aphid will transmit at least one of the viruses. The strawberry aphid is the most common vector. When aphids, which have been feeding on our standard varieties are placed on the indicator plants they transmit virus and such plants quickly show symptoms if the standard variety on which they have been feeding was infected. Some of our varieties are more seriously effected by viruses than others, as indicated in the trial plots where virus free plants of some varieties did much better than the common stock but with a few varieties there was little difference.

Dr. Don Dever, Entomologist, said that on strawberry plots at Bayfield, Kenosha and Spooner sprayed for insect control, there was an increase in berries over check plots where insects were not controlled. He is working on the problem of the best insecticides. In plots at Spooner, malathion plus ferbam or captan were used, also parathion. The quality of fruit on the sprayed plots was also superior to the unsprayed. The important times to spray for insects are: 1. When the mulch is removed. 2. Just before blossoming, with either malathion or parathion. Endrin applied early in the season shows promise of controlling cyclamen mite. There is no tollerance of endrin on the fruit, however, so beware of it.

Dr. Frank Gilbert conducted the tour through the variety trials. Some varieties showed the effect of viruses and some did not. Catskill looked very promising. Dr. Gilbert emphasized "do not condemn a variety until you know if it is effected by virus". We hope to have a report from Dr. Gilbert on the variety trials in an early issue.

Outstanding new variety seen was New Jersey 7-A strawberry. It will probably be named this year and be available next spring. We will keep you informed.

The meeting ended with a tour to the strawberry farm of Mr. Philip H. Erickson, Baileys Harbor, Wis. The crop was being picked by Mexican labor and the fields looked excellent. Rows were wide and the crop was heavy. Mr. Erickson told the group about his cultural methods

Strawberry Varieties

Interesting information has been received from a few leading strawberry plant growers in different sections of Wisconsin in answer to questions on best varieties and varieties which failed to give good results. In fact we are unable to print all the answers in this issue but will continue them in September.

What were your best varieties?

Mr. Gerald Fieldhouse, Dodgeville: 1st. Wis. 8-46 gave an estimated yield of 2,000 quarts per acre; excellent production over a three year period. A firm berry, large right up to the end of the season. Good flavor and appearance.

2. Sharon: Our top quality berry, heavy yielder. Customers called for it.

3. Sweet Sue (Original 2-61): Healthy looking plants with good root system. Heavy yielder. Berries hold good size through season. Excellent flavor.

4. **Premier:** Terrific production. Season lasted 32 days.

5. Wis. 2-60: Very high yielder. Good flavor and appearance.

6. Robinson: Very good this year. Hasn't been in past.

Varieties which failed to meet approval.

1. Wis. 2-14: Does not set enough blossoms to be a heavy yielder; an erratic bearer.

2. Lindalicious: Flavor not good and size does not hold up well. Not a heavy yielder.

From Victor Heinz, Hillfruit Dairy Farm, Route 1, Cleveland, Wis. Best berries, 1. Catskill: A beautiful glossy berry which holds up well for marketing.

2. Wis 2-14: Large, tasty and red throughout.

3. Wis. 537.

4. Improved Senator Dunlap.

Varieties not meeting with approval. 1. Thomas: Will not grow at all here. Late, pulpy, with tendency to have hollow core. Premier and Robinson are not as tasty as those mentioned above.

Mr. Al Kruse, Kruse Nursery, Baraboo

gives these as his favorite varieties: Wis. 2-14; Premier; Wis. 537; Wis. 5-14 were the highest yielders and had the largest berries in my nursery. Premier were earlier and Wis. 537 produced a good crop but not as popular as 5-14. Catskill also produced a good crop.

The poorest variety we had was Empire. Very nice berries but didn't produce well.

From Kamnetz Strawberry Nursery, Cumberland, Wis. Best varieties: 1st. Beaver, highest producer, less loss by rot, good shipping and fruit quality. 2nd. Catskill: excellent quality fruit, good production, attractive berry. 3rd. Empire: beautiful fruit and good production.

Varieties which did not do well: **Robinson:** rots easily, low production, susceptibility to root disorders. **Virus free Premier:** soft fruit, poor quality.

From Philip H. Erickson, Baileys Harbor, (Door County). "Some of the varieties preferred on our soil and under our climate may well be money makers in other areas because I have seen the same varieties do well in other parts of the state."

Best varieties: Robinson, productive, quality and size good throughout season.

ALL—SUMMER—BEARING STRAWBERRY

If you have any doubts that we have one of the most amazing strawberries ever developed drop in and see the new "Esteem" for yourself. What other variety has hundreds of large berries on each plant, let alone bearing from June to November? Plants of this patented variety will be available this Fall in limited amounts.

> Fieldhouse Fruit Farm Dodgeville, Wisconsin Home of Quality Since 1855

Catskill: Production and quality good. Size fair. Empire: Yield fair, quality good. Wis. 261: Yield fair, quality good. Lindalicious: Yield fair, quality good. Sparkle: Quality and yield fair but did not hold size well. Wis. 214: Quality good, yield poor. Thomas: Quality fair, yield poor.

Dunlap: Quality and yield poor. Ambrosia: Yield fair, quality poor. Premier (virus free): Yield and quality poor. Our own planting will consist mostly of **Robinson** and **Catskill** but we have the others in our nursery for the plant market in 1956, including Gem and Superfection everbearing.

From George Zimmerman, Zimmerman Nursery, Baraboo. Our best varieties were Catskill, Premier and Wis. 214. They outyielded all others I tried. Premier good early and good for market. Catskill midseason, large and good market berry. Wis. 2-14, best for freezing. Large deep red, fine flavor. Fair yielder.

Varieties which failed to meet our approval: **Robinson**, large berry but poor flavor. Ripens uneven and subject to leaf spot. **Wis. 261** is round berry with green tip, not ripening even. Fair yielder. **Senator Dunlap** has fine flavor but not very good yielder. Berries get small after one or two pickings. I will grow these varieties in small numbers.

IF THIS ARTICLE CONFUSES YOU

Editors Note: Reading these reports by reliable strawberry plant nurserymen on the performance of different varieties in their fields may be quite confusing. However, as Prof. J. G. Moore, for many years chief of the Dept. of Horticulture, U.W., said recently. Over 40 years ago we published articles on strawberries which stated that varieties differ greatly under different climatic and soil conditions; in fact, sometimes even in the same neighborhood."

What is the answer? Each grower must test a variety in his own fields. Try different varieties on a small scale— 25 to 50 plants. Sometimes it is possible to avoid growing varieties that will no do well if you know that they have no succeeded on soils and in areas similiato your own. For instance, we know Beaver does well in most parts of northwestern Wisconsin; does not do well in most of eastern Wisconsin.

BAYFIELD BERRY CROP SAVED BY IRRIGATION

Irrigation saved the Bayfield berry crop this year and the crop was a good one. There were only 2.09 inches of rain in June and ¾ of this fell in the first 9 days of the month.

According to County Agent Harry Lowe and assistant fruit specialist, Eugene Anderson, interest in strawberries is growing and an increase of 25% in acreage is expected next year. Acreage in the county now is estimated at 225, mcstly in the Bayfield area where there are many 5 to 10 acre patches. Production was estimated at over 1,000 crates per day at the height of the season.

We wish we had all the money we spent foolishly in our lifetime—so we could enjoy spending it foolishly again. —Iron County Miner

Irrigation Equipment

For Sale: The following used irrigation equipment and system:

2—8 h.p. Air cooled engines with 3" pump. (One practically new).

1-25 h.p. Air cooled engine with 4" pump. Approximately 2,000 feet of 2" and 3" aluminum tubing guaranteed like new, priced to sell fast.

Also have a complete line of new equipment with Hardie Rain Control Couplers, Marlow-Hale pumps. Skinner-Rainbird sprinklers, valves, fittings; pumps driven from tractor power take-off; hose—both discharge and suction, and everything to make up a modern and efficient irrigation system.

ERIC FRANKE

Route 5 (On County Trunk "U") STURGEON BAY, WISCONSIN



WISCONSIN GLADIOLUS SOCIETY

OFFICERS

Pres.____Ralph Burdick, Edgerton Vice-pres.__Gordon Shepeck, Green Bay Secretary Mrs. Joseph Rezek,

R. 2, Manitowoc reasurer____Dr. H. A. Kasten, 315 Washington St., Wausau

DIRECTORS: Manitowoc Chapter: Joseph Rezek and Gil Thompson, Manitowoc. Twin City: Jerry Merchart, Marinette; Arthur Kottke, Oconto. Madison: John Flad, Madison: Ed Lins, Spring Green. Sheboygan: Paul Beer, Port Washington; Walter Axel, Sheboygan. Marathon Co.: Ed Schaege, Wausau: Ray Quady, Minoequa. At large: Al Schmidt, Two Rivers; Leland Shaw, Milton; Gordon Shepeck, Green Bay; Dr. R. Juers, Wausau; Charles Melk, Milwaukee; R. Burdick, Edgerton.

TO OUR MEMBERS By Ralph Burdick

On behalf of the Wisconsin Gladiolus Society I would like to extend an invitation to all flower lovers, and more specifically to all members of the Garden Clubs of the State, to attend the 1955 State Gladiolus show to be held in Lourdes' Gym, Marinette, on August 20th and 21st.

I would also urge all growers to attend and to exhibit at all regional shows whenever possible, in the belief that such competition tends to raise the quality level of the shows and the friendships and contacts so made are involuable in knitting together a necessarily widespread Society such as ours.

Growing conditions on the whole have been very good, with adequate moisture in most sections. Insect damage has, however, been a little worse than normal and with the large batch of grasshoppers now developing may require somewhat more attention to the problem than most of us have usually given it. Blooming is advanced over former years from one to two weeks and should give the early shows a wealth of material which has not always been so available.

Seedling scoring and judging sessions, low going on in this area for the fourth ear, give the individual with insufficient tock for trial garden tests a chance to valuate his efforts at hybridization. Most f us are too human to be able to take properly critical look at our own creaion but a group of other growers can ertainly do it in a hurry! Get your eedling to a seedling show-or enter t in the open. Start your chapter on a

program of scoring and judging and see how much fun you can have and how much your knowledge of the gladiolus will increase!

VISIT THESE GLADIOLUS SHOWS

August 13-14-Marathon County Chapter Gladiolus Show. YMCA Building on Third St., Wausau.

August 13-14-Manitowoc County Gladiolus Society Show. Grace Congregational Church Hall, Two Rivers, at 25th and Washington Streets.

August 20-21-Wisconsin State Gladiolus Show, Marinette, Wis., Lourde's Gym. Auspices Twin City Gladiolus Chapter.

September 2, 3, 4, 5—Annual Gladiolus Show, by the Southern Wisconsin, North Illinois Gladiolus Society at the Walworth County Fair, Elkhorn, Wis.

Aug. 20-21 Illinois Show at Garfield Park Conservatory, Chicago.

WISCONSIN STATE **GLADIOLUS SHOW**

Lourde's Gym., Marinette August 20-21, 1955

The banquet will be held at 6:30 on Saturday, August 20th.

The Gladiolus Princess will be crowned during the show on Saturday afternoon.

The American Home magazine Achievement Award will be offered to entries of new varieties.

Deep freeze comment: "Don't you think we could eat that 1954 trout, George" Everybody's seen it now."

FOX RIVER VALLEY GLADIOLUS SOCIETY ORGANIZED

Mrs. Carl Knoll, 137 S. Lee St., Appleton, Wisconsin, secretary of the newly organized Fox River Valley Gladiolus Society, writes that the new chapter has 23 members and hopes to have more. They exhibited gladiolus at the Outagamie County Fair, Seymour on August 4-7 a noncompetitive show to advertise the new organization and the beauty of gladiolus.

Mr. Carl Knoll and Dr. Darling invited growers to attend an informal meeting on June 1 at the Knoll residence. All present were enthused about the society and an official meeting was held at Pierce Park on June 5th with Mr. Gil Thompson, Manitowoc and Mr. Jack Gates, Two Rivers as guests.

Officers elected were Mr. Walter Bell, Acting president; Mr. William Durdell, Treasurer, of Appleton.

Members are planning to enter gladiolus in the Jefferson, Manitowoc and Marinette Shows and hope some day to have a show in Appleton.

MARATHON COUNTY CHAPTER GLADIOLUS SHOW

The Marathon County Chapter of the Wisconsin Gladiolus Society will hold its annual gladiolus show on Saturday and Sunday, August 13-14 in St. James School Auditorium, on Grant and Second St.

The following committees were appointed:

Show chairman: A. W. Schulz, Cochairman, Dr. H. A. Kasten.

Floor manager: Archie Spatz; Asst. floor managers, Mrs. J. Ellingson and Mrs. Erick Luedtke.

Works committee: Mr. Julius Birr; Supervisor of Judges: Mr. Mark Splaine; Show schedules: Mrs. Archie Spatz, Mrs. James Ellingson and A. W. Schulz; Arrangement supervisor: Mrs. Nina Drumm; Supervisor of clerks: Gordon Melang; Assist. Ed. Schaepe; Publicity: Mrs. Ed. Kramer.

The chapter held its annual picnic at the Rib Mountain Shelter House on Sunday, July 31st. There was a basket lunch and members brought spikes of gladiolus for the judging school. A qual fied judge on both spike judging and ar rangements was present.—By Mrs. E Kramer, Publicity Chairman.

THE SOUTHERN WISCONSIN, NORTHERN ILLINOIS GLADIOLUS SOCIETY SHOW

The seasons first gladiolus show a Jefferson on Sunday, July 31 was an outstanding success. The S. Wis. and N. Ili. Society deserves compliments for staging the largest seedling show they have ever held in Jefferson and drawing such a good attendance of both men and women.

According to Ted Woods of Madison the quality of spikes shown was excellent in spite of the heat. The building seemed quite cool, and as has happened almost every year there was a shower.

Seedlings were outstanding in all color classes. Pinks predominated.

Melk Brothers of Milwaukee ran away with the show. They showed the grand champion seedling which was also show champion—a beautiful purple with 8 open. They had the champion basket of glads—variety Honey; also the best seedling basket and won blue ribbons on several other baskets. Walter Krueger, Oconomowoc, won a ribbon on a basket as did John Flad of Madison.

The three spike seedling champion was shown by Mr. Kleinhans of Ft. Atkinson; color white.

The champion recent introduction, 1 spike was shown by Mr. Vincent of Rock City, Illinois; variety Pink Diamond.

The champion 3 spike, recent introduction was shown by Ralph Burdick, Edgerton.

PEONIES

We still have peony roots to sell. Our land is plotted into building lots and we must dispose of our peonies. If you call for them we price them at 25c each Minimum order \$2.50; our selection white, pink and red, double or single. If you wish them delivered, packing and postage \$1.00 extra. Named varieties at about one-half price.

Burr Oak Gardens, E. I. White, Box 147, Fort Atkinson, Wisconsin.

"So You Want To Be A Hybridizer"

By Harold Vincent, Rock City, Illinois

So you insist on hybridizing! Well, take a tip from me, here's how not to do it.

Since it takes two to tango, you merely scrape pollen from stamen here to stigma there. That's all, son.

You ask, from who to whom? Ah, that's the \$64 question!

Some August mid-morning trudge out to your glad patch armed with a boxful of paraphernalia . . . tweezers, toothpick, pencil, wire labels, etc. Of course, you've scribbled a prodigious list of possible world-beater crosses. Burning the midnight oil these past winter nights, you've checked and rechecked potential superdupers. But now scanning the patch, you find blooming only one beauty of your proposed mating.

Do we give up? We are not so easily deterred. There Mulberry Monstrosity standing eight feet tall, opens fifteen of its sixteen buds—saddled with a mottled, speckled complexion, and plain as Jane . . . but it is tall. Yonder beckoning in the gentle breeze, Lavender Lalapolooza leans its knee high beauty adoringly. So it's not tall! But feel that iron texture, behold that step-ladder placement; what a loving pair they make—just aching to get together.

Now to sit back and wait for seed pods to form. Four weeks race by, then five . . . still no pods. Painfully you discover one parent sterile, the other infertile . . . no pods, no seeds! September is with us the growing season almost over and a whole year wasted . . . well, almost. A small teaspoonful represents your entire crop of seed.

Comes spring's first bright morning, you trek to your selected seed growing plot. Plagued with breezes of cyclonic proportions, nonetheless you manage to fold your precious seeds under ground.

Continued on page 25



Gladiolus Flower Parts

From the Editor's Desk

WE MOVE

The offices of the Wisconsin State Horticultural Society have been moved from 424 University Farm Place (Old Entomology Building) to Room 5, Horticultural Building at the University of Wisconsin. That will be our new address.

The "Old Entomology Building" now houses the Dept. of Forestry and Wildlife. The two Departments have been consolidated.

Our telephone number will remain the same as given on the inside front cover of each issue of Wisconsin Horticulture.

ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY Retlaw Hotel, Fond du Lac November 15-16 -1955

The Board of Directors of the Wisconsin State Horticultural Society has decided to hold the annual convention of the Society as given above. There will be the regular fruit show, women's auxiliary meeting, commercial exhibits and of course a very good program.

The Wisconsin Apple Institute will hold its annual meeting in conjunction with this convention. With a luncheon meeting on the 16th.

MURRAY BINGHAM

Mr. Murray Bingham, Sturgeon Bay orchardist and life member of the Wisconsin Horticultural Society, passed away suddenly from heart trouble on July 20th.

Mr. Bingham was the son of D. E. Bingham, pioneer orchardist of Door County, who passed away some years ago. He developed an orchard which Murray operated for a number of years. The Bingham's were associated with the fruit industry of Door County since the first orchards were planted in that area.

The Society extends sympathy to the bereaved family.

APPLE DESSERT DEMONSTRATION CONTESTS

Tuesday, August 16th, at 1:30 p.m. Northern Division Contest at the New Holstein High School, New Holstein, Wis.

Wednesday, August 17th, at 10 a.m. Southern Division Contest, Hasslinger's Moose Lake Lodge, Nashotah.

Thursday, September 22, 11:00 a.m. Finals in the Wisconsin Apple Dessert Demonstration Contest. Watch it on your television set — Channel 4, Milwaukee Journal TV Station; on Breta Griem's "What's New In The Kitchen" program.

DAMAGE TO CROPS BY WILD ANIMALS

Damage claims for crops damaged by deer or bear cannot be paid if the area is posted against trespass. It is important for growers to know this in case they should sustain damage.

A letter from the Asst. Chief Warden of the Wisconsin Conservation Dept. gives this information in part. "No person shall be entitled to damages who shall have posted his lands against trespass or hunting. The attorney General's office has advised us that posting against trespass for any reason constitutes a bar for the consideration of a damage claim. The department has no choice in the matter as long as evidence is presented to them that the area is posted against trespass at the time the damage takes place or during hunting season. Whether or not seasons exist for deer or bear in an area hano bearing on the matter".

This is relative to section 29.595 of the Wisconsin Statutes as it pertains to pay ment of damages.

Growers should therefore not post theil lands with signs such as "No trespassing" or "No hunting allowed". However, such signs as this: \$50.00 reward offered to anyone giving information leading to the arrest and conviction of persons destroying or taking any of these crops" would not be a "trespass' sign and might do more good to protect the crops from humans than the other type of signs. Damages claims by deer or bear could then be made.

OUR COVER PICTURE

August is the month of gladiolus, one of the worlds most popular flowers. The number of gladiolus shows held this month, if laid end to end would keep you awake nights. The North American Gladiolus Council Bulletin for June lists 96 large shows and in our June issue we listed 6 State and Chapter shows to be held in Wisconsin.

Shown in the picture is Mrs. Archie Spatz, Schoefield, placing ribbons on the grand champion arrangement, by Mr. John Jenke of Wausau, at the 1954 Silver Anniversary show of the Wisconsin Gladiolus Society held in Wausau.

COUNTY FAIR FLOWER SHOWS

In the Garden Path, published by the Ohio Association of Garden Clubs, we find an article on County Fair Flower Shows in that State. The garden clubs are urged to cooperate with the fair board in establishing a flower show or undertake the entire responsibility for the floral exhibit.

At the last meeting of the Ohio Fair Managers Association, awards were given for the best County Fair Flower Show in each of four divisions of county fairs in the State.

The article suggests a flower show school for committee members and exhibitors. They also suggest considering the "merit system" for judging exhibits.

Wisconsin is Progressing

A number of Wisconsin Garden Clubs have given notable service to County Fairs in the managing of the Fair Flower Shows. As a result these shows have become the most attractive feature at the fair for all who are interested in Horticulture. An appropriate award for these garden clubs might well be considered by the Garden Club of Wisconsin.

WISCONSIN STATE FAIR AUGUST 20-28

The Horticultural Building at the Wisconsin State Fair has one of the outstanding exhibits to be seen anywhere. This year the Wisconsin Apple Institute will sell high quality early eating apples in a booth at the rear of the building and will have an exhibit booth showing a phase of the apple industry.

The flower exhibit of course is always outstanding. Visit your State Fair.

CHINESE CHESTNUTS AVAILABLE

Those interested in growing a blightresistant strain of chinese chestnut should write to the Eastern Shore Nurseries, Inc., Box 743, Easton, Maryland.



Get a Bigger Yield From Your Small-Fruit Crop

This book can help you plant, grow, harvest, and market a wide range of small fruit more efficiently and more profitably.

Just Published!

SMALL-FRUIT CULTURE

By J. S. Shoemaker 447 pp., 6 x 9, 75 illus., \$6.50

The book covers the culture of grapes, strawberries, bramble fruits, currants and gooseberries, blueberries, and cranberries. It gives help on selecting plants, fertilizers, sprays, weed control, picking and harvesting, and many other operations. Provides data on small-fruit culture for scores of specific areas throughout the country.

Order from Wisconsin State Horticultural Society, 424 University Farm Place, Madison 6, Wis.

Garden Club News

OFFICERS

Pres. Mrs. Harold Poyer, Rt. 2. Fort Atkinson Vice Pres._.. Mrs. John Miller,

Berlin

GARDEN CLUB OF WISCONSIN EXEC. BOARD: Mrs. George Willett, Iola: Mrs. C. H. Braman, Waupaca; Mrs. Ray Luckow, Milwaukee; Mrs. J. C. Ziehm, Berlin; Parliamentarian—Mrs. Roy H. Sewell, 7341 N. 76th St., Milwaukee, Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

6th Annual Convention Garden Club Of Wisconsin The American Baptist Assembly Green Lake, Wis., Sept. 14-15, 1955

Wednesday, September 14

- 1:00-2:00 p.m.-Register at Administration Building (Assembly registration fee 50c per person). Visit your room.
- 2:00-3:00 p.m.-Assemble at Roger Williams Inn for Garden Tour. Tour conducted by Assembly gardener, Mr. Herman Schultz,
- 3:30 p.m.—Auto tour of grounds. Information on interesting points will be provided.

4:45 p.m.-Recreation hour.

5:50 p.m.—Dinner at Roger Williams Inn.

- 7:30 p.m.—Assemble at Lakeside Cottage porch on lake shore. Address of welcome and history of the Assembly by Rev. Grant Anderson, Asst. Executive Secretary.
- 8:00 p.m.—Program. Trees of Tomorrow. By Mr. M. N. Taylor, Executive Director, Trees of Tomorrow, Merrill, Wis.

Thursday, September 15

7:45 a.m.-Breakfast at Roger Williams Inn. Recreation and visit.

8:45-9:45 a.m.—Boat tour of Green Lake. Tickets at Inn desk at \$1.00. Capacity of boat, 48.

- 10:00 a.m. Assemble at Garden View Building for program. Business meeting. Reports of state committees, committee chairman and president of each Region. (Time limit 3 minutes each.)
- 11:00 a.m.-The Wisconsin Audubon Camp; Illustrated with colored slides. By Mrs. Gordon Kummer, Fox Point, Wisconsin.
- 11:30 a.m.-Farmer Jones' Flannel Board Story on Conservation. By Mrs. F. L. Larkin, Whitefish Bay, Milwaukee, Wisconsin.
- 12:15 p.m.—Luncheon at Roger Williams Inn. (Luncheon price for those not staying overnight \$1.50.)
- 1:30 p.m.—Program at Garden View Building. Recognition services for an outstanding gardener from each Region and an outstanding garden club.
- 2:00, p.m.-A Garden Tour with colored slides. Tulip Festival at Holland, Michigan. Tour of Banff National Park and Lake Louise, Canada. The Natchez, Mississippi Pilgrimage and Ante-bellum homes. By Mr. and Mrs. Abner Napstad. Oshkosh

Notes for visitors: All meals are served at one time and on time. Bring walking shoes for garden tour. Dress informal. Rowboats available. Shuffleboard, horseshoe and croquet free. Golf \$1.25 for 9 holes.

MAKE CONVENTION RESERVATIONS EARLY

If you plan to attend the Garden Club of Wisconsin Convention, write to The American Baptist Assembly, Green Lake, Wis. for a 1955 rate card and registration card; that is if you plan to come the first day, Wednesday, September 14 and stay overnight.

Rates are reasonable. For example, in John Clarke Lodge; Brayton Case, Morehouse and Indian Village, rates for two in a room, including three meals (supper, breakfast and luncheon), are \$5.75 per person.

CLINTONVILLE GARDEN CLUB FLOWER SHOW

August 20-21. Clintonville Flower and Garden Club annual show in the Veterans Memorial Building. Show open to the public Saturday and Sunday.—Carl Smith, Secretary.

COMMENTS ON FLOWERS I HAVE SEEN THIS SUMMER

It has seemed to many Wausau Garden Clubbers that this summer our flowers have grown more lush than they have for years. Many flowers like veronica are much sturdier and more compact, also loosestrife or lythrum is taller and much fuller on the stalk with many strong side shoots. The Shasta daisies are very large plants this year with huge flowers.

The veronica, lythrum and Shasta daisies are all such usable flowers for flower arrangements. The foxglove is another good plant to use in flower arrangements, especially for large bouquets. However I find that with foxglove one has to pull many plants or it would just crowd out other things. Some of our Regal lilies in Wausau have been as tall and the bloom as large as the lilies that we saw in Whitnall Park last week.

Even in our rose garden the Frau Karl Druschki which is a profuse bloomer has outdone itself. During this past month it has been just one mass of white bloom. We decided that in Wausau we have had a perfect spring and summer for many of our flowers.—By Wausau Federated Garden Club.

MAZOMANIE FLOWER SHOW

The Mazomanie Garden Club will hold their fall garden flower show on August 12-13. The show will be judged by Mrs. O. F. Isenberg, Baraboo, who will also exhibit African violets.

-By Helen M. Laws, Secretary



THE TREE PEONY

By E. L. White, Ft. Atkinson

By proper selection one may have peony bloom from early May to late June in southern Wisconsin. First to bloom are the Tenuifolia or Fern Leaved. bright red, single and double; second is Anomala with cut leaves and is single red, then the Moutan or Tree Peony, follow by Officinalis, the old fashioned "Piney" blooming until late June. The so called Tree Peony is not a tree but a woody shrub. It does not die down during the winter and some may reach a height of six feet in time. At the time of this writing (early May) bushes are full of fat buds starting to show color and will soon be opening.

A mative of China, they have been found in the high mountains and are hardy. The ones we have are the results of crosses between three groups that reached us from China and through Europe and Japan. The varieties now on the market run into the hundreds. Colors range the same as the Chinese group -white, pink and red, with also a true yellow, and are single and double. Prices run from \$2.00 to \$15.00 each for one year potted plants and from \$4.00 to \$25.00 each or more, for field grown plants. Field grown plants should give bloom the first year after planting, potted plants naturally take longer.

The named varieties are grafted on Chinese peony roots and as they do not all grow, the prices run higher than Chinese peonies. They should be planted deep so the scion may send out roots. Plant in good garden soil (they stand lime) in a place protected from hard winds; protect buds if liable to have cold frosty night; fertilize well with a good complete commercial fertilizer or barnyard manure; mulch the first winter and here in Wisconsin summer mulching will keep the plant in better condition during the hot dry days. Do not prune back. Transplanting is safe in September, October and even in November.

The Tree Peony is recommended for

southern Wisconsin and is a very desirable addition to our gardens. For a display, visit Whitnall Park at Hales Corners, south of Milwaukee. They have eighty odd varieties.

MILWAUKEE REGION HOLDS GARDEN TOUR

A group of 75 members from the Milwaukee Region, Garden Club of Wisconsin and Horticultural Society attended our first tour of members gardens.

The first garden to be seen was at the home of Mrs. A. Frinken, 7102 W. Alburn in Wauwatosa. Then on to the Dammon House at 2107 Wauwatosa Ave. From there we went to the gardens of Mr. O. A. Zillmer, 9502 W. North St. who's Iris and Peony garden was just like a picture in a flower magazine. After feasting our eyes with such beauty we went to Mrs. F. Wittberger's garden at 2028 So. 82nd St. West Allis to refresh ourselves with punch and cookies.

Last but far from least we visited Mrs. Rheinhecker, 2349 So. 78th St., West Allis where our tour ended a perfect afternoon of having seen colors in flowers which only mother nature could have produced so lovely.

With this tour being such a success a fall tour of men's gardens is planned.

-By Mrs. L. Reinsch, Milwaukee Region Publicity Chairman.

NORTH AMERICAN LILY SHOW

Over 2000 lilies were on display at the eighth annual lily show of the North American Lily Society held in Horticultural Hall in Boston, Mass., July 12th through 14th, under the co-sponsorship of the Massachusetts Horticultural Society.

The exhibits included many of the newer hybrids such as the yellow trumpet lilies, the pink trumpets, the auratumjaponicum-speciosum crosses, the tiger lily hybrids and many others, All colors of the rainbow except blue were represented.

In August Gladiolus At Their Best

By Mrs. G. L. Lincoln, Madison

This month we again repeat the theme: "A few flowers can be highlighted with better effect than dozens in a large bouquet". The horizontal line of the stainless steel planter in the picture when used as a container, seemed to call for a horizontal arrangement to fit its sweep.

The planter, 3x3x11 inches, was bought in a Madison flower shop, and has proved more usable than the brass or shiny ones. The metal is a heavier gauge than is usually used in metal planters, and takes a lot of abuse without showing dents or scratches. The painted interior holds the inch mesh chicken wire more securely than a smooth metal surface. The silvery gray finish of the brushed steel blends with more flowers than highly polished brass.

The arrangement pictured is almost thirty inches long, yet only three gladiolus were used. It was made for a book case or mantel, to be viewed from one side only, but the addition of two or three glads on the back side would make it an economical solution to the problem of decorating banquet tables without breaking the treasury.

The flowers used were coral pink, and you will find that flowers in pink, coral, red, orange, or deep yellow shades look best under artificial light, and the colors can be seen from a greater distance than those in the blues, mauves and purple shades, which tend to look muddy. So the decorating committee should remember to check their flowers under the light in which they will be viewed, and that the delicate blends which are beautiful from a few feet away will be lost to the man at the end of a long table, or the person just entering the room.



This horizontal container calls for a horizontal arrangement. A few flowers are highlighted with excellent effect.

Line Material

The line material used with the gladioli is Andorra juniper, a very low growing shrub which has a purple cast in winter. This color will turn to green when the branches are cut and placed in water for any length of time, but it is a more attractive variety for the home grounds than the Andorra juniper which turns brown in cold weather. These lower growing evergreens have thinner branches with better curves than the more commonly grown Pfitzer's, but the variety called Hetzi, which is blue green in color is also a very good one to grow for cutting. Hetzi branches grow longer than Andorra and you will have outstanding material for cutting for Christmas arrangements, as well as material light enough in color to look well in warmer seasons.

White pine, Norway pine, and the more compact varieties of Japanese Yew, particularly the one called taxus cuspidate, var. compacta nana, are other evergreens which have good texture, color, and curves for use as line material in combination with flowers.

August Garden Items

TRANSPLANT POPPIES NOW

Oriental Poppies make for bright gaiety in the flower border. They transplant best during the lull in their summer growth in late August but may be successfully moved throughout September. If set when their summer rest period is on, the new plants will have a long period in which to develop sturdy new roots. The soil should be well drained and dug to the full depth of the shovel or digging fork. The planting should thrive for four years without need of dividing the clumps. These plants enjoy a sunny position. If aphids and bugs invade the plants, they are sprayed with Malathion.

At the Morden Experimental Station the well-known old orange and red types are esteemed. Some cross-bred seedlings have given a considerable variety in coloring. Included are mahogany rose and plum shades.

Although the Oriental Poppies are hardy and thrifty, a straw mulch in early November assures them increased winter comfort.—From Bulletin of the Morden Experiment Station, Manitoba.

HOW IRIS ARE PLANTED In Manitoba

Iris is an esteemed hardy perennial which benefits from summer planting. July and August are favored. Later transplanting does not allow for strong rooting before chilled soil in autumn arrests root increase. Like the poppies they should be placed where they will receive at least half of the day's sun. In breaking up a clump, and it should be every third year, a single fan is set. Planted in rows about two feet apart makes for easy care and a showy bed. They do well on sandy loam and also on moderately well drained clay.

Hungry soils are given commercial fertilizer applications in moderation. The soil is worked deeply. A double trench is dug about 6 inches deep with a cone of earth left between the two channels. The rhizome is placed on the top of the cone, and at a height which will allow about one inch of earth cover over the rhizome when the trenches are filled in with good top soil. The roots are spread along the trenches, covered and tramped in firmly. In late afternoon the planting is well watered.

At Morden the Iris garden is furnished with a large number of varieties. Some of the recent highly praised introductions have suffered considerable winter injury. Further testing is under way to find out the kinds well adapted here.

-By W. R. Leslie, in Morden Experiment Station Bulletin.

LANDSCAPING YOUR OWN HOME

A new book, Landscaping Your Own Home by Alice L. Dustan has just been published by the MacMillan Co., 60-5th Ave., New York 11, N.Y. (Price \$3.95).

Miss Dustan is a designer and teacher of landscaping. The book is written for the outlook of the amateur gardener rather than the professional and takes the reader through a step by step plan for gardens that are geared for yearround family living.

Such chapters as these will be interesting to our homemakers: Barriers To Be Built Or Planted; Trees—the First Consideration; Shrubs For Quick Effect; Evergreens For Permanence; Lawn and Ground Cover Plants; Season-to-Season Color for Zest.

GARDENING HANDBOOK

A new book by T. H. Everett is entitled Gardening Handbook. It is published by ARCO Publishing Co., 480 Lexingtor Ave., New York 17, N.Y. (Price \$2.00)

The book has many illustrations and the chapters of interest to our gardeners are: Shrubs For the Home Garden; Every Garden Should Have Evergreens; Your lawn; Hedges; Vines In Variety; Perennials; Beauty From Bulbs; Herbs; Hotbeds and Cold-Frames and many others including special pages on flower varieties as Roses, Iris, Peonies, etc.

Garden Gleanings

MORE ABOUT MERION BLUEGRASS

Reports on Merion Bluegrass from Beltsville, Md. Station of the U.S.D.A. don't mean too much in terms of Wisconsin conditions.

In commenting on the item in Wisconsin Horticulture for May, Dr. R. Milton Carleton, research director for Vaughan's Seed Company points out that for Beltsville conditions, Meyer Zoysia is considered a desirable grass. In Wisconsin, this grass merely survives, it does not thrive. Under Wisconsin conditions, however, Merion Bluegrass grows more vigorously than do either fescues or bents.

True, for fall sowing (August 15th is the ideal date for seeding Merion in Wisconsin) it is better to use straight Merion without mixing it with any other grasses.

Unfortunately, Merion is a slow starter in spring, and will not fill in the turf fast enough to keep weeds down the first year. For this reason, mixtures with the better new fescues and Highland Bent are recommended.

One reason why mixtures have not proved satisfactory in some instances is the small percentage of Merion seed in them. Tests at Purdue and at Penn State University show that not less than 30%of the mixture should be Merion, and 40%would be better.

Under conditions in Wisconsin and Northern Illinois, such a mixture should produce a solid stand of Merion Bluegrass within one or two years.

Dr. Carleton emphasizes that Merion Bluegrass is not a 30 day wonder grass that will produce a perfect lawn overnight. Many home owners are disappointed with the first year's growth on Merion, but the second year, are enthusiastic about the way it fills in a thick, solid turf.

IS IT WISE TO LET PLANTS BECOME DRY

Gardeners may frequently advise not to over-water house plants and to let them dry out occasionally. This sometimes has disastrous results.

It is therefore interesting to read an experiment reported in the bulletin of the Pennsylvania Flower Growers to test the theory that petunias may be made to bloom by running them dry. The variety Comanche was used; one lot was allowed to become dry before it was watered. A second lot was watered daily, and a third lot was kept continuously moist.

At 50 degrees, only 7 per cent of the dry plants had bloomed, compared with 53 per cent of the daily-watered plants and 70 percent of the constantly moist. The dry plants were stunted, and the constantly moist plants were leggy. The daily-watered plants were best.

At 60 degrees, 60 per cent of the dry plants bloomed, compared with 96 per cent of plants watered daily and 93 per cent of the plants in plunged pots. The dry plants, however, had only one flower per plant on May 24, and the constantly moist plants were leggy.—From the April 21 issue of Florists' Review.

On the 1st day of school, the teacher asked each of the 1st graders to tell his name and what he wanted to be when he grew up. One little tow-head spoke up: "When I grow up I'm gonna be a lion tamer. I'll have lots of fierce lions and tigers, and I'll walk in the cage—" he hesitated, then continued. "But, of course, I'll have my mother with me."



THE HISTORY OF THE TUBEROUS BEGONIA

In 1865 Richard Pearce, plant explorer, searching in the wild mountians of Boliva, came upon a plant known only to the natives. Explorer Pearce carefully dug and packed some plants and sent them back to England. Today this Begonia, Boliviensis, is only a horticulture curiousity, but when first exhibited in 1867 caused great excitement among gardeners.

Richard Pearce and other explorers returned to South America in search of other begonias and soon found some with fleshy tubers which brought great acclaim from the public in England and France.

Gardeners cross-bred the original species and produced seedlings with unusual stem strength and at last in 1873 one with fully double flowers.

So this summer, when you enjoy these beautiful begonias, let's remember that they are the result of imagination and skill of many plant breeders. Today it is the queen of garden flowers started humbly in 1873 from 5 small plants in the Andes.

NEW SWEDEN SPEED JUICER NOW AVAILABLE

A new Sweden speed juicer has an appeal to families growing their own produce for canning and making juice of apples, carrots, cabbage etc. Juice of fruits and vegetable may be frozen for later use. Information about the juicer may be obtained by writing the Sweden Speed Juicer Corp., 3410-17th Ave. West, Seattle 99, Washington.

CUTTING TOPS HELPS CARROTS Continued from page 9

content near that of normal air. Carrots in these packages did not develop offflavors or odors. Normal shelf life of topped carrots packed in such moistureretaining bags is about 6 days at 70 degrees F., at least 2 weeks at 40 degrees, and 3 weeks at 32 degrees.—From Research Notes, U.S. Dept. of Agricuture

NEW BULLETIN ON LOWBUSH BLUEBERRY CULTURE

A most interesting bulletin on the wile or lowbush blueberry culture in Canadis the report of the Dominion Blueberr Sub-Station, Tower Hill, New Brunswick Canada.

Considerable progress has been madin the culture of the wild blueberry in Canada and the bulletin describes in detail weed control, fertilizing and insect control.

PLANTS WITHOUT FLOWERS

A new book Plants Without Flowers by Harold Bastin has just been published by the Philosophical Library, Inc., 14 E. 40th St., New York 16, N.Y. (Price \$6.00).

This is a book that is quite different from anything usually found in the garden library. It gives the reader glimpses of a less familiar but equally interesting section of the plant kingdom in which flowers are absent. Mr. Bastin traces the ascent of flowerless plants through alae fungi and mosses to the ferns, horsetails and club-mosses.

Don't worry about the younger generation not knowing the value of money. Just wait until they start paying off our debts.—Menomonee Falls News.



Wisconsin Horticulture

HELP YOUR FLOWERS KEEP LONGER

Here are some suggestions for helping your garden flowers and bouquets keep longer. Experiment stations have tested methods which add to the length of life of flowers. You will note that some suggestions you may have read about are missing from this list. Evidently they have not proven to be helpful.

Cut your flowers in the evening. They have stored up food during the daylight hours and are strongest then.

Place the stems in warm water (New York Experiment Station says 110 degrees F). Hot water moves up the stems more readily than cold water and perhaps clears the stems of air bubbles. Haven't we always thought that we should place flowers in cold water, the colder the better.

In order to keep the flowers from wilting, wrap the blooms in paper to slow down air movement and reduce evaporation loss.

Use a sharp knife for cutting the stems. A dull one will close the water tubes and shut out water.

Keep containers clean; wash them with soap and water. This keeps bacteria from multiplying and clogging tubes in the stems.

Remove all leaves from the stems if they would be in the water. Decomposing leaves cause clogged stems.

Of course everyone knows that flowers will last longer if they are kept as cool as possible.

We have always wondered whether it would do any good to plunge the stems of dahlias in boiling water. The New York Station states it's a good thing to do, for about 30 seconds. The milky subtance oozing from the stems plugs the water conducting tubes. This stem-boiling lso helps poppies and poinsettias.

A Washington Wag defined an Isolaionist as one who is against supporting the rest of the world in the style to which we are accustomed!

HYBRIDIZING GLADIOLUS Continued from page 15

Well, a fair percentage. And now since some authority has suggested frequent waterings as mandatory, you prepare to drown your helpless progeny at the slightest provocation. It is of no consequence that the ground so tenderly nurtured turns into the first cousin of cement, and local rodent families find it convenient burrowing for summer residence.

Despite the foregoing handicaps, come digging time, you gather a small number of seedling bulbs. Some resemble a small bulblet, some a marble, some may even try blooming the following season . . . some never seem to make it. Yet you entrust them lovingly to a cooling cellar to await an early spring planting.

Don't be surprised next season if some of your tenderly guarded seedling bulbs won't flower. Those virile enough to withstand attacking insects, pestiferous soil organisms, and a perverse nature may bloom. Numbers will appear as runty, crooked, streaked, malformed monstrosities, or oddities . . . several may even resemble glads, but because they are your very own handiwork, more will be saved for repeat performances.

Contrarily, heartlessness here becomes necessity. During the blooming season stoop slightly, reach down, grasp that varmint stalk firmly... and yank. Better to throw it away now, than having propagated it, discover some thousand spikes later, this loving brain child is something less than mediocre.

Are you still with me, son? If the foregoing hasn't dismayed you, come on in the water's fine! Besides, you'll join a host of fanatics who are also mighty fine people. And who knows; That epitome of beauty, that Grand Champ seedling may be even now, just over the horizon! —Condensed from Bulletin of S. Wis..— N. Illinois Gladiolus Society

"I'm the kind of man who calls a spade a spade."

"Okay, but just wait until you fall over one in the dark."



Editor Leland Jen: Wisconsin Nurserymen's Ass'n. Wisconsin Rapids DIRECTORS: Vincent Frantel, Kenosha; Charles Hawks, Wauwatosa; Leland Jens, Wisconsi Rapids; M. A. Haller, Oshkosh; Kenneth J. Altorfer, Waterloo; Kenneth Graves, Milwaukee.

Squirrels Can Be Serious Pests By E. L. CHAMBERS

The squirrel is admired by most folks as a very interesting cunning animal which accounts for the fact that most city parks and suburbs encourage their presence. Out in the great open spaces on farms and in forests they attract little attention and are seldom considered a serious nuisance. A better knowledge of the habits of these animals around our homes and in the nurseries would reveal some facts that might change the public's friendly attitude toward them.

Instead of keeping themselves concealed they deliberately seek you out and then scold you as though you were bothering them. It is certainly too bad that animals so "Charming" to watch should be guilty of robbing birds' nests. Warblers, chickadees, thrushes and many other birds that nest in any locality inhabited by red squirrels fall an easy prey to their depredation. Biologists have observed that each one may destroy a dozen or more eggs or young each year. Many inquiries are received from irate home owners who find their new asphalt or cedar shingle roofs torn up in places by squirrels as to what could be their motive. The answer is simply that they like not only acorns but most other tree seeds and once they develop a liking to them they canot be easily discouraged. This year with the unusually heavy crop of elm seed of which these annoying animals are particularly fond they have torn up a lot of holes in roofs of homes and other buildings seeking the seeds which have become lodged under the edges of the shingles. They also frequently cut off elm twigs on the ground. Biologists report two pairs of squirrels cutting nearly 3,000

such twigs with over 14,000 leaves in just a little more than one day's time.

Milwauke

Sturgeon

OFFICERS

Bay

Robert, H. Gieringer

John Gartman

Damage to shade trees and fruit trees inflicted by squirrels is too often mistaken for insect damage which it sometimes closely resembles. In a general way damage by squirrels, however, can be distinguished from insect injury by the time of year at which it occurs. Most squirrel damage is done during the winter and spring while insect injury more usually occurs during the growing season.

Since the staple diet of the red and gray squirrel consists of seeds, buds. and nuts of many deciduous trees and seeds of conifers, these are always at their mercy. They also attack such fleshy fruits as the berries of the flowering dogwood, the fruits of apple, pear, peach and apricot and other fruits of shade and ornamental trees merely for their seeds. In the spring the buds of maple, elm, beech, birch, magnolia, willow, poplar and spruce are consumed eagerly and in large quantities.

Like Peaches and Walnuts

The writer having two large magnolia trees, two peach and two Carpathian walnut trees in his yard has had an opportunity to see the half a dozen rel squirrels in the neighborhood raid these trees all summer of their fruit. They start out in the early spring by reducin; the magnolia buds about one half and close the season by eating all the magnolia seed. More than 2 bushels of peaches have already been taken and the walnu crop already harvested by these animal

Doubtlessly the most serious type c injury to shade trees by these pests is the cutting of twigs when ground foo

is not available because of heavy snow. In coniferous plantings they cut off sharply the little or terminal shoots only to feed upon the cluster of buds and ends of the top branches. This results in the trees, especially Scotch pine and Norway spruce, becoming mishapen and stunted. Squirrels frequently gnaw the bark or girdle trees. The maple seems to be the most attractive as they relish the sap in late winter. While we do not believe a general campaign should be waged against the squirrel, it is obvious steps must be taken from time to time to protect the nursery and the home.

Feeding the rodents during severe winters appears helpful in reducing twig damage. A mixture of corn, hard shelled nuts and sunflower seeds is recommended for this purpose.

While squirrels are protected under the game laws, when it becomes necessary to protect ones property, section 29.24 of the Statutes provides that: "The owner or occupant of any land, and any member of his family may without license hunt thereon rabbits and squirrels at any time, except during the period of 5 days prior to the opening date for deer hunting in those counties or parts of counties where an open season for hunting deer with firearms has been established, and may take rabbits thereon at any time by means of live trapping with box traps in incorporated cities or villages or other areas where the firing of a gun is unlawful."

LET THE BUYER BEWARE— WHEN BUYING ORCHIDS

"Buying orchids can be fun—and can also be a very disappointing experience for the hobbyist who interprets an advertisement too literally." So states the Lord and Burnham Corp. in its bulletin **Under Glass**, printed for green house gardeners.

The bulletin continues, "Recent artiles in the Saturday Evening Post, the leader's Digest, and other national magzines have pointed up dramatically that elling orchid plants has now become "big isiness", and as with any business which has become "big", it has attracted the usual sharp dealers, operating on P. T. Barnum's theory, "There's one born every minute".

The best protection for the neophyte orchid grower is to purchase his first plants from an established, recognized orchid grower. Your local library will have available bound copies of the publications of such orchid societies as The American Orchid Society (American Orchid Bulletin), California Orchid Society (Orchid Digest), and others. A quick check on the advertisements appearing in these books, whose publishers accept only authentic advertisers, will locate established ranges throughout the country.

We have always suggested that the first plants should be mature, established plants, preferably in bud about ready to bloom. Our local customers shop for them as carefully as for a new hat or putter.

We also have always urged new customers to make their first purchase a Cattleya or Cattleya-type orchid. The orchid family is one of the largest in the plant kingdom, containing about 15,000 species, scattered from the Arctic to the Antarctic. In every country in the world, there are hundreds of domestic orchids which are no more than insignificant wild flowers, undesirable except as articles of botanical interest."

The article also points out that imported plants are subjected to heavy fumigation and usually emerge as "zombies", literally "the walking dead," and unscrupulous dealers may offer them at \$2.00, to unsuspecting novice collectors. (condensed)

If interested in greenhouse gardening write for the Bulletin **Under Glass.** Address, Burnham Corp., Lord and Burnham Division, Irvington, N. Y.

"Eph, did yo' all know dat Jonah done spent three days in de stomach ob a whale?"

"Humph! Dat ain't much. Mah uncle wuz longer dan dat in de stomach of a alligator."

"Sho nuff! How long?" "He dar yit."



AUGUST IN THE APIARY

We hope all members of the Wisconsin State Beekeepers Association shared in the wonderful honey flow which occurred in many parts of the state. In some sections at least, it's the best flow since 1941. For those who were in the favorable areas, but who did not share in the bountiful crop nature gave us, "a New Years resolution" is in order, to improve beekeeping practices. We do hear and read about beekeepers who did not get a good crop for these reasons:

1. Too many overwintered colonies lost. Package bees arriving late and not sharing in the early honey flow.

2. Failure to control swarming.

3. Lack of feed before the dandelion honey flow, which either starved the colony or weakened it.

4. Failure to give colonies enough supers to store honey.

All of these reasons can easily be overcome with determination and better management. If colonies starved last winter and if you failed to control swarming, better change your beekeeping practices and adopt a better method. Information on the best methods are available free.

What To Do Now

In August its time to begin preparing colonies for winter so that they will not starve. Examine your brood chambers carefully to see if there is honey. If light, place the inner cover on the brood chambers with the escape hole open. Then place honey supers above this. It will force the bees to store honey in the brood chambers but if there is a surplus they will carry it through the escape hole into the supers. In many parts of the state the fall honey flow is very uncertain. It was the failure of the fall crop last year that resulted in so much starvation last winter and spring.

If you are using augar hole entrances in the brood chambers (as you should) close the entrances in the two top brood chambers, leaving only the lower one open. This will induce the bees to store honey in the brood chambers.

BEEKEEPERS MEETING FOND DU LAC COUNTY PARK WAUPUN

Sunday, August 28th

Beekeepers in the Lake Winnebago area counties will hold their second annual meeting and picnic at the Fond du Lac County Park on Highway 49, ¹⁴/₂ mile west of Waupun on Sunday, August 28th.

The program will consist of a round table discussion of the most important beekeeping problems at that season of the year. All beekeepers invited. Pot luck lunch at noon. Everyone bring a sandwich, a dish to pass and your own dishes, cups and silverware. Coffee furnished; soft drinks sold at concession stand. Ice cream and candies available.

Come as early as you wish in the fornoon for a picnic. Mr. Arthur Schulz states, "This will be a real old fashioned picnic with emphasis on friendliness and a welcome to the beginner as well as big producers." The Rev. L. A. Moser, president of the Dodge County Association will be chairman. A round table of questions will be conducted by H. J. Rahmlow of Madison.

THE FEEDING HABITS OF THE HONEY BEE ARE PROMPTED FROM WITHIN AND NOT BY OUTER INFLUENCES

This was proven by Germany's Dr. Max Renner, who brought 5,000 live honey bees in his suitcase by plane from Paris to New York.

The article and pictures of the experiment were published in Life magazine for July 11, 1955.

After feeding the bees in Paris, Dr. Renner rushed them to New York for the next meal. Then he waited to see if the five hours' difference in time would affect the bees' sense of time.

Scientists had long disagreed whether the mysterious ways bees tell time, as indicated in the clocklike regularity by which they can be trained to leave their hives for food, depends on an inner time signal or outer influence. There is a difference of 5 hours time between Paris and New York. The bees stuck to the old time schedule proving that a bees feeding habit are not prompted by the clock.

Dr. Renner's troubles were not all scientific. He had to persuade airline officials not to place the bees in the baggage compartment where they would have died of exposure. He prevented officials from routinely spraying the plane's interior with DDT only by threatening to release a swarm of bees around their heads.

INSECTICIDES POISONOUS TO BEES

From results of field experiments at Texas A & M College it was found that the following insecticides are poisonous to bees—in **decreasing** order as given here. (Several not used extensively in Wisconsin omitted.)

Parathion, dieldren, aldrin, chlordane, DDT and toxaphene. It is recommended that colonies be placed at considerable distance from fields which are to be treated with insecticides.

INFLUENCE OF HONEY BEE ON CUSTOM & CEREMONIAL

CROSS POLLINATION, needed by nature, is most fully carried out, only by honey bees, which have a more widespread distribution than any other species of pollinating agents.

IN EARLY TRIBAL WARS, winner imposed so much honey and wax as penalties upon losing tribe.

WAX AS WEATHER-PROOFER, desired for palaces of rulers, became levy for taxes & penalties.

IF AN INDIAN STOLE HONEY, he was fined 3 times its value and in next life became a gadfly!

BEESWAX WAS CHOSEN, by early peoples, as the symbol of the virgin origin of Christ, and was wonderfully logical, since beeswax is the product of a virgin, the worker bee!

NEWLY MARRIED COUPLES used to serve honey to all friends who crossed their threshold, for a period of one moon; hence the term **Honeymoon**!

DIAMETER OF WORKER CELL was once proposed as standard of length, because it's the same in Murch as in October, in Persia, Palestine or Egypt.

-From Beekeepers News, England

BEE SUPPLIES FOR SALE

Lewis, Root and other 8 frame bee equipment at very reasonable prices.

See Thompson Apiaries, Gillett, Wisconsin or Adolph Moesch, Bonduel, Wisconsin.

HELP WANTED

Good man in our beekeeping operations. Permanent job. Good wages. Call or write, Walter Diehnelt, Honey Acres, Menomonie Falls, Wisconsin. Tel. 2811.

NEW MOVIE FOR BEEKEEPERS MEETINGS"

A new moving picture which will be enjoyed at all beekeepers meetings is "Modern Bee Breeding".

It may be secured by writing Dr. Howard Cmejla, Research Division, Abbott Laboratories, North Chicago, Illinois. Bookings should be made early.

Water Economy and Temperature Regulation of the Honeybee Colony

An interesting article in the Bee World (England, for June) has the above title. The author is M. Lindauer, the University at Munchen, Germany. The following is a summary of the detailed and descriptive article.

How Bees React To Overheating

1. When there is danger of overheating the bees react in the following way: they spread out on the combs, fan, and finally carry water into the hive. Water is spread out in the hive in minute quantities, both outside and inside the cells; at the same time evaporation is assisted by fanning, and considerable cooling is produced. Evaporation is further enhanced by other bees which, constantly moving their tongues, produce drops from their mouths and stretch them to form a thin film. It is shown that this 'tongue folding and unfolding' not only regulates the temperature, but is also used to concentrate nectar.

2. The activities necessary to regulate the temperature on overheating are carried out according to the principle of division of labor. There are separate groups of bees for carrying water, for receiving and distributing it in the hive, for spreading it, for working it with their tongues, and for fanning. The individual groups work in harmony together; a direct relationship between overheating and the activity of the water carriers has been established.

3. The daily water requirements of an isolated colony from spring to autumn were determined, and the following relationships were found:

- (a) the need for water depends on the amount of uncapped brood in the hive; the more brood the
- greater the water requirement.
- (b) the need for water also depends on the supply of nectar at any given time; if the flow is good, less water is needed. This indicates that the bees meet part of

their need for water from nectabrought into the hive, which contains a certain (but varying amount of water. If the foragerhave been prevented for several days from collecting nectar and water by rain or cold, the visits to the watering place increase markedly at the first opportunity.

4. The water carriers are informed about the need for water through the bees which take the water from them in the hive. If the water is taken quickly and eagerly, water carrying continues actively, and new carriers are recruited by dances; on the other hand if the water is taken from the water carriers only slowly and reluctantly, water carrying gradually ceases. This principle also applies to bees collecting nectar.

The problem is raised how the first water carrier is induced to start on her first flight. It is thought possible that the foragers themselves feel the beginning of a water shortage before they start their activity. The hive bees continually exchange the contents of their honey sacs by giving to and receiving from one another; a scarcity of water thus becomes apparent throughout the hive, all the bees acquiring a liquid in their honey sacs which has a high sugar concentration.

BEES FOR SALE

About 200 colonies in 3 brood chambers with all supers and equipment needed.

Write A. C. c/o Wisconsin Horticultural Society, 424 University Farm Place Madison 6, Wis.



Honey	CONTAINER PRICES Glass Jars		
Containers	Queenline Plain		
Goldanici	8 ozper case 24\$1.05 \$.98		
	1 lb.—per case 24 1.35 1.05 2 lb.—per case 12		
60 lb. cans, 5 and 10 lb. pails. Also	2 lb.—per case 12		
5 lb., 3 lb., 2 lb. and 8 oz. glass jars. We can make immediate ship-	5 lbper case 6		
ment.	Square Jars for Chunk Honey		
	21/2 lbper case 12\$1.18		
Complete line of bee supplies. (also used equipment).	Tin Cans & Pails		
We are always in the market for Honey.	60-lb. can-3" screw top-bulk		
We will buy your beeswax or trade	60-lb. cans—3" screw top—per case 24 \$17.00 5-lb. pails—no bails—per case 50\$ 6.35		
for supplies.	5-lb. pails—with bails—per case 50\$ 7.15		
	10-lb. pails—with bails—per case 50\$10.50		
Write for complete price list.			
· · · · · · · · · · · · · · · · · · ·	CASH DISCOUNT		
	5% on \$50.00 Orders 10% on \$100.00 Orders.		
Honey Acres			
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APPLES WANTED

Wanted: All varieties of apples in season for roadside stand. Apple Jack's Super Farm Market, Franksville, Wisconsin. (Hwy. 41—9½ miles south of College Ave. Milwaukee City Limits.)

GRADE-ALL FRUIT GRADERS

For Sale: GRADE-ALL graders & Brushers. For small or large acreage. GRADE-ALL offers you more economy, more utility, more gentleness to fruit. For more information write: Henry Mahr, 10820 S. 27th St., Milwaukee 7, Wis.

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Protect your trees and shrubs against rodents with this material. Proven successfully.

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Neunfeldt & Dickmann Co., Inc. Grafton, Wisconsin



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The Orchard Tour

The Fruit Was Beautiful, The Machinery Demonstrations Interesting and the Program Helpful

The Orchard Tour and Machinery Demonstration and the Apple Dessert Demonstration Contest held at Hasslinger Orchard, Nashotah, August 17th was a most successful event. Attendance was the largest we can remember for a meeting of this kind—about 300 men and women attended.

We extend thanks to Herbert Hasslinger and family for their splendid hospitality and help in making the meeting successful.

The crop in the orchard was very pretty —the trees were vigorous and open ideal for good production. The uniform set of fruit on the large block of Mc-Intosh testified to the benefit from the "shotgun" pollination Mr. Hasslinger used.

Master of ceremonies was Prof. George Klingbeil who kept the program going while the secretary was busy with the Apple Dessert Demonstration contest.

The Machinery Demonstration

The following exhibitors and demonstrators took part and we appreciate their attendance and demonstrations in which so many were interested.

Containers For Fruit

American Box Board Co., 470 Market Ave. S. W., Grand Rapids, Michigan. Exhibited a variety of fruit containers.

Fort Wayne Corrugated Paper Co., 97 W. 15th St., Holland, Michigan. Demonstrated packages for their fruit industry.

Dobeckmun Company, 8320 W. Bluemound Rd., Milwaukee 13, Exhibited transparent bags, plain and printed polyethylene bags.

Bemis Bag Co., Minneapolis, Minn., Plastic Sales Dept. Showed bags and packaging materials for fruit.

Orchard Machinery

Brillion Iron Works, by their agent Farm Power Corp., Fond du Lac, Wis. Demonstrated the Brillion Cut-All Rotary Shredder. It cuts orchard prunings and brush as large as could be pushed over with a tractor.

The Mall Tool Co., 2725 W. Oklahoma Ave., Milwaukee 13. Demonstrated chain saws and earth augers.

The Southeastern Supply Co., 227 Cutler St., Waukesha. Demonstrated pruning equipment-power pruners.

Grade-All Grader and Brusher was shown by Henry Mahr of Milwaukee. Designed for small or large acreage; economical and handles fruit gently.

Sprayers

The John Bean Co., by Leon Miller, Okauchee. Showed the John Bean Speedaire as used in the Hasslinger orchards. Had a Royal 20 unit 400 gal. tank, a Model 12 Speed-aire attachment powered with 25 HP Wisconsin motor. Used for concentrate or dilute spraying. Can be mounted on any machine of 20 GPM capacity or above.

John Bean Speedette 28 TD, 400 gal. tank; 55 HP Willys motor; Royal 25 pump. Twenty-nine inch axial-flow fan, spraying one way in large apple trees—2 ways with smaller trees such as cherries. Can be used with dilute or concentrate sprays.


One man operation; fast and thorough coverage on any size trees.

Hardie sprayers by C. D. Hunter, Cedar Rapids, Iowa. Demonstrated the Hardie-Model DF-24B, air blast sprayer featuring the dual fan, 20 GPM high pressure pump with 70 HP engine. The sprayer was shown as used the night before in the T.C. Czarnecki's Orchard, better known as the Homestead Orchard at Cedarburg.

Myers Concentrate sprayer, exhibited by the F. E. Myers & Bro. Co., Ashland, Ohio and local dealer, George Schubert Sons Co., Thiensville, Wis.

The Model was No. 54C20. This model had a 20 GPM pump operates at 400 pounds pressure; 300 gal. tank, air volume 26,000 cu. ft. per minute at 90 MPH. Has a 75 HP Ford Industrial engine. Designed to apply spray materials up to 10 times normal dilute concentration. One concentrate sprayer, one man and one tractor can do the job of 2 dilute sprayers, 6 men and two tractors.

MINNESOTA ORCHARD TOUR Interesting Program and Good Attendance Marks Event

The La Crescent, Minnesota area has become an important fruit growing section. The number and size of the orchards has increased considerably during past years and the quality of the fruit produced is excellent.

The joint Minnesota Fruit Growers Association, Wisconsin Horticultural Society Orchard Tour at La Crescent brought out a good attendance of interested growers, some from several sections of Wisconsin. Discussion centered around spray programs, orchard machinery, pruning and other cultural practices. Prof. J. D. Winter, Secretary Minnesota Fruit Growers Association acted as the master of ceremonies.

One of the interesting new machines shown was a 10X concentrate mist sprayer from Holland, demonstrated at Fruit Acres Orchard by Gordon Yates, Manager. It is a small mist sprayer and is quite economical for young trees but inadequate for trees of large size.

Mowing The Orchard

Dr. R. H. Roberts commented on a practice of mowing the grass in the orchard, stating he had not mowed his orchard for 15 years. After mowing, the orchard floor looks pretty, but the soil is exposed to the drying effect of sun and winds. He recommended leaving a good grass cover, unmowed to give shade. He said, "If you have good grass the soil stays cool and it sweats, so moisture from the air condenses." The Russians say that in this way several inches of moisture are added during a season, Trees with low branches give shade and coolness. A tree with a short trunk makes the best growth.

Dr. Roberts condemned the practice of adding a heavy mulch to bearing trees in the orchard because there is a tendency towards green fruit during years with sufficient moisture. However, young trees need a mulch to a minimum of 8 feet in diameter. While in the L. R. Lautz Orchard, Mr. Lautz stated that he thought there was more sun scald of apples in the section of the orchard where he had mowed the grass twice than where he had not mowed at all.

Scab Control

Scab control was very good in all orchards visited. Dr. J. D. Moore commented that the most expensive spray is the one that we **fail to put on.** Asked the question if there was any material which could be sprayed on the leaves in the fall of the year to kill over wintering scab spores, Dr. Moore stated recent work in Australia indicates a new mercury spray applied in the fall may give good results, but has not been tried here. This might take the place of the ground spray in the spring.

The following orchards were visited: Little Swiss Fruit Farm, Mrs. H. Vollenweider & Sons; L. R. Lautz Orchard and Fruit Acres Orchard, Gordon Yates, Manager.

The most disappointed people in the world are those who get what is coming to them.—Appleland News.

Demonstration Contest Winners Prove

Apples Make Good Dessert



The winners in the Southern Section, Wisconsin Apple Dessert Demonstration Contest held at Hasslingers Orchard and Resort. From left: Mrs. Frank Sleik, Waukesha 2nd prize winner: Center Mrs. Elmer Schneider, Germantown 1st prize winner and Miss Evelyn Gottschalk of Ft. Atkinson who won 3rd prize.

Two very fine Regional Apple Dessert Demonstration contests were held in August—the first on August 16th for Northern counties at New Holstein and the second for Southeastern counties on August 17th at Hasslinger Orchards, Nashotah. There was a good attendance at both, especially at Hasslingers because it was held in connection with the Horticultural Society's Orchard Tour and Machinery Demonstration, so that about 75 women were present.

The Winners

Winners were, at the New Holstein contest:

First prize: Edith Desmith, Sheboygan Falls, on Apple Torte.

Second prize: Mrs. John Scherer, Route 1, Hilbert, on Golden Apple Salad.

Third prize: Dorothy Reinke, Route 2, Reedsville on Apple Torte. At the Southern Regional Contest at Nashotah the winners were:

First prize: Mrs. Elmer Schneider, Route 1, Box 172, Germantown on Apple Dapple Pudding.

Second prize: Mrs. Frank Sleik, Route 2, Box 412C, Waukesha on Apple Roll.

Third prize: Miss Evelyn Gottschalk,

The winners. Wisconsin Apple Dessert Demonstration Contest, Northern Section, held at New Holstein, and some of the prizes they won. From left, Miss Edith Desmith, Sheboygan Falls, showing her winning Apple Torte to 2nd place winner Mrs. John Scherer, Hilbert and Dorothy Reinke, Reedsville, 3rd prize winner.

-Picture courtesy Sheboygan Press.



Route 1, Ft. Atkinson on Roman Apple Cake.

In Appreciation

On behalf of the Wisconsin Apple Institute we extend thanks to the judges, Miss Kathryn Gill of the Vocational Education Dept., Madison; Mrs. Aline Hazard, Directors of the Homemakers Hour, WHA, Madison and Mrs. Roselyn Wagner, Publicity Director for the Institute for their help.

We also wish to extend thanks to Mr. Gilbert Hipke of New Holstein, who arranged for the demonstration and secured a number of prizes. The contestants greatly appreciated these prizes. They were: packages of cheese from Lake to Lake Dairy Association; instant chocolate milk from the Carnation Company, peck bags of apples from the Hipke Orchards and a choice of Flexiclog shoes and other merchandise from the Flexiclog Company of New Holstein.

Waldo Orchards of Waldo, Wis., furnished apples for premiums at the Southern contest on behalf of the Wisconsin Apple Institute.

We also express our sincere appreciation to Mr. Herbert Hasslinger and family for the accommodations and wonderful meeting place for both the contest and the Orchard Tour.

Special thanks to the county committees who conducted the county contests. A number of counties had as many as 7 and 8 contestants and really carried a fine program of publicity in local newspapers and on radio stations. This created a special interest among consumers in early apples.

The Final State Contest

You are all invited to watch the final State Apple Dessert Demonstration Contest to be held at 11:00 a.m. Thursday, September 22nd over the Milwaukee Journal TV Station—Channel 4, when the two winners of the Regional Contests will demonstrate. The winner will receive the Wisconsin Apple Institute award of \$50.00 and second prize will be \$35.00. Invite your neighbors and apple customers to watch the show. It's on the Breta Griem show "What's New In The Kitchen."

APPLES AT THE STATE FAIR

Melba and early McIntosh apples wer in great demand by fair goers durin; State Fair week and the Wisconsin Apple Institute's special committee set ua booth in the Horticulture Building and sold fresh apples as 5c each and 2 for 15c. The committee consisted of Mr. Hen ry Mahr, Mr. Elroy Honadel, Jr., and Le-Roy Meyer. Apples sold briskly and the Institute's new recipe book was in great demand. The new air-conditioning system installed in the Horticultural Building created a very pleasant temperature and made the building popular with fair goers.

The committee also staged a booth showing a cider press and equipment.

Apple Exhibits

In the regular tray and plate competition the following growers exhibited and won the prizes:

Waldo Orchards— Arno Meyer, Waldo, Wisconsin; Meyer Orchards, Milwaukee; Nieman Orchards, Cedarburg; Miss Lenore T. Zinn, Hartford; Mrs. Oscar Conrad, West Allis and Henry Mahr, Milwaukee.

APPLE TREES IN "HEDGEROWS"

More but smaller apple trees grown in "hedgerows" may find favor with orchardists using modern air-blast sprayers and looking for greater convenience in pruning and harvesting. How dwarfing rootstock can be used to limit tree growth for this purpose has been demonstrated in plantings at the experiment station at Geneva. The process is described by Professor Karl D. Brase in a recent issue of "Farm Research."

Yields of individual trees are reduced by dwarfing, but the larger number of trees to the acre and the greater convenience in orchard operation offset this effect, he explains.

Not True Dwarfs

The truly dwarfing rootstocks, such as E M (East Malling) VIII and IX, are practical for commercial orchards because individual trees must be supported by stakes or a trellis.

(Continued on Page 40)

The Mouse Mobile



The Mouse Mobile. The cutting disc cuts the sod to a depth of about 4 inches. A mole of 1% inch pipe enlarges the bottom to form a tunnel. Apple cubes are dropped into the tunnel at 4 to 5-foot intervals for mouse bait.

The need for a better method of mouse control in orchards has long been recognized. While trail baiting when done properly is the most effective method yet devised, it is expensive, tiresome and very dependent upon the caliber of the laborers.

In an effort to make trail baiting more mechanical, the U.S. Fish & Wildlife Service has devised a "mouse-mobile". This consists of a cutting disc mounted so that it will cut the sod to a depth of about four inches. Directly behind this is a mole of 1% inch pipe that enlarges the bottom of the cut to form a tunnel. A man seated on the machine drops poisoned apple cubes at 4 to 5 foot intervals into the tunnel thus formed.

Experiments under varied conditions have indicated that these artificial tunnels are highly attractive to the mice and a high degree of control can be obtained in a fraction of the time taken by adequate trial baiting. While detailed drawings of the original machine can be obtained from the U.S. Fish & Wildlife

By W. D. Fitzwater

Service, A.E.S.: Annex, West Lafayette, Indiana, a number of growers have built units from available parts. Reports indicate that these modified units that retain the same principles are entirely satisfactory.



DETAILS OF MOUSE BAITING MACHINE—THE MOUSE MOBILE

STATE FAIR APPLE PROMOTION

Melba, Early McIntosh and Milton apples sold well at the State Fair according to the Wisconsin Apple Institute's committee on the exhibit: Henry Mahr, Milwaukee, Chairman, Elroy Honadel, Jr., and LeRoy Meyer. Sales ran up to \$200.00 on the best days, at 5c each. The demand for the new apple recipe book was surprising—over 1,300 were sold at 5c each.

Small apples did not sell and the committee came to the conclusion it was poor promotion to offer them to customers.

ILLINOIS FRUIT QUEEN

The Illinois Fruit Queen Contest will be held on Saturday, September 24th in East Moline, Illinois. There will be a parade at 1:00 p.m., interview and tea at 3:00 p.m. and the appearance of all contestants in bathing suits and formal gowns at 7:00 p.m. Wisconsin fruit growers are especially invited to attend.

September In The

Orchard and Berry Patch

With George Klingbeil

APPLE "PEST" CONTROL

This is the time of year when success or failure of a pest control program can be easily measured. The condition of the foliage and quality of the harvested fruit tells the answer. Most growers will concede that pest control materials are available that will effectively control most orchard pests. The exception is fire blight. Growers that experienced difficulty can generally trace the trouble to improperly timed spray applications or reduced dosages of materials.

Some injury has been observed on foliage that appeared first as dead spots on the leaves followed by defoliation. Such injury was observed on trees sprayed with the captan, DDT, arsenate of lead program.

Fire blight again caused severe damage in many orchards. The use of the antibiotic preparations was somewhat effective on spur blight type infection but ineffective on twig infections of the blight. Fire blight infections were still active, in many cases, in July.

Amateurs and small growers not interested in a complete spray program for tree fruits found the general-purpose spray suggestions quite helpful. Good results have been reported by many that used the suggestions listed last spring. The materials suggested were as follows: 2-3 tablespoons of 50% methoxychlor wettable powder, 2 tablespoons 25% malathion wettable powder, and 2-3 tablespoons 50% captan wettable powder all mixed in one full gallon of water.

Plum "Shot-Hole"

This season many plum varieties were infected with a disease that caused small "shot-holes" in the foliage. The foliage



first appeared mottled, later the leaf tissue died forming very small brown spots. These spots of dead leaf tissue became the perforated areas on the leaf causing the "shot-hole" appearance. If the leaf was severely infected it dropped and as a result many plum trees were almost completely prematurely defoliated. The disease is called "shot-hole" of plums and apparently there is no good preventative spray material for this difficulty.

APPLE TREES IN HEDGE ROWS (Continued from Page 38)

Two methods of propagating dwarf trees that do not require any support have been developed at the station. In one method cions of E M VIII or E M IXare grafted onto seedling rootstocks in late winter and the grafts lined out in the nursery in the spring. In midsummer the desired variety is budded into the cion which thus becomes an interstock.

By the second method the dwarfing interstock is budded onto the seedling rootstock in the nursery. The next year the desired variety is then budded into the whip of the interstock at a point four to five inches above the previous bud union.

Cheaper Method

Dwarf trees can be grown by these methods cheaper than on rootstocks EM VIII or IX, says Professor Brase.

Northern Spy and Red Delicious on dwarfing interstock can be set ten feet apart in the row with rows 20 feet apart. This means 217 to 218 trees to the acre. Golden Delicious and McIntosh can be spaced eight feet apart in the row with rows 20 feet apart, or 278 trees to the acre.—From The Packer

Growing Better Vegetables

By John Schoenemann

PROPER HOME STORAGE OF VEGETABLES

Store only sound vegetables of good quality. Diseased or injured ones may be used in early fall or preserved in some other way. Harvesting, in most cases, should be delayed as long as possible without danger of freezing. All vegetables to be stored must be handled with great care to avoid cuts and bruises. Carefully remove any excess soil from beets, carrots, celeriac, parsnips, rutabagas, salsify, sweet potatoes, turnips and winter radishes. This may be done either by light rubbing with a soft cloth or glove or by careful washing.

Care must be taken in washing vegetables to avoid injury; let excess water evaporate before the vegetables are stored. Remove tops from root vegetables to within half an inch or so of the crown. Both tops and tap root are commonly removed from rutabagas; tap roots need not be removed from other root vegetables.

The loose outer leaves are taken off both cabbage and Chinese cabbage; only sound, solid heads should be stored. If heads are to be wrapped for storage, the roots and stem should be left on if the plants are to be transplanted to moist soil or sand in the storage room; roots may or may not be left on if cabbage is stored in an outdoor pit.

Celery

Celery is commonly taken from the garden, just ahead of heavy frosts, with roots and soil attached and set in moist soil or sand on the storage room floor. The tops of celery should be dry when stored and must be kept dry to avoid decay. The



soil or sand should be only deep enough to cover the roots and must always be kept slightly moist.

Both leaves and roots are removed from kohlrabi. Onions, pumpkins and squash must be mature and thoroughly cured before being placed in dry storage. Onion tops are usually taken off when curing is partially completed. Pumpkins and squash store best if a part of the stem is left on each one.

If sweet potatoes are to be stored they must be free from disease and from any insect or mechanical injury. Thorough curing, preferably at high temperatures $(80-90^{\circ})$ is desirable before placing the roots in a warm, well ventilated place.

Cucumbers, eggplant, peppers and full-sized tomatoes, either green or partially colored, may be wrapped separately in paper and put in a cool place. Stems are commonly taken off to make wrapping easier and to avoid injury to other fruits. Only those tomatoes which have begun to change from a dark to a light green will be likely to develop red color.

Temperature

Proper temperature is a most important factor. With few exceptions, the most desirable temperature is at or very near 32° —the freezing point of water. Except for potatoes, vegetables are not injured at this temperature. It is difficult, however, to keep the temperature as low as 32° without danger of it going low enough to cause actual freezing during exceedingly cold weather. It is suggested, therefore, that the storage room temperature be kept between 35 and 40 degrees. Such

(Continued on page 43)



Wisconsin Berry and Vegetable Growers Ass'n.

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FERTILIZERS USED FOR STRAWBERRIES BY GROWERS

In the August issue of Wisconsin Horticulture a number of Wisconsin strawberry nurserymen and growers told of their variety preferences. These same growers were asked a question on what fertilizers they used for strawberries. The following are their replies.

From Gerald E. Fieldhouse, Dodgeville: "We believe in using a great deal of organic matter in soils to be used for strawberries. As our land is too high priced to be tied up in a long rotation of using a green manure crop such as clover, we use many tons of manure and sawdust. We plow under soy beans in the fall following the last picking. We work in a 6-10-4 fertilizer mixed with chlordane or aldrin in the top 2 inches of soil before planting at the rate of 300 lbs. per acre. During the bearing season 19-20-14 is applied in the irrigation water if we think it is needed. We add ammonium nitrate to this formula if we think more nitrogen is needed. This fertilizer is not used until the first berries are picked and then varies with varieties. Robinson goes vegetated with a slight excess of available nitrogen while No. 537 needs more to make it grow well."

Hillfruit Dairy Farm, Mr. Victor Heinz, Route 1, Cleveland: "I am a believer in using plenty of manure before strawberry plants are set out, but I am also experimenting with fertilizers in renovating after the crop has been picked."

From Kamnetz Strawberry Nursery Cumberland: "We fertilize heavily and turn under about 2 green manure crops of soy beans and rye each year. Check rows of no fertilizer usually are poorer."

A grower at Baraboo states, "fertilizers



A NEW STRAWBERRY

A picture of one of the new strawberries selected from crosses made by Dr. R. H. Robert, Dept. of Horticulture, University of Wisconsin. This seedling has a number 50-144. It is vigorous, very productive, mid-season, bright color, yellow seeds and is a good freezer. It forms runners early but not many late in the season, (a decided advantage).

Dr. Roberts has originated a number of very good new varieties during the past years, many of which are familiar to our members. This one looks unusually promising.

and organic matter seem to help but I didn't leave any check rows."

Mr. George Zimmerman, Zimmerman Nursery, Baraboo: "We use 10-10-10 fertilizer according to how much foliage we have. You don't want too much foliage to have nice berries. We also use lots of organic matter which is the best fertilizen there is for strawberries."

Danger of Over Planting Strawberries?

We asked the question as to whether growers thought there is danger of too much interest in strawberries and over planting to the point where prices and market might slump at the height of the season. Here are some of their replies.

"It's foolish to plant a larger acreage of strawberries than one has outlet for during the peak days. By planting varieties which reach their peak at different times we no longer have a high spot during the season."

"I think there will be a great increase in strawberries production especially by many home gardeners, which will tend to reduce prices when the market is flooded. I believe there is still a good market for quality berries. Many of these home gardeners sell several crates before the season to stores and the average housewife puts off canning until later. When growers plant a big acreage and flood the market in a given area, a price slump is sure to come."

"To prevent a flood at the peak of the season I would recommend midseason and late varieties to spread the picking time a little more."

"There may be some increase in production here but not very much that I know of. We could have sold many more than we had."

"There can be danger of overplanting and consequently a market slump. That depends somewhat on the size of the crop in any one year."

OUR ERROR

Mr. Gerald Fieldhouse, Dodgeville calls our attention to an error in his report of strawberry varieties and yields he received. We stated that Wis. 8-46 gave an estimated yield of 2,000 quarts per acre. It should have been 20,000 quarts. Perhaps the proof readers and printer both never heard of such a yield.

The person who falls down on the job will be back on his feet a lot quicker than the one who lies down on it.—Appleland News.

PROPER HOME STORAGE OF VEGETABLES

(Continued from page 41)

temperatures cannot be reached and kept except in a room separated from the rest of the basement, reasonably well insulated and having adequate ventilation.

The size of the basement storage room will vary with the space available and the family needs; 8 by 10 feet is suggested for most families who plan to store both vegetables and other foods in the same room. A storage room of the type illustrated, if properly constructed and managed, will be suitable for nearly all foods commonly preserved. Where practical, the storage room should be located either in the northeast or northwest corner of the basement and away from the chimney and heating pipes.

Moisture

Most vegetables shrivel rapidly unless stored in a moist atmosphere. Shriveling may be prevented (1) by keeping the air quite moist throughout the storage room, (2) by protecting the vegetables either by wrapping or by putting them in closed containers, or (3) by adding moisture directly to the vegetables now and then. If the first method is used, the storage room should have a dirt floor so it can be kept moist by occasional sprinkling; concrete floors may be covered with four to six inches of soil or sand to help hold moisture.

EASY WAY TO GROW MELONS AND SQUASH

If you are looking for a "LAZY" PLACE TO PLANT SQUASH AND MELON SEEDS, shove them into the compost or leafmold pile. They will love it, will produce long vines and adequate fruit, and will not be in the way. The first fall frost will automatically return them whence they sprung..

-From The Horticultural Newsletter, Pa.

The best demonstration of a man's poise is his ability to talk fluently while the other fellow is paying the check.

-Hooping Up.



Wisconsin Nurserymen's Ass'n.

DIRECTORS: Vincent Frantel, Kenosha; Charles Hawks, Wauwatosa; Leland Jens, Wisconsin Rapids; M. A. Haller, Oshkosh; Kenneth J. Altorfer, Waterloo; Kenneth Graves, Milwaukee.

COMMERCIAL CHRYSANTHEMUM CULTURE

A new book, Commercial Chrysanthemum Culture by J. E. Curwood is just off the press. Published by the John de Graff, Inc., 64 W. 23rd St., New York 10, N.Y.; price \$3.00. This book is a complete guide for growers, starting from scratch. It begins by discussing the equipment that will be required; then there is a full description, stage by stage of how to grow chrysanthemum and the various snags that may be encountered. It includes chapters on pests and diseases, and suggestions on marketing. Sections on raising new varieties and selling plants will be of interest to growers of some experience.

The author has been a successful grower of mums for many years. He lectures on this subject and devotes much of his spare time judging shows. The book is well illustrated.

The book was first published in London.

COMMON BUCKTHORN A THREAT TO OATS

A new bulletin, Special Bulletin 55, has just been issued by the Wisconsin State Department of Agriculture, State Capitol, Madison with the above title. It was prepared by E. L. Chambers, G. E. Hafstad, D. C. Arny and E. K. Wade.

The common buckthorn (Rhamnus Cathartica) is the most important alternate host of oatleaf rust. Birds have spread the seeds so that the plant grows wild in fence rows in woodland and along roads. The Lance-leaved buckthorn (R. Lanceolata), which is a native of western Wisconsin is susceptible but does not appear to be important in the spread of the rust.

The hardy Siberian buckthorn (R.

Dahurica) has been used in landscaping and in the past has been considered for use in erosion control and conservation planting. This species is also an alternate host for the leaf rust of oats.

Anyone having bushes suspected of being buckthorn should send specimen for examination to the Division of Plant Industry, Wisconsin Dept. of Agriculture, Madison, Wisconsin.

Very commonly, oats grown near buckthorn hedges are not worth harvesting. In oat growing areas it is necessary to destroy any buckthorn growing within a radius of a half mile to reduce the spread of the crown rust.

Tom: "Do you know the difference between filet and hamburger?"

Mary: "No, I don't."

Tom: "Good! Waiter, bring us two hamburgers."

Irrigation Equipment

For Sale: The following used irrigation equipment and system: 2—8 h.p. Air cooled engines with 3" pump.

(One practically new).

1-25 h.p. Air cooled engine with 4" pump. Approximately 2,000 feet of 2" and 3" aluminum tubing guaranteed like new, priced to sell fast.

Also have a complete line of new equipment with Hardie Rain Control Couplers, Marlow-Hale pumps. Skinner-Rainbird sprinklers, valves, fittings; pumps driven from tractor power take-off; hose—both discharge and suction, and everything to make up a modern and efficient irrigation system.

ERIC FRANKE

Route 5 (On County Trunk "U") STURGEON BAY, WISCONSIN



WISCONSIN GLADIOLUS SOCIETY

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HOW TO DIG GLADIOLUS BULBS

In the northern part of the country, it will soon be time to dig gladiolus corms and put them in storage.

If you have had a great deal of wet weather, cure the corms rapidly in a well-ventilated place where you have artificial heat. Unless this is done, the losses will be much greater in storage during the winter. Sometimes, when the weather is warm and sunny, the corms can be left in the field in shallow flats for a week or 10 days, but this type of weather can hardly be depended upon. Screen bottom trays are best for storage, as they allow circulation of air through the corms. If possible, cure bulbs that have been harvested in wet weather at 80 degrees.

The sooner you clean the corms after they are cured the better. Usually they will be ready for you to start working over them in about a month, but you can tell this best by testing a few corms. If the old dried-up corms come off easily, they are ready. Do not delay too long.

Whether or not you have seen evidence of thrips in the field this year, dust the corms with DDT. From the standpoint of thrips control, DDT should be applied immediately after placing the corms in storage, but for practical purposes, it is probably best to delay applying DDT until after the corms are cleaned. The 5 per cent dust is satisfactory. Use it at the rate of about two ounces to one tray of bulbs, and try to cover the bulbs thoroughly.

Maintaining correct temperatures in the bulb cellar during winter will help to reduce losses from diseases and thrips.

September, 1955

THE MADISON GLADIOLUS SOCIETY SHOW REPORT

The Madison Gladiolus Society seedling and Recent Introduction Show was very well attended, being held at Manchester's, Inc. where many store visitors viewed the flowers on August 8 and 9.

The Winners

Amateur Section: 43% inches and smaller—single spike champion,Wedgewood by John J. Magnasco. 4½ inches and larger —single spike section champion, Sundance by Harry Sulzer. High point winner, John J. Magnasco. Runner-up, Harry Sulzer.

Open Division: $4\frac{1}{8}$ and smaller—single spike section champion, **Cupid** by James Torrie. $4\frac{1}{2}$ and larger—single spike section champion, Heirloom by Mrs. George Bartels, Tomah. 3 spike section champion, **Mother Fischer** by Ray Williams, Mauston. High point winner, Earl Knudson. Runner-up, Peter Landwehr.

Introduction Section

Seedlings: Excellent ribbons were awarded to 5 of approximately 30 entries. The champion seedling was No. 10-42-48 shown by John J. Magnasco.

Recent Introductions: Single spike section champion, **Wonder Boy** by C. and J. Melk, Milwaukee. Three spike section champion, **Wax Canary** by John J. Magnascc.

Grand Champion Awards Of The Show

The NAGC ribbon for the champion single spike was won by Harry Sulzer with Sundance. The grand champion single spike was won by C. and J. Mełk with Wonder Boy. The grand champion three spike was won by John J. Magnasco with Wax Canary. The traveling trophy went to Harry Sulzer for the most total points in the Amateurs and the Open Class.—By W. J. Landwehr, Sec.-Treas.

THE MANITOWOC COUNTY GLADIOLUS SHOW

"The Manitowoc County show held at Two Rivers, August 13-14 was well attended and we had approximately 1,000 spikes entered, which in view of the weather, we felt was very good," writes Mr. A. W. Schmidt, president, Manitowoc County Glad Society.

The Winners

The following were the winners at the show.

Grand Champion Spike—seedling 19-55 by Jack Gates; Reserve Champion Spike— Tan-Glo by Mrs. Al Schmidt; Grand Champion Three Spikes—Tivoli by John Bayless; Champion Recent Introduction— Tan-glo by Mrs. Al Schmidt; Show Sweepstakes by Touhey Gardens; Champion Seedling Single Spike—Seedling 19-55 by Jack Gates; Champion Seedling Three Spike—Seedling 10-46 by John Bayless.

Artistic Arrangements Sweepstakes by Mrs. Al Schmidt; Champion Basket-Sans Souci by Touhey Gardens; Amateur Champion Spike—Red Charm by Mrs. Max Sosnosky; Amateur Champion Three Spikes—Dutch Master by C. L. Heise; Amateur Sweepstakes Winner, C. L. Heise; Junior Champion Single Spike— Marimba and Junior Three Spikes— Aureole by Nancy Schmidt. Junior Sweepstakes Winner, Nancy Schmidt.

Best Commercial Display by Touhey Gardens; Spike Longest Flowerhead— Spic and Span by Mrs. Al Schmidt; Spike Largest Floret—King David by John Bayless; Spike Most Open—Folklore by C. L. Heise and Spike Most Ruffles— Coral Ace by Mrs. Al Schmidt.

Open Class, Single Spike, Section Champions

100-200—Little Sweetheart by Gordon Shepeck; 300—Linda by Joe Rezek; 400— Tivoli by John Bayless; 500—King David by John Bayless and Division Champion —Tivoli by John Bayless.

Open Class, Three Spike, Section Champions

100-200—Starlet by Mrs. Al Schmidt; 300—Arctic Snow by Touhey Gardens; 400—Tivoli by John Bayless; 500—Elizabeth the Queen by Touhey Gardens and Division Champion—Tivoli by John Bayless.

Recent Introduction, Single Spike Section Champions

100-200—Ares by Touhey Gardens; 400 —Tan-glo by Mrs. Al Schmidt; 500— Rosita by Gordon Shepeck and Division Champion—Tan-glo by Mrs. Al Schmidt.

Recent Introduction, Three Spike, Section Champions

300-Roseneath by Dr. S. F. Darling; 400-Caleidoscope by Touhey Gardens; 500-Coral Ace by John Bayless and Division Champion - Coral Ace by John Bayless.

THE WINNERS WISCONSIN STATE GLADIOLUS SHOW MARINETTE, AUGUST 20-21

Grand Champion spike, Spic and Span by Arnold Sartorius, Porterfield. Section Champion seedling, 36-35 by John A. Gates, Two Rivers, also Meritorius. Show Sweepstake by Joe Rezek, Manitowoc.

Section Champion, class 145, Thomas E. Wilson by Joe Rezek. Section Champion, class 217, Trezsering by Dr. H. A. Kasten, Wausau.

Champion 3 spike class 444, Spic and Span by Arnold Sartorius. Three spike recent introduction, class 513, Golden Jewell by Walter Axel, Sheboygan.

Largest seedling Floret No. M.55 A. Kapschitzke, Sheboygan. Largest flowerhead class 444, Spic and Span by Mrs. Al Schmidt, Two Rivers.

Most open-Phantom Beauty by A. Kapschitzke. Smallest floret, Airy Fairy by Mrs. Willdam Hochman, Two Rivers. Section Champion, class 501, Maureen Gardner by Robert Dickens, Manitowoc. Recent Introduction—class 410, Sceptre, by Mrs. Al Schmidt. Best Basket by Mr. Paul Ravet, Menomonee, Michigan. Am. Section Champion, Starlet by Robert Dickens. Section Champion, Terrific by Roger Rezek, Two Rivers. Section Champion, Spic and Span by C. L. Heise, Two Rivers.

Section Champions

Artistic Arrangement, Division Champion by Earl Janson. Section Champion, Mighty Monarch by Walderman Christenson, Lena; Colonial Dame, class 367 by John Bayless, Two Rivers. Leif Erickson by Dr. R. H. Juers, Wausau and Summer Queen, class 542 by Mrs. Al Schmidt.

-By Nels N. Nelson, Marinette

WINNERS OF THE MARATHON COUNTY CHAPTER SHOW HELD AT WAUSAU, AUGUST 13-14

Grand Champion spike, Evangeline by Mark Splaine, Wausau; Reserve champion, Juno by Dr. R. H. Juers, Wausau; Second day champion, Noweta Rose by Erich Luedtke, Merrill; Three spike champion, King David by Mark Splaine; Show Sweepstakes and open sweepstakes by Ray Quady, Minocqua; Amateur sweepstakes by Vernon Schmidt, Wausau; Artistic sweepstakes arrangement by Betsy White-Toddy Kramer, Wausau; Champion artistic arrangement by Betsy White; Children's champion artistic arrangement by Ruth Meland, Wausau; Best recent introduction. Juno by Dr. R. H. Juers; Spike with longest flowerhead, Stormy Weather by Charles Porath. Wausau; Spike with largest floret in good condition, Miss Chicago by Mark Splaine; Spike with smallest floret, Osage by Ray Quady; Spike with most florets open, Noweta Rose by Leslie Brown, Wausau: Spike with most ruffled bloom, Burma by Mrs. Wornick, Wausau; Second most points in show, Mark Splaine and Third most points in show, Dr. R. H. Juers.

Blue Ribbon Winners, Open Class

500, White Challenge; 501, Corono; 506, Leading Lady; 517, Vanity Fair; 533, Bold Face; 540, Evangeline; 542, Heart's Desire; 550, Mid America; 552, Mighty Monarch; 554, Black Cherry; 560, Miss Chicago; 563, Rosita; 564, Boulougne; 566, Elizabeth the Queen; 568, Parthenia; 570, King David; 400, White Christmas; 410, Cynthia; 411, Sparks; 416, Patrol; 417,

(Continued on page 58)

MORE ABOUT THE JEFFERSON SHOW

A report on the Jefferson Show by the S. Wis. N. Ill. Society, sent by Mr. Leland Shaw of Milton, came too late for our August issue. However, here are some interesting additions.

Many potentially excellent seedlings were there but most hadn't beaten the weather. Only 4 single spike seedling entries from a total of 135 scored 83 or better, by far the smallest percentage in our show history.

The best 1-2 years seedling was No. 8 shown by Miles Armstrong—a ruffled pink, it suggested its Boise Bell parent with an Ivy Robertson flower head. It scored 85.

Champion seedling and Grand Champion of the show by Melk Brothers was No. 50-110, a black lipped purple; scored 87½.

Three-spike championships went to John Kleinhans' white seedling No. 50-99 and to Carl Miller's Crusader in a close contest with Traveler by Flad-Torrie. Best vases were Melk's dark blue No. 48-125 and Shaw's Linda B.

Recent introduction baskets filled a beautiful division with blue ribbons to the following: Amber Glory and Alexius (Flad-Torrie); Richland Queen (By Van Ness); Rosy Eyes (Krueger) and Margery, Honey and Fortune by Melk.

Rosette for the best spike of any older variety went to Patrol by Shaw.

Other varieties which won blue ribbons were: White Tower, Good Morning, Pink Pride, Rosita, Crinoline Belle, Purple Burma, Barrett's Beauty, Lorelei, Prince Carnival, Alfred Nobel, Sans Souci, Traveler, Tyrone, Violet Charm, Bergen, Tan Glow, Fairy Dell, Catherine Beath, Sprite, Vision, Roseneath, Negus, Shallimar, Dresden, Vivaldi, Peter Pan, Flashlight, Puck, Little King, All Blotches, Figi, Coral Ace, King David, Pete's Pride, Celestial Rose, Gay, Frolic and Toy Town.

A quitter never wins—a winner never quits.—Cuba City News-Harold.

From the Editor's Desk

OUR COVER PICTURE— WE LIKE APPLES

"Can we have an apple", these first graders yelled, so we set the basket down and let them help themselves. There were only seven of them but the bushel of apples almost disappeared.

COMING EVENTS

September 22, 11:00 a.m. Finals in Wisconsin Apple Dessert Demonstration contest between winners of the Southern and Northern Regional Contests. On Breta Griem's "What's New In The Kitchen" Show on WTMJ-TV, Channel 4. Be sure to watch it.

October 27-28. Wisconsin Beekeepers Association Annual meeting at the Zion Lutheran Church, 6th and Grant St., Wausau, Wis.

October 31-November 1. Joint meeting Minnesota Fruit Growers Association-Western Section Wisconsin Horticultural Society, Stoddard Hotel, LaCrosse.

November 9. Annual meeting Wisconsin Berry and Vegetable Growers Association, Retlaw Hotel, Fond du Lac.

November 15-16. Annual Convention Wisconsin State Horticultural Society. Retlaw Hotel, Fond du Lac.

EARL SKALISKEY

County Agent Earl Skaliskey of West Bend passed away on August 21.

Mr. Skaliskey was County Agent of Washington County for many years and was most active in promoting Horticulture in the county. He was a member of the Board of Directors of the Wisconsin State Horticultural Society, Secretary of the Washington County Fruit Growers Association and active in exhibits of Washington County Fruit at the State Fair. The Society extends sincere sympathy to the relatives.

BEWARE OF PLANT ADVERTISERS

"Did you see the full color advertisement that appeared in many local newspapers, advertising 42 georgeous rose plants, flowering shrubs and hedge plants-a \$26.51 catalogue value for \$2.98". writes Prof. Victor Reiss of the University of Ohio in his Newsletter. He states that he can put his thumb and forefinger around the bottom of the bundle of shrubs. What they call a rock rose is a St. Johnswort and the Rose of Sharon is not a rose. There were 14 privets which ranged from 6 inches to 10 inches high. Many of the plants were partially or wholly dead. The magnolia, which was sent free and supposed to have large, rose pink flowers, was actually the native Ohio cucumber tree, with yellowish green flowers

Prof. Reiss suggests that since these outfits guarantee your money back if not satisfied, why not call their bluff? Tell your friends who were gypped to write in and demand their money back. If enough people do this they could no longer afford to gyp the public.

Last year the U.S. Government convicted a nursery in Bloomington, Illinois and they were fined \$17,000 and the owner sentenced to a year in prison. However, they are back in business again. So if you read the ad in the newspaper complain to the newspaper. If you hear it on the radio, complain to the station. A vast majority of nurserymen are honest and reliable, but a few unscrupulous outfits are giving the industry a very bad name.



IMPORTANT NEW RESEARCH ADVANCES

Dr. F. P. Cullinan, Chief of Horticultural Research Branch, U.S.D.A., lists eight notable research advances that have increased efficiency in food production in this country.

1. The concept of the relation of nitrogen and carbohydrates (starches, sugars, etc.) composition of plants to their fruiting and habits, vegetative growth and response.

2. The discovery that length of day controls flowering, fruiting, and seed production in many plants.

3. The discovery of male sterility in onions and development of methods for exploiting this deficiency in development of many high-yielding, vigorous hybrid strains of onions.

4. The discovery that chromosome structure of plants can be changed by use of chemicals, resulting in betteryielding plants better adapted to modern growing methods.

5. The discovery that growth and behavior of many plants can be regulated by application of small amounts of hormones or hormone-like substances.

6. The use of leaf analysis to measure the utilization of plant nutrients in the soil and the levels or amounts of these nutrients necessary to prevent mineral deficiencies in plants.

7. The application of radioactive tracer technique to problems of plant physiology, nutrition, and rate of movement of nutrients in plants.

8. The realization that plants can absorb and translocate highly-potent chemicals that provide insect and disease control, plant food, and plant growth regulation.

Many of these discoveries and techniques have a direct bearing on our present fruit growing practices, such as reation between heavy or light pruning, ertilization, soil fertility, spray injury ffects, etc.; the use of chemicals for ruit thinning, or harvest sprays; soil leficiencies; the tree's use of fertilizers; now rapidly these materials are taken up and moved to various parts of the tree; and many other things that mean a lot to us as fruit producers.

-From Maryland Fruit Grower

PEONIES

We still have peony roots to sell. Our land is plotted into building lots and we must dispose of our peonies. If you call for them we price them at 25c each. Minimum order \$2.50; our selection, white, pink and red, double or single. If you wish them delivered, packing and postage \$1.00 extra. Named varieties at about one-half price.

Burr Oak Gardens, E. I. White, Box 147, Fort Atkinson, Wisconsin.

MOULTON IRRIGATION COMPANY Represented by H. D. Roberts Black River Falls, Wis.

MERION BLUEGRASS IN CANADA

In the news notes of the Morden Experimental Station, Manitoba for June 11, this item appeared about Merion Bluegrass. (Condensed)

"At the Experiment Station in Morden a test plot was sown in May, 1953. By seasons end a good turf and sward was established which has survived the winters in excellent condition. Last summer a dense, dark-green sward was maintained by fertilizing with 16-20-0 at the rate of 1 lb. per 100 sq. ft., applied in late May and again in July.

"The Merion grass may be cut closer than Kentucky Blue. In the test plot at Morden ¾ inch mowing has thrived even in dry weather whereas common bluegrass will thin seriously when mowed to this height."

The article also states that the high price of the seed is offset by the low rate of seeding recommended—1 lb. per 1000 sq. ft. is adequate, whereas 3 to 4 lbs. of ordinary grass are required.

Garden Club News

GARDEN CLUB OF WISCONSIN EXEC. BOARD: Mrs. George Willett, Iola: Mrs. C. H. Braman, Waupaca: Mrs. Ray Luckov, Milwaukee; Mrs. J. C. Ziehm, Berlin; Parliamentarian—Mrs. Roy H. Sewell, 7341 N. 76th §.,

ANNUAL FALL MEETING BLACKHAWK REGION HELENSVILLE FIREMEN'S HALL HELENVILLE, WIS. **SEPTEMBER 25, 1955**

Hostess: The Green Thumb Garden Club.

6:30 p.m. Pot luck supper.

"Mums on Parade" flower show will be judged before the meeting.

7:30 p.m. Rose Parade of 1955-colored slides shown by Mrs. Howard Smith.

Election of officers.

-By Mrs. Allen Ley, Rome, Pres.

6TH ANNUAL MEETING CENTRAL REGION-GARDEN CLUB OF WISCONSIN **EVANGELICAL LUTHERAN CHURCH** (Main St.)

September 27th, Amherst, Wisconsin 9:30-10:00 a.m. Registration.

10:00 a.m. Meeting called to order by the vice-president, Mrs. George Hathaway. Welcome by Mrs. Lester Ristow, president Amherst Garden Club.

10:15 a.m. Arrangement of Trees, Shrubs and Flowers In Our Gardens, by Prof. George Ziegler, Dept. of Horticulture. Madison.

11:00 a.m. Flower Arrangement In Our Gardens: Illustrated with colored slides by Mrs. A. J. Wiesender, Berlin.

11:30 a.m. "Better Horticulture", by Mr. Charles Braman, Waupaca.

12.00 Luncheon.

1:00 p.m. Business meeting. Report of nominating committee, election of officers and report of committees.

2:00 p.m. September and October In Our Flower Gardens, by H. J. Rahmlow, Madison.

2:30 p.m. Shrubs For Our Home Plantings, illustrated with colored slides by Mrs. Chester Thomas, Milwaukee.

OFFICERS

Pres.__ _Mrs. Harold Poyer, Rt. 2, Fort Atkinson Vice Pres.____Mrs. John Mill r.

Berlin

THE MILWAUKEE REGIONAL MEETING

A letter from Mrs. Charles Bierman, president Milwaukee Region, Garden Club of Wisconsin states that the Annual fall meeting will be held on October 25. Complete plans and program will be published in our October issue.

ANNUAL FALL MEETING WINNEBAGOLAND REGION **METHODIST CHURCH** (Park Ave.) BERLIN. WIS. **OCTOBER 26, 1955**

An excellent program is being prepared and will be published in our October issue.

CONGRATULATIONS

Congratulations to Mrs. Chester Thomas, the Executive Board of the Garden Club of Wisconsin and all the committee members who helped make the Carl Starker, Flower Arrangement Lecture at Oshkosh an outstanding success.

Everyone was enthusiastic about the wonderful arrangements, which Mr. Starker demonstrated. The attendance was excellent-the hall was filled to capacity.

PEWAUKEE GARDEN **CLUB NOTES**

During the past year the Pewaukce Garden Club had as speaker Mrs. Mary Decker, who writes a column for the green sheet in the Milwaukee Journal. She told about her hobby of watching birds and about the Audubon Camp, which she visited. In September the club will have a Chinese auction of flowering plants, vegetables and fruit. Every men ber brings something and we have quite a display.

The club has had an interesting program along different lines of gardening each month.

By Mrs. Glenn Cook, Sec.

WESTCHESTER GARDEN CLUB NEWS

The Westchester Garden Club maintains a centrally located plot in the subdivision (West of Milwaukee). Early in June the members met there to weed the garden and plant petunias. Tulips bloom in this garden in early spring and we hope the landscaped plot will add beauty to our small community.

Our garden club also undertakes at least two philanthropic projects each year. During May we made May Baskets which carried begonia plants to the doors of sixteen invalids and shut-ins in the Waukesha area. Names were obtained by a member of our group who in turn got them from her church's shut-in list. Club members take turns in supplying names.

Our meeting with Dr. Anna Hehn of Milwaukee, who spoke to us on the Audubon Camps with movies of the camps in Maine and California was an outstanding experience.

By Mrs. Louise Hatton. Sec.

MANITOWOC MEN'S GARDEN CLUB NEWS

The Men's Garden Club in Manitowoc has done a vast amount of work during the past year and members started a rose garden in Lincoln Park in conjunction with the City Park Superintendent.

We put on 2 TV demonstrations on WBAY in Green Bay and a half hour on WOMT radio every Thursday evening from 8:00 p.m. to 8:30 p.m. for a 6 weeks series. It was very interesting and drew many questions and phone calls in anvering local problems. We have 49 memers.

By Jess L. Hamilton, Sec.

A man may be happy without a fortune, ut no man can be truly happy without friend.—Dodgeville Chronicle.

CARL STARKER DAY

By Mrs. Chester Thomas, Chrm. Judges & Exhibitors School

Carl Starker Day at Oshkosh, August 10, was a most succesful venture financially, but most important, the occasion can be recorded as one of high cultural value.

The fine attendance by members representing a majority of the member clubs of the Garden Club of Wisconsin indicated clearly the great interest in the subject of Artistic Flower Arrangement. Nowhere could we have found a more capable and skilled exponent of the art than that shown and demonstrated by Mr. Carl Starker.

The days program with its showing of Artistic Flower Arrangements so expertly done by our members, gave our members and guests an enjoyable, instructive and inspirational good time.

To all members having attended and to

(Continued on Page 58)





September Study Topic Line In Arrangements

By Mrs. Garrison Lincoln

The person interested in further study, or the beginning exhibitor in flower shows, will find some of the best illustrations of the various types of line designs in "Flowers, Their Arrangement" by Gregory Conway. The diagrams with this article will give you the general frame work rather than the finished design. In your own home, you will use them to suit a particular location, for each background will demand a change in size, shape and color of the finished composition.

HORIZONTAL—Excellent for the dining table, low coffee table or high mantel where a long sweep if effective. Examples in books or articles usually show a straight line, but the horizontal Scurve is equally correct, and more interesting. The drooping semi-circle may also be used. Containers might be a shallow oval or rectangle, or a long or short planter type container to repeat the line. A low cube is sometimes useful, the vases are generally long and narrow.

VERTICAL—All movement is up, the arrangement should be kept narrow at the sides, hugging the lines of the container, which may be a tall pillow, cylinder, or a tall, thin modern pitcher. Again the movement can be straight up and down, but is generally more graceful with a vertical shallow S-curve as a part of the design.

RADIATING—Difficult to do without stiff look to the finished design, paricularly because of the formal balance.

ERECT SEMI-CIRCLE—Use a low cirular or oval container to repeat the hythmic movement of rounded lines. Siberian or spuria iris leaves may be easier to use than the broader German iris. **SEMI-CIRCLE**—Needs a round container to complete the picture, and flowers should follow the curve of the edge. Cover one third to two thirds of the circumference of the vase, and leave plenty of water showing. If preferred, a flat tray or plate may be used, with water in a cup needlepoint. Lovely design to look down on.

CRESCENT—A handsome and perfect crescent is hard to make. Unlike the semi-circle, it must have thin tapering ends, and enough depth at the base to give a third dimension. Don't let it get too high at the base, or you will lose the effect of a crescent moon.

CIRCULAR—Difficult to do without crowding into the field of mass arrangements. Use a few flowers, well separated to give a light, airy feeling, and keep arrangement low.

NEW IRIS INTRODUCED

Carmela is a new iris with petals so krinkled and heavily ruffled that it gives the idea of a lace-edged bloom. It is being offered this year by Schreiner's Gardens at Salem, Oregon.

They also have a new variety **Bazaar**, which has raspberry-wine markings on pure white. This must be a very attractive coloring.

Hardy Gladiolus Bulbs

Gladiolus bulbs that can be planted in the fall and bloom in May are being featured by Burgess Seed and Plant Co., Galesburg, Michigan. The plants are said to grow about 2½ feet high and will make an unusual addition to your perennial border.

If you grow any of these new flowers we will be pleased to hear your opinion of their merits.

A Visit To The Trial Gardens of

Annuals For 1956

A TRIP TO TRIAL GARDENS OF ANNUALS

A visit to the Trial Gardens of annuals at Vaughan's at Western Springs and Ball's at West Chicago, Illinois is always most interesting. There one may see the All-America selections and the trials of many new seedlings and hybrids which will be receiving honors in the future. One can select the varieties to grow during the coming year—those which appeal most from the standpoint of color, size and blooming qualities.

Heat Resistant Varieties

The area in Illinois just west of Chicago, had not had rain for about 30 days when we visited the Trial Gardens on August 5th. Consequently varieties which did well without irrigation deserve special mention. These are:

Vinca Rosca. (Periwinkle) This beautiful flower makes an excellent bedding plant and is heat and drought resistant. Comes in several colors, including a dwarf type.

Verbena. The variety Master Blend was outstanding in color. A number of varieties were blooming profusely and had withstood drought and high temperatures well.

Cleome. Varieties Helen Campbell and Pink Queen were outstanding and we marveled that these tall plants were so resistant to the hot weather. There is a golden variety but were told it is difficult to grow.

Portulaca or Moss Rose is of course recommended for hot, dry places. Both the single and double varieties were blooming profusely and made a most beautiful bed.

Heliotrope showed little effect of the heat and was blooming nicely. Usually a favorite of those who grow it, we do not see it in many gardens.

Petunias

There were dozens of rows of different the effect of heat and drought. The kinds of petunias on trial and all showed dwarf type, the kind we like to grow in our gardens, were effected more than the tall kinds. However, the single fringed, large flowering types are so superior that we would still prefer to grow them, especially since we do not have such hot weather very often, (fortunately).

All-America selection for 1956 is Petunia Fire Dance. You will hear a great deal more about this variety in the coming months, as it is the only flower selected for the honor for introduction in 1956.

Other varieties which were outstanding and deserve a place in our garden, especially for trial, are the following: Zinnia Ice Cream, a pale yellow, about the color of old fashioned ice cream. Vaughan's Blue Petunia Serenade.

The Castor Bean, Ricinus Zanzibar is an excellent tall growing plant for hedges. Of course one must remember it will grow as tall as a person and that the beans are poisonous if eaten by children. However, it would not be difficult to remove the seed cluster from each plant when first formed and thereby make it safe.

Ageratum Imperial is a nice blue which comes fairly true from seed.

The Midget Morning Glory, Convolvulus, variety Royal Ensign is a verv interesting and pretty plant for the garden.

Petunia, variety Linda is a fine bedding plant. It is an improved Silver Meda.. The color is an intense salmon pink an i it has the vigor of the F-1 hybrids, with an abundance of flowers throughout the summer.

Zinnias continue to attract attention by the beautiful colors and forms being introduced.

Garden Gleanings

WORM MANURE-DOES IT HAVE VALUE

In the Empire State Gladiolus Society bulletin we find this article about worm manure (condensed). The writer states he wrote an article to the effect that horse and cow manure do not have the same glamour that the earth worm has, so can not be sold for the same "jewelry store prices", this brought forth a letter from a worm manure company explaining that it takes millions of earth worms to produce the same amount as a horse or cow, therefore the greater value. They enclosed an advertisement for the material.

The Bulletin states: "The ad told of all its glories and of what wonderful results it produced when applied to plants. Then it gave the analysis-20 parts per million nitrate nitrogen. 15 p.p.m. phosphorus, and 30 p.p.m. potassium. This sounds very marvelous-unless you know that any good garden soil should contain 25-50 p.p.m. of nitrates, 10-20 p.p.m. phosphorus, and 10 p.p.m. of potassium, or as it is sometimes called, potash. This indicates the worm manure doesn't have as much nitrate as good garden soil and but slightly more phosphorus and only 3 times as much of potash. For this you pay, according to the ad, only 20c per lb. in 100 lb. lots, but considerably more for smaller quantities. You could buy the same material, as far as the fertilizer it contains, as a complete commercial fertilizer for a small fraction of 1c per lb. You can buy the organic matter that it contains for not over 3c per lb. Or put it another way-if you look 1 lb. of peat moss or rotted leaves and added 1/2 teaspoon of a complete comnercial fertilizer, you would have roughly he equivalent of the worm manure at a mall fraction of the cost.

I'm afraid I cannot agree with the ad "hich says the following: "It is the richst form of plant food," but they are "orrect when they say it "looks like black

HOW TO PLANT TULIPS AND DAFFODILS

All bulbs should be planted from September 1 to October 15th for best results. Do not let the bulbs lie around in a dry place because they continue to dehydrate, which weakens them.

Plant bulbs deep enough — daffodils deeper than tulips; about 8 to 9 inches deep. Tulips 6 to 8 in heavy soil and 8 inches in light soil.

If bulbs cannot be planted at once when received store them in a cool place. Bulbs give off heat and in closed containers this can be serious.

Outdoor planted bulbs grow their root system in the fall and the better the root system produced the better they will do next spring. If the bulbs must be stored, place them in as cool a place as possible—48 degrees F is best.

For Forcing Bulbs

Florists who grow bulbs for winter bloom in the greenhouse grow them in a temperature of 40 degrees F. until the plants are 2 to 3 inches high. Bulbs are well rooted before they are brought into a warm place and 48 degrees is the best rooting temperatures.

In the house they should be in a cool place, never above 60 degrees F. for the early period and 65 degrees F. for the last 2 weeks of growth. This is considered to be the best maximum day temperature. The pots are never allowed to dry out. A florist states "nothing will spoil them faster than temperatures above 70 degrees F."

"Your hair needs cutting badly," remarked the barber.

"It does not," exclaimed the customer, settling down in the chair. "It needs cutting nicely. You cut it badly last time."

Garden Lore

HOW TO DRY FLOWERS

Is it difficult to dry flowers and have them retain their natural color? Nothing could be simpler. If flowers are picked at the proper time and dried properly they will retain their natural color. All flowers, with the exception of strawflowers and Joe - pye - weed, should be picked at the peak of their bloom; these two are picked just beyond the bud stage. All leaves are stripped off and the flowers are tightly tied into bunches of about a dozen and hung upside down in a dark, dry place. An attic is ideal if you can exclude all light. A cellar is poor, as it may be damp and then the flowers will mold. An unused closet might serve. Remember, if your flowers are dried in a light place they will fade.

Zinnias must be dried in an upright position or else the petals become cupshaped. Some of the plumed cockscombs and grasses should be dried in a peach basket to insure graceful curves. But almost everything else is dried upside down. Never put flowers in water, for you want to dehydrate them as rapidly as possible. Most flowers dry in ten days to two weeks and can be packed away until needed.

Leaves are dried in a different way. Magnolia and dogwood leaves may be dried in a mixture of one-third glycerine and two-thirds water. The branches are placed in a quart mason jar containing 4 inches of this mixture and left there until they have absorbed all of it. Eucalyptus, lemon leaves and western cedar should be bought just before making your arrangement and left to dry just where you place them. Maple, oak, beech and other leaves should be dried flat between layers of newspapers. Clip out any overlapping leaves .-- By Ruth Gannon. Condensed from the Home Garden Guide, Albany, N.Y.

MOTION PICTURES FOR YOUR GARDEN CLUB MEETINGS

The Wisconsin Conservation Department has some excellent movies, which will be appreciated by all garden club members. We recommend these:

"Wisconsin Wild Flowers". Sound colored—12 minutes. This colored sound reel includes many varieties of wild flowers growing in Wisconsin from early spring to late fall.

"Wisconsin Wild Flowers". Silent colored—17 minutes. Thirty-two varieties of wild flowers appear in this silent onereel film in the approximate order of their appearance from early spring until late fall.

Birds

"Robin." Sound colored -10 minutes. This film portrays very colorfully the raising of a robin family and their habits.

"Wild Geese". Silent black and white— 14 minutes. The flight of the Canada Goose is followed through Wisconsin in this picture, showing the fields and lakes where they stop to feed and rest and their flight formations.

"Wisconsin Birds". Silent colored—15 minutes. A colored silent film of Birds native to Wisconsin. Most of the scenes were obtained during the nesting season and in many instances show the parent bird feeding their young. Excellent for Nature groups and class room study.

Address requests for films to Visual Aids Library, Wisconsin Conservation Department, 312 State Office Building, Madison 2, Wisconsin.

An artist who wanted a home among the Taconic Hills of Vermont was talking the matter over with a farmer who allowed that he had a good house for sale.

"I must have a good view," said the artist. "Is there a good view?"

"Well," drawled the farmer. "From the front porch yuh kin see Ed Snow's ne 7 barn; but beyond that there ain't nuthi ' but a bunch of moun-tins."

For Busy Gardeners

FALL OR SPRING PLANTING Plant Lilacs In Fall, Tender Roses Only In Spring

Lilacs do best if planted in the fall, according to our leading nurserymen. But roses should never be planted in the fall in Wisconsin.

In spite of the articles you will see in national magazines, advocating rose planting in the fall, you will run into a lot of work or even trouble if you do not wait until spring to plant them.

Hybrid tea roses are not hardy—they will winter kill at temperatures from 0 to 5 above unless fully protected. Newly planted roses are not as hardy as established plants because they do not have a complete root system and dehydrate more readily. Rose plants must be mounded with soil to a height of 9 inches and covered with marsh hay or straw to fully protect them against our cold Wisconsin winters.

Many soft wooded trees, such as Lombardy Poplar and Willow, can be successfully planted in the fall if we have good frost and properly ripened wood and the following winter is a favorable one.

Many nurserymen say that lilacs planted in the fall will gain a year in growth over those planted in the spring.

Plant These In Spring Only

The following trees and shrubs should be planted only in the spring: Birch; Nut trees; Oak trees; Poplar; Red Bud; Thorn; Willow; Altheas; Butterfly Bush; Deutzia Forsythia; Tamarix; Clematis; Climbing Honeysuckle; Silver Lace Vine; Trumpet Creeper; Wisteria; Hybrid Tea Reses; Hybrid Perpetual Roses; Polyantha Roses and Climbing Roses.

Some of the hardier varieties listed a we can be transplanted in the fall if $t \mapsto y$ are balled and burlapped. The hardy veneties of roses such as Rugosa and F gosa Hybrids, Rugosa Hugonis can be F unted in the fall.

For Fall Or Spring Planting

The hardy types of trees and shrubs can be planted in the fall quite successfully. This includes the Ash, Elm, Linden, Locust, and deciduous shrubs such as Almond, Aronia, Barberry, Buckthorn, Caragana, Cornus, Contoneaster, Currant Alpine, Honeysuckles, Lilacs, Philadelphus, Snowberry, Virburnum, Weigelias and Witch Hazel. They can be planted either in fall or spring.

GARDEN NOTES

BLACK SPOT. One of the best fungicides for control of black spot on roses is captan, when used as a spray. It is not very effective when used as a dust however.

Captan does not control powdery mildew on plants such as roses, phlox, hollyhock, etc. It will control the downy mildew, which is sometimes found on roses.

Karathane (Mildex) is the best control for powdery mildew on plants. It should not be applied however, during very hot weather as it may cause burning.

SOIL INSECTS can be controlled effectively with dieldrin. The 5% Grandular form seems best for the soil. Wireworms, white grubs, beetles, cutworms, ants, sow bugs and other pests are eliminated by dieldrin. If soil insects are killed moles will not burrow through your garden soil.

SUCCESS WITH PEONIES

A new circular No. 494 has just been prepared by the Floriculture Staff, Dept. of Horticulture, University of Wisconsin, entitled "Success With Peonies". Address, the Mailing Room, College of Agriculture, Madison, Wis. for a copy.

The bulletin covers in a brief way such topics as varieties, summer care, controll insect pests with dust or spray; peony diseases and when to plant peonies.

OUT-OF-THE-ORDINARY SHRUBS FOR SOUTHERN WISCONSIN

The **Blueleaf Honeysuckle** has bluishgreen leaves that actually give a gray effect in the garden. Clear-pink flowers are followed by red berries. It is a tall grower, like most bush honeysuckles, to about eight feet, and needs room to spread out. It will take light overhead shade. Cataloged as Lonicera Korolkowi floribunda.

Fragrant Thimbleberry is familiar to those who know our fields and woods. Many grow along the clifftops on Lake Superior between Ashland and Bayfield. Being a raspberry, Rubus odoratus suckers, but not too wildly when grown in light shade. Its broad, heart-shaped leaves, six inches and more wide, are always interesting. The large, fragrant flowers, purplish-pink, set into thimbleberries that are very good to eat if you have the patience to pick them. The plant prefers damp soil, likes shade.

Pearlbush is grown for its flowers panicles of white blossoms that in the bud look like strings of pearls. The variety now preferred has a cracking name, Exochorda Giraldi Wilsoni. It is considered an improvement over Exochorda grandiflora. Both are June bloomers. They are somewhat leggy when young but develop into shapely erect shrubs up to about seven feet, and prefer open locations. Van Melle suggests hard pruning, right after flowering, when they are young, to encourage a shapely bush.

-C. P. Holway, Cooksville.

RABBITS HELP FIND VIRUSES IN PLANTS

We are told that in Holland at least 2 million potato plants are checked for virus disease each year by a new test, which makes use of rabbits.

Here's how it works. First you squeeze the sap from an infected plant and inject some into a rabbit. In about three weeks the rabbit builds up anti-bodies against certain viruses in the plant.

The next step is to separate the anti-

bodies or anti-serum from the rabbes blood stream. You take a drop of stp from the plant to be checked and mix it with a drop of the anti-serum. If virus is present chloroplasts (the green material in plants) clump together in about 20 minutes. It's easy to see under a microscope.

If clumps of chloroplast do not appear then the plant is free of the virus.

Winners of Marathon County Chapter Show—From page 47

Pactolus; 422, Gold; 430, Polynesia; 436, Dieppe; 437, Red Wing; 440, Susan Kaye; 442, Tivoli; 444, Spic and Span; 445, Noble; 454, Ace of Spades; 462, Julia Mae; 464, Elmer's Rose; 465, Aristocrat; 466, Tyrone; 470, Royal Scot; 490, Jack Pot.

312, Golden Boy; 340, Roseneath; 200, White Butterfly; 207, Lucille; 213, Marionette; 222, Orange Butterfly; 231, Bo Peep; 236, Atom; 240, Betty Bald; 252, Geralda; 265, Tweedledum; 266, The Orchard; 269, Inza; 277, Blue Lilly; 286, Old South; 290, Brown Orchid; 162, Tiny Rose.

CARL STARKER DAY (From Page 51)

those members who so whole heartedly made possible this lovely day, your chairman again most sincerely expresses her gratitude.

Exhibitors At The School

Berlin Garden Club: Mrs. Alfred Huebner and Mrs. J. C. Ziehm.

Home Gardeners, West Allis: Mrs. L. G. Stewart and Mrs Harold Buerosse.

Ikebana Study Group, Milwaukee: Mrs. Peter Colosimo, Mrs. E. A. St. Clair and Mrs. Max Geline.

Clara Larson Garden Club, Iola: Mrs. Myron Erickson.

Oshkosh Horticultural Society: Miss Anna Christenson, Miss Agnes Phillipson, Miss Anna Phillipson, Miss Bessie Pease and Mrs. John Rasmussen.

Waupaca Garden Club: Mrs. Char'ss Braman and Mrs. Chester Brandon.

Wausau Federated Garden Club: M s. A. J. Anderson.

West Allis Garden Club: Mrs. Victor Schmitt.

Wisconsin Horticulture



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September With Our Bees

The year 1955 will go down in beekeeping history as one of the best for honey production. In fact, if we could be assured of a colony average of honey such as obtained this year, many of us would go into commercial beekeeping or would have done so long ago.

But now is not the time to indulge in wishful thinking of what might have been but to think about the coming winter and how to prepare our colonies for it.

Oddly enough the hot, humid weather of July seemed favorable for honey production. It was not until the rain and cool weather came about August 6 that robbing began, which always means that the honey flow has slowed down or stopped. During the first week of August, colonies lost weight.

The second crop of alfalfa in southern Wisconsin did not look as thrifty as expected. The main reason was again injury by leaf hoppers. This insect causes the leaves to turn yellow, and blossoms to appear wilted and blossom buds fail to open. In fact, Entomologists tell us that by spraying the alfalfa fields to control leaf hoppers, not only would he plants bloom well and produce seed ut the hay crop would be vastly imroved. We have been told that in secons of the state where alfalfa seed can e produced, it is because the area is latively free from leaf hopper damage ue to some unknown reason.

Winter Stores

A few weeks ago we asked a friend on hose land a beekeeper had a number

September, 1955

of colonies if there had been a good crop. He said the crop was very small because the beekeeper had lost most of his colonies by starvation last winter and spring. What a tragedy and dissapointment for a beginner. No doubt this sort of discouragement is the reason why many beginners drop out. They do not appreciate the amount of honey that a strong colony of bees will consume during the winter and spring months.

In fact we think it is a serious mistake to teach beginners to use less than three chambers the year round. By using three brood chambers, colony management is greatly simplified as much more honey can be stored for winter. It also simplifies swarm control and requires much less manipulation of combs by either beginners or commerical beekeeper.

No Surplus In September

Excepting in some sections of Wisconsin where there may be acres of goldenrod and asters there are very few sections of the state where there will be any surplus honey from now on and it is well to either remove supers or place the inner cover, with the entrance hole open, above the brood chambers with the honey supers on top. This forces the incoming necter into the brood chambers. Here is another reason for using three brood chambers-the colony raises its over-wintering bees during August, September and early October. Confining the queen to a very small area due to storage of honey, may result in a weak colony.

Points To Remember

WHAT ABOUT HONEYDEW FOR WINTER STORES

Dr. C. L. Farrar writes this (Page 439 in The Hive and The Honeybee, 1946 edition): "Colonies have been wintered successfully at Laramie, Wyoming, when provided with 25 pounds of honeydew stores that contained 12 to 13 per cent of dextrin. Although inferior to equivalent colonies that had honey, when supplied with pollen reserves they were superior to colonies on honey without pollen. Only 2 out of 8 colonies wintered on honey dew stores suffered from dysentery, and it is probably a safe assumption, based upon recent studies, that these were heavily infected with Nosema. At Madison, Wisconsin, during the winter of 1944-45, additional tests on honeydew stores verified these results and assumptions.

The unfavorable moisture balance was presumed to result from poorly ripened stores, granulation of stores, inadequate hive ventilation, high humidity, and excessive activity of the winter cluster. The moisture content of most honey stores in the North Central states is at least 5 per cent higher than in drier regions, such as the Intermountain states; yet good colonies survive the winter in similar condition in both."

HONEY PACKERS AND DEALERS LAUNCH HONEY ADVERTISING PROGRAM

The National Honey Packers and Dealers have launched a program planning honey advertising. The program will be financed by an assessment of 1c per 60 lb. can from the packers and dealers and another cent per can from the producers.

The American Bee Journal lists 32 honey packers and dealers who are cooperating and have agreed on the program. When one of these honey buyers is able to get a producer to agree to the voluntary assessment of 1c per 60 lb. can he will then make a deduction from the remittance to the producer. The buyer will affix stamps on the cans to show both the producer and the dealer have contributed. The money will be turned over to the Honey Industry Council of America and will be used by them to increase the sale of honey.

Recommendations on spending the money for honey promotion will be made by the American Beekeeping Federation representing the producers and the National Honey Packers and Dealers Association representing the buyers.

A plan for raising more funds than we have had available in the past for honey promotion is badly needed and we hope this plan will succeed.

BEST PRODUCING COLONIES MAY HAVE LEAST AMOUNT OF STORES

You have no doubt noticed that strong colonies with a good queen are the ones that readily store surplus honey in the honey supers. Weak colonies with small populations bring in nectar slowly and are likely to store the honey in their brood chambers. Consequently our poorest producing colonies during the honey flow may be heavy with winter stores, while our best colonies may be light. It is well to watch for this.

Every beekeeper should check all colonies now and make arrangements so that winter stores will be provided during the coming month. We do not find it profitable to feed sugar syrup, especially if we can induce the bees to store all dark fail honey.

NEWS NOTES

The Congress has voted \$200,000 for research on pollination; honey house equipment and dietetics of honey, according to information from the American Beekeeping Federation.

BEEKEEPERS HOLD PICNICS

Several very successful picnics were held by County Beekeepers Associations in July and August. The Southern Region meeting at Watertown on July 24th and the Winnebagoland area picnic at Waupun on August 28th were both pleasant and enjoyable. As important as the program are the visits among the members and new friends made.

The question and answer period brought out some valuable information. The information given on the prospective honey crop and prices are helpful to beekeepers.

DID YOU KNOW THIS?

We Have much To Learn About The Nature Of Bees

In the **British Bee Journal**, Beekeepers News and Digest, we find the following interesting information about bees.

BEES POSSESS 4 WAYS of making sounds—wings, feet, spiracles, ventral obdominal plates and very possible a fifth by the wings causing a draught of air over the Nassanoff canal.

MAN'S VOICE is around 500 cycles and maximum that can be heard is 2,000, so my estimate of the queen's pipe which is the loudest single note in the hive, is around 1,500 cycles.

IS THIS HIGH NOTE to enable the queen to be heard above the footsteps, dancing and chatter of the remainder of the colony?

VIRGIN'S PIPING has a distinctiveness of its own and is answered by other queens if present. Workers do not appear to help matters at all and leave them to settle their own affairs!

MATED QUEEN'S PIPING has another note—more like a startled scream — and has same effect upon workers as the combined HISS which they issue when startled—both are warning notes. They seem to crouch down, for a second, if in fear—and then there is a combined (sh by the older or guard bees to find (the cause of the trouble.

77TH ANNUAL CONVENTION WISCONSIN STATE BEEKEEPERS ASSOCIATION ZION LUTHERAN CHURCH (6TH AND GRANT ST), WAUSAU OCTOBER 27-28

This has been one of our really good honey years. Let's get together and celebrate and learn more about the industry.

WOMEN'S AUXILIARY MEETING WISCONSIN BEEKEEPERS ASSOCIATION ZION LUTHERAN CHURCH, WAUSAU OCTOBER 27-28

An excellent program is being planned for the Auxiliary meeting this year and all the ladies are invited to attend. The ladies of the church will put on a luncheon Thursday noon, banquet at 6:30 p.m. and on Friday noon there will be a luncheon. The program will be in the October magazine.

Honey Cookery Contest

Class 1. Devils Food cake, not less than 25% honey.

Class 2. Honey Butter White cake, not less than 25% honey.

Class 3. Honey Fudge, not less than 25% honey.

Class 4. Honey Sweet rolls, not less than 50% honey.

COOKIES MADE WITH HONEY

The above is the title on the very attractive circular put out by the American Honey Institute and emphasizes that cookies *pack better, *keep better, *taste better when made with honey. It contains 32 pages of recipes and sells 12 for \$1.00.

Write the American Honey Institute, Madison 3, Wisconsin for a list of the many books, leaflets and display cards available to advertise honey.

Prepare now for National Honey Week. The dates: October 24 to 30th, 1955. The object is: heavier honey sales.

CAN BEES RECOGNIZE THEIR OWN QUEEN

Has the queen a specific odour, or does she acquire the odour of the colony? To elucidate these points a series of experiments were carried out in 1951-1953 in Russia by V. C. Henrikh. The experiments were reported by M. Simpson in the July issue of the Bee World (England).

"Two hermetically sealed test tubes were put on the alighting board of a queenless colony, one empty and one containing a laying queen; neither attracted the bees. Both tubes were then uncorked and the queen removed. The bees immediately went into the tube which had held the queen and licked its sides for a while; they did not go into the other tube. Evidently the queen had left some scent which attracted them; the licking suggests that the queen exuded some substance. This is confirmed by the fact that when a laying queen was placed on an alighting board of a queenless colony the first reaction of the bees was to lick her whole body. Isolated bees when touched with a glass rod were indifferent, but if the rod had previously been rubbed on the queen's abdomen they licked it and continued to do so even when up to 8 segments of their antennae were cut off.

The queen scent alone can also attract bees. Bees were shaken in a room on to paper, 1-2 cm. above which cotton wads in gauze bags were hung 30 cm. apart. One of the wads had been rubbed on the queen's abdomen, and the bees clustered round this wad.

From these experiments, all repeated many times, it is evident that the queen has a specific scent.

ANNUAL MEETING of the American Beekeeping Federation will be held in Biloxi, Miss. in January. Headquarters will be the Buena Vista Hotel.

Thought for the month: Wouldn't it be nice if anyone tempted to point a finger would instead hold out a hand.—Park Falls Herald

WHY COLONIES WITH GOOD QUEENS DO NOT WINTER KILL

Some southern queen breeders produce queens of unusual vigor. Not long age a beekeeper remarked that he found it difficult to winter colonies from packa;:es sent by a certain breeder. They died over winter.

Now the reason is that a colony with a very vigorous queen will produce a large population of bees during the summer which store honey in supers rather than in the brood chambers. One must adopt a system of management which will induce a colony to store more honey in the brood chamber. We have found it very practical to place the inner cover (escape hole open) on the brood chambers about the first week in August so as to force all fall honey into brood chambers for winter use; especially if the brood chambers are light in stores.

There is no difference in the wintering ability of different strains of Italian bees —it's just a matter of the best ones using more honey and actually storing less in the brood chambers than the poor kinds.

Since we are making great progress in improvement of stock it's up to every beekeeper to adopt a system of management which will enable him to carry these good colonies over winter.

Strong colonies can be wintered anywhere in the honey producing sections of the state without winter packing though they should have a windbreak. Again: packing with honey is better than with something on the outside of the hives.

HONEY WANTED Carloads and less than carloads. Mail sample and best prices in all grades. C. W. AEPPLER COMPANY Oconomowoc, Wisconsin

Wisconsin Horticulture

Honey Containers Containers 60 lb. cans, 5 and 10 lb. pails. Also 5 lb., 3 lb., 2 lb. and 8 oz. glass jars. We can make immediate ship- ment. Complete line of bee supplies. (also used equipment). We are always in the market for Honey. We will buy your beeswax or trade for supplies.	CONTAINER PRICES Glass Jars Queenline Plain 8 oz.—per case 24 \$1.05 \$.98 1 lb.—per case 24 1.35 1.05 2 lb.—per case 24 .135 1.05 2 lb.—per case 24 .77 4 lb.—per case 6 .75 5 lb.—per case 6 .71 Square Jars for Chunk Honey 2½ 2½ lb.—per case 12 \$1.18 Tin Cans & Pails 60-lb. can—3" screw top—bulk 66c 60-lb. can—3" screw top—per case 24 \$17.00 5-lb. pails—no bails—per case 50 \$.635 5-lb. pails—with bails—per case 50 \$.715 10-lb. pails—with bails—per case 50 \$.051 CASH DISCOUNT CASH DISCOUNT
Honey. We will buy your beeswax or trade for supplies.	60-lb. cans—3" screw top—per case 24 \$17.00 5-lb. pails—no bails—per case 50\$ 6.35 5-lb. pails—with bails—per case 50\$ 7.15 10-lb. pails—with bails—per case 50\$10.50





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Edith DeSmith-The Winner

Annual Convention Programs

October, 1955

Wanted: All varieties of apples in season for roadside stand. Apple Jack's Super Farm Market, Franksville, Wisconsin. (Hwy. 41—9½ miles south of College Ave. Milwaukee City Limits.)

GRADE-ALL FRUIT GRADERS

For Sale: GRADE - ALL graders & Brushers. For small or large acreage. GRADE-ALL offers you more economy, more utility, more gentleness to fruit. For more information write: Henry Mahr, 10820 S. 27th St., Milwaukee 7, Wis.

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Wisconsin Horticulture

Award To Hugo Klumb For Services

The Racine County Fruit Growers Association showed its appreciation for the work of Mr. Hugo Klumb at an orchard meeting and tour at the Klumb Orchard on September 20.

Mr. Klumb is one of the organizers of the Association and for 35 years was an instructor in horticulture and agriculture at the Racine County School of Agriculture in Rochester. He retired last year.

In 1937 Mr. Klumb planted a 4½ acre orchard as a hobby. Caring for this orchard gave him valuable experience in all phases of orcharding—pruning, spraying, marketing, and he gave valuable assistance to fruit growers of Racine County on their orchard problems.

Members present at the meeting extended their best wishes to Mr. and Mrs. Hugo Klumb and hoped that the suitcase presented them would make their vacation trips more pleasant.

APPLE DESSERT DEMONSTRATION CONTEST PROVES VALUABLE PROJECT

Miss Edith DeSmith, 16 year old Sheboygan Falls High School girl, won first place in the Wisconsin Apple Dessert Demonstration Contest. Her picture is shown on this months cover.

The final contest was held on Milwaukee Journal TV, September 22, over the Brets Griem program "What's New In the Kitchen".

Mrs. Elmer Schneider, mother of three children, from Germantown, won second place. Both contestants were excellent in fact the three judges split their votes in the final contest and Mrs. Schneider received one vote for first place.

The contest proved a big boost for Wisconsin apples. Immediately after the contest was over, the editor was in Mrs.



A gift to Mr. Hugo Klumb, Rochester, from the Racine County Fruit Growers Association. From left: Mr. Marvin De-Smidt, president, Racine; Mr. Hugo Klumb and Mr. Wm. Verhulst, Franksville, past president, who made the presentation.

Griem's office and the telephone began to ring. Mrs. Griem was kept busy answering requests for the recipes used by the two girls.

Already suggestions for new ideas for next years contest are being received. Mrs. Griem suggested an "unusual apple dish". We thereupon proposed an "Unusual Apple Pie Contest". This could include apple pie made in different forms and shapes and appearance as well as perfection of quality. Such a contest might do much to keep up interest in what we consider the nations favorite dessert, apple pie, but which is beginning to loose out to other fruits because there is a good deal of poor apple pie being made. Someone has remarked that what the nation now needs is a "better apple pie".

A. T. Hipke & Sons, Inc. New Holstein, Wisconsin

Want N. W. Greening apples for slicing. Call for particulars.

87th ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY WISCONSIN APPLE INSTITUTE

Retlaw Hotel, Fond du Lac, November 15-16, 1955

Tuesday, November 15

8:30-10:00 a.m. Set up fruit exhibit. See schedule in this issue.

10:00 a.m. Call to order by President Marshall Hall, Casco. Announcements. What s New in Apple Maggot and Plum Curculio Control, by Dr. C. L. Fluke, Dept. of $E_{\rm L}$ tomology, U. W.

10:30 a.m. The Spray Program in Light of New Residue Restrictions. The 1956 Spray Program for Orchard Insects. By Dr. Don Dever, Dept. of Entomology, U. W.

11:00 a.m. Orchard Irrigation. Will It Pay? By Albert TenEyck, Pine Bluff Fruit Farm, Brodhead, Wis.

11:45 a.m. Opening of business meeting. Wisconsin State Horticultural Society. Nominations and election of officers and members of the Board of Directors.

12:00 m. Luncheon meeting of Board of Directors, Wisconsin Horticultural Society and Wisconsin Apple Institute-separate meetings.

1:45 p.m. My Experience in Apple Promotion and Marketing With the New York-New England Apple Institute, by Ben Drew, Drew Fruit Farms, Westford, Mass.

Question and answer period on apple promotion.

2:45 p.m. Report on Experimental Spraying in 1955 for Apple Scab and Fire Blight Control, by Dr. J. D. Moore, Dept. of Plant Pathology.

3:30 p.m. Our Spray Program and How It Worked. Five minute report. Led by Art Bassett, Jr., Vice President. Growers: William Connell, Menomonie; Dawson Hauser. Bayfield; C. J. Telfer, Green Bay; Arnold Nieman, Cedarburg; R. L. Marken, Kenosha and Bigelow Lourie, Gays Mills.

Annual Banquet

6:30 p.m. Banquet in Ball Room. Retlaw Hotel. Presentations of Honorary Recognition Certificates.

Entertainment features and program to be announced.

Wednesday, November 16

9:30 a.m. How We Grow McIntosh and Other Varieties on Drew Farms, by Ben W. Drew, Westford, Mass.

10:30 a.m. Which Varieties of Apples Can Be Stored in Polyethylene Bags?, by Dr. Malcolm Dana, Dept. of Horticulture, Madison.

10:45 a.m. Forum on Apple Containers and Mouse Control, conducted by Prof. George Klingbeil. Discussion by exhibitors of containers.

11:30 a.m. Business meeting Wisconsin State Horticultural Society.

12:00 m. Luncheon and business meeting, Wisconsin Apple Institute. Election of Directors. President Joe Writt, Ellison Bay, presiding. Discussion of apple promotion and marketing.

⁴ 2:00 p.m. Trends in Apple Production, by Dr. R. H. Roberts, Dept. of Horticulture, U. W.

JUICE APPLES WANTED

A. T. Hipke & Sons, Inc., New Holstein, Wis. are in the market for juice apples. Call or write them for particulars.

BRUSHER AND GRADER FOR SALE

We have a Friend brusher and Apple Grader for sale. A. T. Hipke & Son, Inc., New Holstein, Wis.

FRUIT SHOW — ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY Retlaw Hotel, Fond du Lac, Nov. 15-16

Committee in charge: Prof. Malcolm N. Dana, Chairman: Prof. George Klingbeil, Madison: County Agent E. B. Stiefvater, Milwaukee.

APPLE VARIETIES

Plate of 5 Apples

1.	Macoun	8.	McIntosh
2.	Haralson	9.	Cortland
3.	Secor	10.	Red Delicious
4.	Fireside	11.	Golden Delicious
5.	Prairie Spy	12.	Jonathan
6.	Northwestern Greening	13.	Any recently introduced
7.	Wealthy		variety properly named.

Premiums: Grand champion plate of apples—five-gallon pail Crag Fruit Fungicide 341, retail value \$16.50, by Mr. M. Shepherd of W. H. Barber Co., Chicago.

Second grand champion plate of apples—one carton of 42 pounds of Kolo Carbamate (value \$9.15) by the Niagara Chemical Co., Mr. R. H. Hawkins, Waupaca.

First prize on Fireside, Prairie Spy, N. W. Greening and Wealthy: 6 bags of Ovotran Wettable insecticide by Dow Chemical Co.; Mr. W. C. Kenyon, Chicago, Ill. (Value about \$6.00 each.)

Premiums on McIntosh, Cortland, Red Delicious, Golden Delicious and Jonathan: 1st prize, each variety, 1—10-lb. bag of Orthocide 50W (value \$7.30) by the California Spray-Chemical Corp. Victor G. Ruh, Branch Mgr., Janesville.

Premiums on each class except as noted: 1st prize, \$2.00; 2nd prize, \$1.50; 3rd prize, \$1.00; 4th and 5th prizes, 75c each. In case of more than 10 entries, 3 additional prizes of 50c each will be given.

Judges: Prof. George Klingbeil, Madison and Prof. Malcolm Dana, Madison.

Apples in Retail Containers

An exhibit of apples in a **retail container** suitable for store of roadside stand sales. Includes: $\frac{1}{2}$ bushel or smaller basket. Container of cardboard, polyethylene, paper or any other type of material. The entry to show a total of about $\frac{1}{2}$ bushel of apples. To be judged by the merit system—(excellent, very good and good).

Displays will be judged: 50% for container and display, 50% for quality of apples.

Award for champion container of apples in display: 50-lb. drum of Captan by Stauffer Chemical Co., W. H. Bigelow, Omaha. (Value over \$35.00.)

Award for 5 next best containers and apples, each: 1 gallon can of Stauffer Paraflow insecticide (value \$10.00 per gallon), by Stauffer Chemical Co.; W. H. Bigelow.

Special prize for the container having apples of best quality exhibited in any container: 1 carton of Kolofog (value \$5.20) by the Niagara Chemical Co., Mr. R. H. Hawkins, Waupaca.

JONADEL, A NEW APPLE FROM IOWA

Jonadel is a new apple originated by the Department of Horticulture, Iowa State College and will be introduced to the trade during the winter of 1957-58. Jonadel is a cross of Jonathan X Delicious, made in 1923. The orginal tree fruited in 1935. Trees of Jonadel bloom abundantly each year and set moderate crops. The time of fruit harvest is similar to Jonathan—October 1 to 10 at Ames.

9th ANNUAL MEETING WISCONSIN STATE HORTICULTURAL SOCIETY MINNESOTA FRUIT GROWERS ASSOCIATION

Stoddard Hotel, La Crosse, Wis. — October 31-November 1

MONDAY MORNING, OCTOBER 31

9:30 a.m. Registration and sampling of new varieties of apples.

10:00 a.m. Call to order by Mr. Marshall Hall, Casco, President, Wis. State Hort Society.

What's New In Insect Control, by Dr. C. L. Fluke, Dept. of Entomology, U. W.

Our Minnesota Fruit Insect Control Program, by T. T. Amodt, Minn. State Dept. of Agriculture.

11:00 a.m. Promising New Varieties of Fruits, by Dr. L. C. Snyder, Univ. of Minn.11:30 a.m. Adjourn to visit exhibits. Business meeting Minnesota Fruit Growers

Afternoon Program

1:30 p.m. Call to order by George W. Nelson, President, Minnesota Fruit Growers Association.

New Developments In Apple Storage, by Dr. D. H. Dewey, Mich. State College, East Lansing, Michigan.

2:30 p.m. New Materials For Apple Disease Control, by Dr. J. D. Moore, Dept. of Plan: Pathology, U. W.

3:15 p.m. Round Table Discussion on Insect and Disease Control Problems and Apple Storage lead by Prof. George Klingbeil, Extension Specialist, Dept. of Horticulture, Madison.

4:15 p.m. Directors meeting, Minnesota Fruit Growers Ass'n.

6:30 p.m. Banquet—Hotel Stoddard. Toastmaster, Alfred Francour, County Agent. La Crosse. National Apple Institute's film, "Gateway to Health", will be shown.

Program to be announced.

Association.

TUESDAY MORNING, NOVEMBER 1

9:30 a.m. Call to order by Mr. Art. Bassett, Jr., Vice President, Wis. Hort. Society. Varieties preferred by growers in yesterday's apple sampling test. Report by Dr. O. C. Turnquist, Prof. T. S. Weir, Univ. of Minn. and Prof. George Klingbeil, U. W.

10:15 a.m Bagging Apples on the Farm, by Dr. D. H. Dewey, Mich. State College. 11:00 a.m. Motion picture film on Packing Apples, Apple Harves: Time, courtesy Wooden Box Institute, San Francisco, Calif.

1:30 p.m. Call to order by R. B. Graves, Vice President, Minn. Fruit Growers Ass'n.

· What Our Spray Materials Will Do For You. Five minute discussions by exhibitors.

2:15 p.m. Current Problems In Our Orchards, by Dr. R. H. Roberts, Dept. of Horticulture, U. W.

Committees

Registration, publicity and banquet, Alfred Francour, County Agent, La Crosse.

Fruit Exhibits, Prof. George Klingbeil, Madison and E. M. Hunt, Sec., Minn. Hort. Society.

Program, H. J. Rahmlow, Sec., Wis. Hort. Society and J. D. Winter, Sec., Minn. Fruit Growers Ass'n.

Wisconsin Horticultur

How Much Is A Tree Worth

Every year, we are confronted with the question, "How much is a fruit tree worth". Often trees are damaged by fire, removed in building new highways or injured in some way. The owner then wishes to determine the true value of such trees.

In the August issue of The American Fruit Grower, a New York grower states that he has kept records of cost and comes up with the interesting figure of \$61.75 as the total value of a 10 year old tree. However, he includes the sum of \$58.50 as a 10 year service cost.

The editor of the American Fruit Grower makes this statement in reply.

"Fixing values is a most interesting and difficult problem, especially in the case of orchards.

First, it is necessary to determine which value to start with—replacement, cost less depreciation, capitalizing net earnings, or market value.

If you intend to use cost as a basis, you cannot add to it your established income to increase the cost. With this in mind, your cost at the end of 10 years is \$61.75 per tree. Cost studies at Cornell estimate the cost of bringing one acre of orchard through 10 years at \$636. With trees planted 40x40, or 28 trees per acre, this figures to \$22.70 per tree, or a little over \$2 per year. It would seem that your cost figures are high compared to the Cornell experience.

The figure of \$1 per year per tree has long been used as a general cost figure by orchardists. However, with increases in expenses of spraying, pruning, etc., it would not be out of line to double this figure. Two dollars per year per tree gives a figure of \$20 per tree at the end of 10 years, which is in line with the Cornell cost studies mentioned above.

A value per acre at the end of 10 years of around \$600 may be high or low, depending on orchard values in the particular area. Certainly market value as well as replacement cost or capitalizing net earnings should be taken into account to adjust value figures. Finally, a most important condition to be considered is the experience and skill of the owner. Trees under the care of one grower may be worth double or more what they would be if cared for by a less skillful grower."

Editors Note: We will be glad to hear from our members on their opinion as to the value of fruit trees which are injured or destroyed.

APPLE PICKING AND HANDLING MADE EASIER

Michigan apple growers are taking advantage of newly developed labor-saving picking methods and specialized picking crews. A new harvesting system promises an increase in picker efficiency of 5 to 10 per cent.

Described in Agricultural Research by the U.S. Department of Agriculture, pictures are shown of picking and handling methods devised by USDA and the Michigan Experiment Station. Here are some of the labor saving methods used.

Specialized Pickers

1. A ground crew of 5 begins harvest of an apple tree. These workers do not carry or use ladders. By picking what they can reach from the ground they were able to get a little over half the total yield. Unskilled help can work effectively in a ground crew.

2. A mid-section crew of 4 pickers takes over with 6 ft. ladders, which are short and light weight. Crew picks all the fruit that can be reached from this length and then moves on to the next tree.

3. A top-section crew,, also 4 moves in and completes the harvest— amounting to about as much as the mid-section crew obtained. They use longer ladders continuously and more effectively than would be true if unharvested fruit were still in the bottom of the tree.

4. The apples were poured into pallet

October, 1955
crates, carried through the orchard on a low-hung tractor-hauled trailer. Each pallet holds about 20 bushels and saves individual handling of the ordinary 1bushel crates.

5. Pallet crates are quickly loaded on truck by a tractor with hydraulic lift. Pickers like pallets; they take less leveling-off labor, eliminate orchard stacking.

6. A fork-like truck unloads pallet boxes filled with the hand-picked apples at the plant.

HOW TO KEEP APPLES IN BAGS MOVING

By Clyde Lewis, Chazy Orchards, Chazy, N. Y.

We have been able to move apples in bags quite well, about 300,000 bags per season, and at prices generally better than the same quality and grade of fruit would have moved in any of the other types of packages commonly used.

We have packaged in 3-lb., 4-lb., 5-lb., and 10 lb. bags, both mesh and polyethylene. Some of our customers insist upon the mesh bag, but we like the poly bags much better. We think that the poly bags add to the appearance of the fruit more than does the mesh type. Both mesh and poly bags have their own advantages. Mesh bags are stronger and as easy or easier to handle, but if bags are packed tightly in the container there is a tendency for the mesh to cut into the apples. Polyethylene bags, while not as durable as the mesh bags, seem to be strong enough to withstand ordinary handling, providing a good grade of material is used and the bag is properly made. Our experience has shown that .0015 gauge material is of sufficient weight or thickness, but anything less than the .0015 will be subject to considerable breakage. We have had our trouble with breakage and we know this problem is of great importance.

We have packed about all of the varieties which we grow in bags and grades from utility up to Extra Fancy. Being about 90% McIntosh at Chazy, most of our experience has been with McIntosh. We try to use mostly 5 lb. bags becaus Dr. Brunk found that the 5 or 6 lb. ba_i will sell more apples and we certainly agree. However, the trade in some citie insist upon the 3 lb. bags. We use singletrip cartons for the 3 lb. bags—12 bags per carton with two layers of six bagseach, again each bag in a separate cell Recently, cartons of 12—3 lb. bagspacked with a good utility grade Mc-Intosh—sold for 50c more than 150's cartons of Fancy McIntosh. How do we know what the people will buy and how much they will pay?

Our experience has been that bags can be packed $2^{1}4^{"}$ and up—mostly up—but not just $2^{1}4^{"}$ or smaller. We packed $2^{1}4^{"}$ to $2^{1}2^{"}$ Fincy Apples in bags, enclosed a good, clean comic book in the bag and furnished the stores with an advertising placard describing the package. We thought we would appeal to the children and the smaller apples would be acceptable. Does anyone wish to buy a few hundred comic books?

-Condensed from the New York Horticultural Society

WHAT NATIONALITIES EAT THE MOST POTATOES

Answer: The Irish eat more potatoes than any other nationality in the world -404 pounds per year. The Germans are second but all north-Europeans like potatoes but not so in south-Europe. The Italians eat only 79 pounds; the Canadians 96 pounds. In India and Africa they are a rarity.

The only thing most of us know about the speed of light is that it comes too early in the morning.

MOULTON IRRIGATION COMPANY Represented by H. D. Roberts Black River Falls, Wis,

Wisconsin Horticulture

Growing Better Vegetables

By John Schoenemann

Early in September the American Society for Horticultural science met for its 1955 annual meeting in East Lansing, Michigan. This society is made up of horticulturists from all over the United States and Canada. At this meeting horticultural research workers presented results of their research work conducted during the last year or so. Much of the research reported does have a practical application and may be of interest to gardeners, growers and others.

University of Florida research workers reported on studies on the control of blossom end rot in tomato. This is based on the idea that the cause for this trouble is calcium deficiency. Their results supported the fact that the use of calcium chloride sprays can reduce blossom end rot under conditions found in Florida.

New Developments In Growing Asparagus

At the University of Delaware they have been experimenting with spring, summer and fall cutting of asparagus beds. Fall cutting of beds allowed for just about as much production as spring harvesting based on six years results. Cutting during the summer months however, was detrimental to the asparagus crowns. A split cutting season, that is harvesting for a few weeks in the spring and then again for a few weeks in the fall appears to be very promising from an economic stand point according to these Delaware research workers.

New Jersey has also reported on asparagus production experiments. Several years of research in commercial asparagus fields on various soil types has shown



that increases in yields and spear weight are obtained from annual applications of 1000 pounds per acre of a 5-10-10 fertilizer. This is applied and disked in after the cutting season so that the plants will grow large and heavy to store up "food" for next years crop.

A new growth regulator called CLPA has been found effective by Maryland research workers to set fruit on tomatoes during periods of cool weather. The material is sprayed on the lower leaves and open blossoms but should not be applied to the growing tips of the plants.

New Lettuce Variety

A new leaf lettuce variety called Tendergreen has just been released from Michigan State University. It is a cross between Bibb and Grand Rapids. The color is dark green like Bibb but the plants are larger and more upright. Tendergreen is ideally suited for greenhouse production or first-early planting out of doors. Eating quality is much like Bibb but Tendergreen is also fastbolting, susceptible to tip burn and is quite fragile. We have not yet tried Tendergreen in trials in Wisconsin. Seed will be available in limited quantity from certain seed companies this fall.

Ever wonder what makes a red tomato red or how it ripens. In red tomatoes the chief pigments are lycopene, which is of a red color and carotene a yellow pigment. The balance between these two pigments in the fruit determines the color to a large extent. If there is more lycopene the fruits will be of a deep red, but with high carotene they will appear orange or pale red.

Continued on page 81



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1955 SMALL FRUIT INSPECTOR'S NOTES H. E. Halliday

Considerable difference was noted in various parts of the state this past inspection season in raspberry and strawberry plantings. The lower two thirds of the state has fair stands of strawberries and raspberries at the time this is being written. This of course can largely be blamed on the excessive heat and lack of rainfall. There is one thing that may be counted as good in this area however, and that is a smaller general infection of the plantings with the various fungus disease. Strawberry leafspot, raspberry spurblight and anthracnose are quite uniformly lighter.

The northern third of the state has normal or even better stands of plants with normal amount of the fungus diseases.

Watch For Cane Borer

All over the state there is a heavy

infestation of the red necked raspbe ry cane borer and the raspberry canebor r. All canes showing spindle shaped swillings and other evidence of cane boring should be cut off close to the ground and burned before growth starts next spring. Strawberry leaf roller is heavy over the southern half of the state. Plantings which have been sprayed and well cared for have a minimum of pests and diseases. Information in insects and diseases of small fruit may be obtained from the Wis. Dept. of Agriculture in a recent bulletin, "Pests and Diseases of Small Fruit", and from the College of Agriculture, Horticulture Department's "Recommendations for Control of Insects and Diseases of Small Fruits".

Mulch Strawberries

It was again noted this year that growers who mulched their strawberries just before the ground froze last fall, had less root and crown injury, better crops,

ANNUAL MEETING WISCONSIN BERRY AND VEGETABLE GROWERS' ASSOCIATION Retlaw Hotel, Fond du Lac, Nov. 9, 1955

10:00 a.m. Call to order by President Elmer Whitby, Chilton.

Round Table. Discussion panel, covering culture, varieties, weed control and the virus situation, fertility and new cultural methods of berries as being used by growers around the state. Panel includes Prof. George Klingbeil, Dr. Malcolm Dana, Prof. L. G. Holm of the Dept. of Horticulture, U. W., and Dr. Frank Gilbert, Branch Experiment Station, Sturgeon Bay.

11:30 a.m. Grower reports on berry varieties and cultural methods, conducted by H. J. Rahmlow, secretary, Madison.

12:00 m. Luncheon in Hotel. Business meeting and election of officers.

1:45 p.m. How We Grow and Market Berries in the Alma Center Area, by Buster Lea, grower and buyer, Lea Brothers Strawberry Exchange, Alma Center.

2:30 p.m. Question and answer period.

3:00 p.m. Vegetable Varieties to Grow and Try in 1956 by Prof. John Schoenemann. Dept. of Horticulture, U. W.

and much cleaner berries. With very $f_{\rm CW}$ exceptions, these results have been demonstrated year after year.

It would appear at the present time that it would be wise to make arrangements early for your supply of plants for next spring.

ABOUT HYBRID VEGETABLES From Bulletin of the Morden Experiment Station (Canada) What Is A Hybrid

When two tomato varieties are crossed they produce hybrid seed. Plants grown from this seed are first generation hybrids, also designated F1 hybrids. Each time a new lot of hybrid seed is required, crossing the parents is necessary.

New varieties of vegetables are sometimes referred to in the trade as hybrids. For example, when Early Chatham was introduced it was described as a new hybrid tomato. This was not incorrect, because Early Chatham was a new variety developed by cross breeding but such reference tends to obscure the preferred meaning of the term "hybrid". Normally, seed of a variety will produce plants like those of a mother variety. However, seed saved from fruits of first-generation hybrids will not give seedlings like the "hybrids". Such seedlings will be different in plant and fruit appearance and in yielding ability. Only seed obtained by crossing uniform parent varieties will produce hybrid plants that are alike and often high yielding.

HYBRID VIGOR—First-generation hybrids generally exhibit greater plant vigor than their parents. This vigor is often reflected in high yields of fruit or seed and is the result of combining two varieties or strains that have been inbred for several generations. When corn is inbred the selfed progeny plants are often weak. However, crossing such strains of inbred plants results in hybrid progeny that exhibit marked vigor and robust growth. Unlike corn, vegetables such as tomatoes, cucumbers, and melons do not produce visibly weak plants following in-

breeding. However, when inbred strains are crossed the resulting progeny is vigorous and often produces higher yields than the parent strains.

Crossing two or more inbred strains of plants does not necessarily produce outstanding hybrid progeny because such strains do not always combine well. Combining ability is usually determined by comparing the yield of the progeny with that of the parents. As a rule, the plant breeder must cross many inbred strains and test their hybrid progeny before parental strains are found that produce desirable hybrids.

Vegetables Adapted As F1 Hybrids

Some vegetables such as sweet corn, tomato, onion, cucumber, cabbage, squash, melon and pepper are well suited to the development of first-generation hybrids. Their flower structures and flowering habits are adaptable to the breeding methods used to produce hybrid seed. On the other hand, the flowering parts of beet, carrot, and radish are so arranged that hybrid seed production is extremely difficult. However, in some of these vegetables as well as others, plants with male-sterile flowers have been observed which are adapted to hybrid seed production methods and are specifically useful in crossing many plants at one time. As a result, the development of hybrids previously thought impracticable may soon be feasible.

Advantages of F1 Hybrid

Vegetable hybrids are favored because of several desirable characters. Possibly the most important of these is their high yielding ability which is usually greater than that of the parents. If hybrids are to be economically valuable also, they must exceed the yield of the comparable standard variety of the district. For short gardening season districts, time of fruit ripening in tomatoes is important and hybrids that are earlier and more uniform than their parents have been developed. Fruit uniformity in size, color, quality, and maturity is particularly essential to the canning industry.



WHAT IS NEW IN NURSERY INSPECTION FOR WISCONSIN

By E. L. Chambers

Despite the availability of hundreds of pesticides capable of controlling almost any insect pest and plant disease encountered these days, nurserymen still find themselves paying enormous taxes each year to pests due to failure to detect them and apply the proper material at the right time. Much of the loss could be avoided if the growers had the "know how" and "where with" to control it and could possibly find the time to do it. At no time has the nurseryman had such an excellent opportunity to eliminate plant pests as he has today. It is imperative that he recognize these nursery pests early and fight them vigorously in order to furnish pest-free plants to his customers.

The State Entomologist's Office through field inspection by its staff of six nursery inspectors makes every effort to reduce nursery stock losses to the growers to a minimum. Inspections are made of strawberry plantings as soon as the winter covering has been removed in the spring. At this time not only are the plant roots examined for the prevalence of winter injury but also they are checked for red stele, a fungus disease which destroys the roots. Fortunately, Wisconsin growers have very little infection found in their fields, but a considerable number of shipments of strawberry plants received from growers of an eastern state were found this spring to have considerable diesase which appeared to be red stele and a heavy root knot nematode infestation. Some of the planting stock offered as virus-free was found to have nematode infestation on the roots unless it had been subjected to hot water treatment as is prescribed for its control.

There are approximately 200 species of pests which have been reported this year in the some 1200 nurseries of the sta e. Wisconsin nurserymen are fortunate in having much fewer pests than many of our other states. Such destructive introduced pests as the Gypsy moth, Japanese beetle, European chafer, Whitefringed beetle and Dutch elm disease have never been found in our state although our inspectors are alerted to be on the lookout for them because it is possible for them to gain entrance. A "birds-eye view" of the important pests found in Wisconsin nurseries this summer would include the European pine shoot moth, European elm scale, San scale, pine needle scale, pine tortoise scale, birch leaf miner, spruce needle miner, spruce bud scale, lilac borer, bronze birch borer, and the pine sawflies.

Among the plant diseases encountered, the dozen most prevalent of the more injurious species of these include cedar rust, crown gall, fire blight, juniper blight, poplar canker, shot-hole disease, spruce needle rust, white pine blister rust, a verticillium wilt of elm, virus diseases, oak wilt and nematodes.

Nurserymen are advised of the pests found on their premises and given instructions as to the requirements necessary to control the pests before sending out their nursery stock. To this end, Bulletin 330, which is issued by the Department entitled. "Pests and Diseases of Trees and Shrubs" gives them the up-todate information on the life history and control of these more serious pests, and they are kept informed on new developments from time to time on control measures for the more common pests.



WISCONSIN GLADIOLUS SOCIETY

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OUR GLADIOLUS SHOWS By Ralph Burdick, Edgerton

In spite of the auspicious early start that ample rain and early planting gave us, this turned out to be about the poorest growing season we can remember. Drought and hot weather gave a multitude of short heads, few buds, poor opening, and in general poor performance. However, there were some very good blooms exhibited at the state shows and full credit should go to those who did such an excellent job of growing in spite of the handicaps.

Some Fine Seedlings

The State Seedling Show at Madison had some good material-the champion spike "Wonder Boy" being a real color champ, as well as a nearly perfect show spike. Many fine seedlings were shown that should have a great future; in fact at all shows the seedling sections are growing and a great many good ones are beginning to show up. There is no more enjoyable aspect of the gladiolus growing hobby than that of developing your own varieties from seed.



PRINCESS CROWNED. Carol Ruth Atwell of Marinette is being crowned princess of the Annual Wisconsin Gladiolus Society Show by Ralph Burdick, Edgerton, president of the society, at the show held in Marinette August 20-21.

shows at Wausau and Two Rivers, I understand that the usual high quality was in evidence and that the basket displays by Touhey Gardens were out of this world.

At The State Show

The State Show at Marinette certainly proved the worth of Spic and Span, this variety winning both single and three

While unable to attend the chapter

ANNUAL MEETING WISCONSIN GLADIOLUS SOCIETY SUNDAY, NOVEMBER 6, 1955 Hotel Appleton, Appleton, Wis.

10:00 a.m. Board of Directors meeting. Transaction of business. Election of officers. 12:00 m. Luncheon.

Business meeting of the State Society. Election of Directors at Large. 1:00 p.m. New business.

2:00 p.m. Program to be announced.

Arrangements Committee at Appleton: Walter Bell; William Durdell; Dr. Darling; Mrs. Carl Knoll, 137 S. Lee St., Appleton.

Noon dinners at Hotel, \$2.00. Send reservations to Mrs. Knoll.

spike championships. I hope that a photo of the Little Princess of the show may be published so that all may see what a fine choice was made by the host society.

It has also been obvious that more space will be required for the arrangement sections which are growing larger every year. A trend toward a special class for the men has become a feature of many shows and should lead to a great deal of fun.

GLADIOLUS SHOW AT WALWORTH COUNTY FAIR

Twenty-one exhibitors divided the \$236.50 distributed by the Walworth County Fair Association as prize money won at our Elkhorn show this year. We had a good show because a few who had blooms exhibited them generously, even though their customers were bidding for everything available.

Grand Champion was Miles Armstrong's red seedling 3-331-3. Aubry Dickmann's spike of Good Morning won the reserve championship. Three spike honors went to Dr. Graff's Pink Pride and to Dickmann's Pactolus. Armstrong's spike of Harrisburger was second day champion and Harold Vincent's Gail won the three spike honor.

Everett and Irene VanNess won the vase championship with King David. Their large basket of Spic and Span lost out to Dickmann's Red Wing.

Anton Koepke had a beautiful commercial display. Neatly arranged bouquets built into large palettes on standards formed the background while specimen spikes in tall brass vases and well designed arrangements completed this display.

Blue ribbon winners includes 13 other Armstrong seedlings and one from Van-Ness gardens in addition to the following named varieties: Snow Clad, Good Morning, Corona, Manchu, King Size, Bold Face, Pink Pride, Harrisburger, Burma, New York, Bridal Orchid, Francesca, King David, Sherwood, Flying Fortress, Mother Fischer, Pete's Pride, Amber Glory, Fort Knox, Hans Van Meegren, Spotlight, Patrol, Pactolus, Jili Marie, Red Wing, Palette, Beautis Blush, Sweet Sixteen, Spic and Spili, Leah Gorham, Traveler, Elmer's Roy Gail, Princess, Alexius, Stormy Weath r, Margaret Fulton, Scarlet Tanager, Var tion, Negus, Seneca, Indelible, Broyn Orchid, Polor Cub, Little Gold, Flick r, Orange Tweedle, Jingles, Flashlight a d Taurus.—By Lelend Shaw, Milton.

MORE ABOUT THE TREE PEONY

In the August issue of this magazine —page 29, an article by Mr. E. L. White of Fort Atkinson on the Tree Peopy states, "The tree peopy does not die down during the winter and may reach a height of 6 feet in time".

Mr C. P. Holway, whose articles on unusual plants have appeared in this magazine and who is now editor of the Chilton Times-Journal writes, "Does Mr. White actually possess, or know of, a 6 foot high tree peony in Wisconsin"?

To this Mr. White writes, "No I do not know of a tree peony reaching that height and if you read my article you will find that I say, 'some may reach a height of 6 feet in time.' I do know one that is now 52 inches tall and had 60 blossoms last year. My tallest one is 36 inches. They are slow growers, mine adding about 2 to 3 inches each year and would take years to reach 6 feet.

I get my 6 foot dimension from the following authorities: Hortus-varieties Delavayi and Lutea grow to 3 feet while Suffruticosa (moutan) grow to 6 feet

The National Horticultural Magazine issue of January 1955, which is entirely about the tree peony, quotes several authorities stating that the usual height is 3 feet, but that some grow to 10 feet. The Lutea variety grows 5 feet in China and 8 feet in Tibet.

I expect the usual height is around 3 feet here, but I see no reason why they cannot grow taller, depending on the soil, fertility, exposure, time and the varieties in the ancestry of our plants."

If a black cat crosses the path of a car, it's a lucky cat.

Heat Treatment

of Gladiolus Corms Robert Wilkinson, Entomologist

Wisconsin Dept. of Agriculture

Many favorite gladiolus varieties— Picardy, Spotlight, Leading Lady, Corona have often been discarded as being unprofitable due to heavy losses from the brown corm rot called fusarium. It is possible that heat-curing, which has been tried on a commercial scale, may allow disease-ridden varieties to make a comeback if practiced together with persistent rotation, roguing, and culling.

Heat-curing is chiefly a process of speeding natural disease-resistant tissue formation. The outer "skin" of a corm under the husks is composed of several layers of cells which, when mature or properly cured, gives protection to the corm. If this "skin" is broken, thin, or tender as often is the case immediately after digging or cleaning, any disease organism present can readily penetrate into the inner tissues. Studies have shown that exposure of corms to temperatures ranging from 80 to 95° F. hastens formation of a corky layer of thick-walled "skin" cells which resist disease.

Commercial growers have obtained good results from heat-curing when:

- Corms were cured immediately following digging to start wound-healing and "skin-thickening."
- Relative humidities were maintained above 50% at 80° F. and above 80% at 95° F. to prevent excessive moisture loss.
- Air change and circulation was adequate to prevent moisture condensation on corms. (Such "sweating" has been known to increase certain disease problems).
- -- Muddy corms were turned at least once during curing.
- Curing was continued only until old and new corms separated easily.

After cleaning, grading, and treating,



corms were again subjected to the same curing process for an additional 3 to 7 day period. This was necessary to prevent any subsequent infection of corms injured during cleaning and handling.

Detailed instructions and specifications are given in publications such as Circular 542: "Drying and Curing Gladiolus Corms" available from Oregon State College, Corvallis. Technical articles have appeared in "Phytopathology": vol. 42 (1952), page 342 and vol. 43 (1953), pages 141 to 155. ,

Ingenious hobbyist and small scale growers can probably adapt known heatcuring methods to their own resources one Wisconsin grower cures in a nearby boiler room. Consideration should be given to this heat-curing method where disease is a problem.

GLADIOLUS SCAB CONTROL Insecticides Help Reduce Disease

Experiments by the Illinois Experiment Station indicate that scab is spread by soil insects. When these insects are destroyed, scab is greatly reduced.

In an experiment on scab control the insecticides aldrin, lindane and heptachlor, applied to the soil at planting time, effectively reduced the amount of scab on the new corms.

In soil that produced heavily scabbed corms, when no treatment was used, the insecticides reduced the incidence of scab about 90 per cent. Application of the insecticides to the soil was more effective in reducing scab development than was use of the same insecticides as corm treatments.

The insecticides, mixed with the fungicide Arasan and applied to the corms dry, were most effective.

itor's Desk

OUR COVER PICTURE

Shown on our cover this month is Miss Edith DeSmith, Sheboygan Falls, 16 year old high school girl, who won first place in the Wisconsin Apple Dessert Demonstration Contest. Her dish was Apple Torte. She won the contest on her personality, a bility to demonstrate cookery and the quality of the product.

The final contest was held on Channel 4, WTMJ-TV on the Breta Griem program, "What's New In The Kitchen" on September 22. Second place winner was Mrs. Elmer Schneider of Germantown, Ozaukee County.

WOMEN'S AUXILIARY PROGRAM ANNUAL CONVENTION WISCONSIN STATE HORTICULTURAL SOCIETY Retlaw Hotel, Fond du Lac, Nov. 15-16 PROGRAM, TUESDAY, NOVEMBER 15

10:00 a.m. Call to order by president, Mrs. Marshall Hall, Casco. Announcements. 10:30 a.m. Arrangement of Trees, Flowers and Shrubs In Our Gardens, by Prof. George Ziegler, Dept. of Horticulture, U. W.

11:15 a.m. Question and answer period.

11:30 a.m. Annual business meeting. Election of officers.

1:30 p.m. Apple Dessert Baking Demonstration by the winners of the Wisconsin Apple Institute's Apple Dessert Demonstration Contest.

 $2{:}00\ p.m.$ How the Apple Dishes Were Judged. Prizes awarded. Some favorite recipes by Mrs. Margaret Hollander, Home Agent, Fond du Lac.

2:30 p.m. Fads and Fashions In Home Decorations, by Mrs. William Groesnick, Kewaunee.

4:00 p.m. Tea for members and guests.

6:30 p.m. Annual Banquet, Crystal Ballroom.

PREMIUM LISTS

Women's Auxiliary Exhibits

Apple Dishes: Any kind suitable for serving at the tea, with recipe.

Arrangements: Fruit and/or vegetable, for holiday season.

Premiums: Judging by Merit System. Excellent, \$1.50; very good, \$1.00; good, 75c.

COMMITTEES

Banquet Decoration: Mrs. Harry Brunn, Milwaukee, Chairman; Mrs. Fred Gygax, Waukesha; Mrs. R. Nieman, Cedarburg and Mrs. William Basse, Muskego.

Exhibits and Judging: Mrs. Walter Clemens, Thiensville, Chairman; Mrs. Elsie Jaeger. Afternoon Tea: Mrs. Alric Erickson, Egg Harbor, Chairman; Mrs. B. J. Otting, Cedar-

burg; Mrs. Henry Mahr, Milwaukee and Mrs. Willard Wagner, Cleveland.

Welcoming Members: Mrs. Philip Dell, Waldo and Mrs. A. Nieman, Cedarburg.

Resolutions: Mrs C. J. Telfer, Green Bay, Chairman; Mrs. R. L. Marken, Kenosha.

Nominations: Mrs. Dawson Hauser, Bayfield, Chairman; Mrs. Herbert Hasslinger, Nashotah and Mrs. Emil Beyer, Malone.

Tickets and Memberships: Mrs. Arthur Bassett, Jr., Baraboo, Chairman; Mrs. Armin Frenz, Cedarburg.

Officers: Women's Auxiliary. Pres., Mrs. Marshall Hall, Casco; Vice President, Mrs. Arthur Bassett, Jr., Baraboo; Sec.-Treas., Mrs. Armin Frenz, Cedarburg.

COMING EVENTS

October 27-28. Wisconsin Beekeepers Association Annual meeting at the Zion Lutheran Church, 6th and Grant St., Wausau, Wis.

October 31-November 1. Joint meeting Minnesota Fruit Growers Association-Western Section Wisconsin Horticultural Society, Stoddard Hotel, LaCrosse.

November 9. Annual meeting Wisconsin Berry and Vegetable Growers Association, Retlaw Hotel, Fond du Lac.

November 15-16. Annual Convention Wisconsin State Horticultural Society. Retlaw Hotel, Fond du Lac.

NEW BULLETIN AVAILABLE Pests and Diseases of Trees and Shrubs

Bulletin No. 330, entitled Pests and Diseases of Trees and Shrubs has just been printed by the Wisconsin State Department of Agriculture, State Capitol, Madison. It was prepared by the Division of Plant Industry of which Mr. E. L. Chambers is Chief. It is a very complete work of 88 pages filled with pictures and illustrations of all the leading injurious insects and diseases and gives directions for their control. It is an invaluable book for anyone interested in trees and shrubs and their proper care. The bulletin is free on request but since it is expensive do not ask for it unless you have use for it.

HOW TO GROW BEGONIAS AND GLOXINIAS

A new circular may be obtained by writing Bulletin Mailing Room, Wisconsin College of Agriculture, Madison, Wis., on how to grow Tuberous Rooted Begonias and Gloxinias. (Circular 496). It tells how to grow begonias from seed, soil treatment, transplanting, how to start plants from tubers, propagation by leaf and stem cuttings, summer care, how to store tubers and pest control.—Prepared by the Dept. of Horticulture, Univ. of Wisconsin.

HOW POTATOES RESIST SCAB

How a potato resists scab disease may have been partly explained by Federal-State cooperative research at Fort Collins, Colo.

USDA plant pathologist L. A. Schaal and Colorado experiment station chemist G. Johnson found that resistant varieties have quite a bit of the chemical chlorogenic acid and the enzyme tyrosinase in the skin. These substances are especially plentiful around the potato's breathing pores (lenticels), where the scab fungus generally enters. It appears that after fungus injury to the potato, the enzyme may change the acid into toxic chemicals that kill the fungus.

The scientists also observed that cut or skinned surfaces heal with corky tissue more readily when chlorogenic acid and the enzyme are abundant. So this chemical reaction seems to be part of a potato's protective mechanism against injury.—From Agriculture Research, by the U.S.D.A.

BETTER VEGETABLES Continued from page 73

Before these pigments are formed the chlorophyll, which gives unripe tomatoes their green color, breaks down. At the same time the tomato is losing its greenness and changing to a red color, many other changes also take place. The temperature of the fruit is the most important factor affecting the rate of ripening.

New Cucumber Bulletin

A new Wisconsin circular number 503 Growing Cucumbers for Pickling is now available. The new circular gives tips on soil management, fertilization, varieties, irrigation, disease and insect control cultivation and harvesting of the pickling cucumber crop. Copies are available from your county agricultural agent's office or by writing the Bulletin Mailing Room at the University of Wisconsin, Madison 6.

Garden Club News

OFFICERS

Pres.

Mrs. Harold Poyer, Rt. 1 Fort Atkinson Vice Pres.____Mrs. John Mille: Berlin

EXEC. BOARD: Mrs. George Willett, Iola; Mrs. C. H. Braman, Waupaca; Mrs. Ray Luckow Milwaukee; Mrs. J. C. Ziehm, Berlin; Parliamentarian—Mrs. Roy H. Sewell, 7341 N. 76th St. Milwaukee. Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

Convention Highlights

The 1955 Convention of the Garden Club of Wisconsin at the Baptist Colony, Green Lake, was one of the most enjoyable we have ever held.

Everyone was enthused about the accommodations and the beautiful surroundings at the Baptist Colony and members voted unanimously to have the 1956 annual convention at the same place on September 11-12.

Membership Increases

Mrs. W. N. Crawford, Berlin, membership chairman, reported that 11 new clubs were admitted to memberships in 1955. The Milwaukee Region added 6 new clubs this year.

Mrs. Chester Thomas, exhibit and judges school chairman, reported that 199 attended the Carl Starker lecture and demonstration at Oshkosh and that 17 members took the examination.

Mrs. C. H. Brimmer of Wausau, year-

book chairman, reported that 26 clubs had sent in yearbooks.

Mrs. John Dooley, West Allis, conservation chairman, gave a report together with a short movie from the Conservation Dept. on the value of controlling erosion. She has made arrangements for a workshop to be held the third week in June of 1956 at the Trees For Tomorrow Camp at Eagle River. Anyone interested should write Mrs. Dooley at 7724 W. Rogers St., West Allis, Wis.

Mrs. Robert Holly of Waupaca, horticulture chairman, suggested that each region appoint a horticulture chairman. We should try out all types of flowers in our garden, she said and is planning on articles in this magazine on new kinds of flowers we should all grow.

Mrs. Charles Bierman, Milwaukee, reported a substantial balance in the treasury from our activities during 1955.



Honored at the Annual Convention were, from left: Mrs. C. H. Brimmer, Wausau; Mrs. Clara Harrington, West Allis; Mrs. Mary Kolb, Berlin; Mrs. Mary Robertson White, Ft. Atkinson and the West Allis Garden Club with Mrs. Victor Schmitt, president, receiving the certificate.

Wisconsin Horticulture

Recognition For Outstanding Services

Beautiful certificates of recognition were presented by the Garden Club of Wisconsin and the Wisconsin State Horticultural Society to four outstanding gardeners, selected by their respective regions and to the second oldest garden club affiliated with the state organizations, at the annual convention. The following were honored.

MRS. CHARLES BRIMMER

Mrs. Charles Brimmer of Wausau was chosen by the Central Region, Garden Club of Wisconsin, as an outstanding member to be recognized for her services to garden clubs and gardening.

Mrs. Brimmer has been a loyal garden club member since 1938 and a member of the Wisconsin State Horticultural Society for 18 years. She has served as president, vice-president, secretary and treasurer, program chairman and flower show chairman of her garden club. She served the Wausau Anti-Tuberculosis Association for 20 years. She was instrumental in organizing an annual project providing cookies and candy for the patients at Mt. View T.-B. Sanatorium at Christmas time, which has been done for 8 years by the garden club. She has helped organize 4 new garden clubs in Wausau. She served on the city committee to regulate the planting of trees in the boulevards of the city of Wausau. She has been an officer in a number of other Wausau organizations.

About 15 years ago, Mr. and Mrs. Brimmer became interested in tuberous-rooted begonias and grow about 150 plants each year. They also love and grow many roses and are successfully growing 10 rose trees. This year Mrs. Brimmer is growing 500 gladiolus. Her garden has served as an inspiration to others and her articles and talks on how she grows her plants and flowers have given valuable information to gardeners.

It is for her inspiration and helpfulness in promoting garden club memberships and activities that she deserves special recognition.

MRS. CLARA HARRINGTON

The Milwaukee Region selected Mrs. Clara Harrington to receive the honorary award for 1955.

Mrs. Harrington has been a member of the West Allis Garden Club for 39½ years; she is the only surviving charter member. She has also been a member of the Wisconsin State Horticultural Society, with which the club has been affiliated from its beginning.

For 37 years she exhibited at all garden club flower shows and for the past 2½ years has contributed materials for other members use in exhibiting. She helped organize a number of junior garden clubs, speaking to them on horticulture and helping judge their shows. She has always been interested in conservation and has helped establish home beautification and conservation projects. She



has helped save beauty spots locally and in the state and nation. One of the biggest projects on which she worked was to help save the Japanese cherry trees in Washington, D.C. Many of these trees were to be cut to make room for memorials and it was through the efforts of women like Mrs. Harrington that their beauty is preserved. There is a tree planted in her honor in the Women's Club Forest at Whitnall Park. Mrs. Harrington has organized Audubon Societies and been active in selling Conservation Stamps.

She learned about herbs and their use from her grandfather, who was a Botanical physician and specialized in the medicinal use of herbs. On her ¼ acre lot she has specialized in growing lilacs, peonies and iris and has cultivated many roses and other garden flowers.

She was president of the West Allis Garden Club for 5 years and is still publicity chairman for the club and has been chairman for flower shows staged by the West Allis Garden Club Association.

Mrs. Harrington has been a civic leader for a half century and a founder and member of a number of West Allis organizations.

MRS. MARY KOLB

The Winnebagoland Region presented the name of Mrs. Mary Kolb of the Home Garden Club of Berlin to receive the honorary recognition certificate.

Mrs. Kolb is a gardener of long experience, having spent her early married life on a farm. She grew practically any plant you could name and always had an outstanding flower border. From this gorgeous display of blooms, many found their way to homes of shut-ins, hospitals and churches. Ten years ago the Kolbs moved into Berlin and with patience and hard work Mary converted an absolute ash heap into a living floral picture. Flowers from this garden were used for flower shows, weddings and altar decorations. An Easter Cross of Lilies was one of her outstanding creations at the Methodist Church. Her untiring an devoted efforts assure them of altaflowers each Sunday of the year. I early fall she pots chrysanthemums t take to church long after it is wintry out side. Chrysanthemums and Tuberou-Begonias are her specialties. She ha had some begonia bulbs for 15 years.

Mrs. Kolb has developed an inexpensiv fertilizer formula, especially good fo house plants that keep her busy during the winter months.

She has been a member of the Stat-Horticultural Society for 15 years, a charter member of the Garden Club. chairman of the program committee. president for two years and member of the Garden Club park committee.

She is a member of the City Park Board which has benefited much by her good judgment in plantings at the various Parks in Berlin for which she supplies the cuttings patiently grown thru the winter.

MARY ROBERTSON WHITE

Mrs. Mary Robertson White was chosen by the Blackhawk Region for recognition.

As a little girl, her mother taught her to love flowers and she had a flower garden of her own when just eight years old. She has ever been willing to share her knowledge of plants and flowers with others.

Mrs. White has been a member of the Ft. Atkinson Garden Club for 25 years and has served in each of the four offices of the club. She was secretarytreasurer of the Wisconsin Garden Club Federation in 1940-41.

She has always been willing to work on any committee when ever requested.

Mrs. White produced the first yearbook for the Ft. Atkinson Garden Club, for the year 1938. The club has had a book every year since. She has served on the yearbook committee as chairman and as a member many times since.

She has always backed the projects of the club, and has been especially active in helping with flower shows.

During Mrs. White's teaching career of 30 odd years, she always tried to instill the love of nature in her pupils. She was especially interested in trying to teach them to observe and respect wild life.

One of her special interests is the study of birds. Many birds make their homes (especially winter) at the Burr Oak Gardens where special attention is given to feeding them.

Mary has her favorite flower, the peony, of which she has some 3,000 plants to admire, and there are about 150 varieties for her to choose her favorite—a lovely pink one.

Mr. White has often heard her say, that if she could have but one annual it would be the nasturtium.

Mary has always been willing to share her flowers with others for many occasions, and always cooperated in all civic affairs.

THE WEST ALLIS GARDEN CLUB

The West Allis Garden Club was chosen for recognition by the Executive Board, Garden Club of Wis. The club is celebrating its 39th year, being organized by Mrs. C. E. Strong on February 16, 1916 with Mrs. Strong as president and Mrs. Clara Harrington as secretary. In the fall of that year, the club voted to ask for membership in the Wisconsin State Horticultural Society and Mrs. Harrington still has the receipt from Mr. Frederic Cranefield, then Society secretary, for \$3.00, dues for 12 members, dated October 26, 1916. The members were all amateurs and have benefited greatly from the meetings they attended, the lectures they heard and participation in many flower shows and project activities. They have always been active in the promotion of civic projects and participated in many flower shows, both locally and statewide. Some of the members, being expert gardeners, contributed to the interest in gardening

Continued on page 87

ANNUAL FALL MEETING MILWAUKEE REGION Wauwatosa Presbyterian Church,

2366 N. 80th St.

(One block north of North Ave.) October 25, 1955

Theme, morning session "Do It Yourself", Workshop.

9:30 a.m. Meeting called to order by President Mrs. Ray Luckow.

Christmas Crafts by Mrs. Victor Schmidt, West Allis.

9:50 a.m. The Art of Making Candles by Mrs. Harold Buerosse, Milwaukee.

10:10 a.m. Creative Arrangements of things selected from anywhere and everywhere by Mrs. L. G. Stewart, West Allis.

10:30 a.m. Business meeting. Election of officers.

12:00 m. Luncheon.

1:30 p.m. Demonstration of arrangements for holiday tables by Mr. Fred Quade, Becker Floral and Gift Shop.

ANNUAL FALL MEETING WINNEBAGOLAND REGION BERLIN, WIS., WEDNESDAY, OCTOBER 26

Methodist Church on Park Ave.

9:30-10:00 a.m. Registration.

10:00 a.m. Meeting called to order by Mrs. J. C. Miller, Regional President. Welcome by Mrs. J. C. Ziehm, President, Home Garden Club, Berlin.

10:15 a.m. October and November in Our Flower Gardens. Slides of arrangements at 1955 flower shows, by Mr. H. J. Rahmlow, Madison.

11:00 a.m. Flower Arrangement In Our Garden, with colored slides, by Mrs. A. J. Wiesender, Berlin.

11:30 a.m. Report of nominating committee, election of officers, activity report from each garden club.

12:00 m. Luncheon at the Hotel Whiting.

2:00 p.m. Holiday Arrangements, by Mrs. Victor Schmidt, West Allis.

3:30 p.m. Tea and social hour.

October, 1955

Principals of Balance

In Flower Arrangement

By Mrs. G. L. Lincoln, Madison

A good arrangement has proper balance, which can be either formal and symmetrical, or informal and assymmetrical.

FORMAL BALANCE — An imaginary line drawn through the high center creates two sides approximately equal in size and shape, and can be used in both line and mass arrangements. Too often one side is a rigid reflection of the other, both in form and material, and the finished piece is cold and forbidding. We should like to suggest a way of softening this rigid effect, and give you a step-bystep formula of Gregory Conway at one of his work schools. Examine the lovely and graceful examples of formal balance in his earliest book "Flowers, Their Arrangement", and you will see that they fit the same diagrammatic pattern show on the opposite page.

Mr. Conway's work class was using sanseveria or snake plant, croton leaves and hibiscus blossoms. For Wisconsin, one might keep a large pot of snake plant growing in the basement to cut for line material, or substitute German or Siberian iris leaves that have an interesting twist. Funkia or Hosta leaves are a substitute for crotons; peonies, roses, asters, medium-flowered chrysanthemums, or any round flower in season will do for the flowers at the focal point.

Formal Balance

- 1. Cut one tall leaf, place in center of needlepoint holder.
- 2. Cut pair of leaves 3 or 4 inches shorter than leaf above. Place one on left



N LINE DESIGNS

ASSYMMETRICAL



SYMMETRICAL

Wisconsin Horticulture

side of central leaf, close to it, but tilted slightly back toward the wall. Place other leaf to right of central leaf, close to it, but tilted slightly toward arranger.

- Cut pair of leaves 3 or 4 inches shorter than pair above. Tilt leaf on left side toward arranger, one on right toward wall, reversing direction of tilt given in step 2.
- 4. Cut pair of leaves for the horizontal placement, sized to length of table, longer or same as vertical placement in Step 1. Place in horizontal position on needlepoint, to right and left of central axis.
- Cut four leaves the same length, 3 or 4 inches shorter than horizontal placement in step 4. Place one on each side of right horizontal leaf.
- 6. Place remaining leaves in same way on each side of left horizontal leaf. This completes the basic form.
- 7. Fill in base with 5 hosta leaves, repeating basic form. (See sketch)
- 8. Add one large or 3 medium flowers to fill in focal point.

INFORMAL BALANCE — An imaginary line drawn thru the high center creates two patterns which are dissimilar in shape. Useful for both line and mass arrangements. Takes less material than the formally balanced arrangement, and is light and graceful in feeling. Visual balance easily achieved when tip of the tallest branch is directly over the needle point holder, though it need not always be placed in that position. Height of main branch sweeping upward is balanced by a long low branch to one side, and whole arrangement must have a good substantial focal point to tie it down and make the container a part of the arrangement.

Formal balance comes from the classical European art forms, and was long characteristic of American arranging. Informal balance, though newer in this country, is of Japanese origin, where flower arranging has been a major art form, comparable to Western painting, for centuries.

HONORARY RECOGNITION Continued from page 85

by holding meetings in their gardens and lecturing to theirs and other garden clubs.

One of the early activities of the club was to start a city beautiful club, with a Mayor presiding at the first meeting. This included a clean up campaign.

Club members assisted the Botany teacher in the High School in organizing Junior Garden Clubs and served as advisors on gardening and as judges for their flower shows.

For many years members exhibited at the State Fair as individuals and as a garden club. Exhibits were made in every state flower show held in Milwaukee; district shows at the Milwaukee Auditorium, the Milwaukee Gas and Light Co. and the Electric Co. Auditoriums, as well as shows in West Allis.

The certificate was presented to Mrs. Victor Schmidt, Club President.

CONGRATULATIONS

Congratulations to the Home Garden Club of Berlin for their splendid cooperation in helping make the 6th annual convention of the Garden Club of Wisconsin an outstanding success.

They furnished table decorations of Tuberous Begonias, Arbovite, Hosta leaves and trailing vine, supplied by Mrs. Hilda Huebner and Mrs. Mary Kolb of the club. Mrs. J. C. Zeihm, Mrs. J. C. Miller, Mrs. Hilda Huebner and Mrs. Mary Kolb planned the arrangements, which made the dinner tables most attractive.

If you work hard and save, some day you'll have enough to divide with those who don't.—DAC Ad-Viser.

A big part of a man's religion consists in getting along with other people.

-Union Grove Sun.

There's really only one thing wrong with the younger generation—a lot of us don't belong to it anymore.—Orfordville Journal

Here's my solution: When I lend someone a book, I borrow his umbrella.

YEAR BOOK WINNERS FOR 1955

Twenty Six Garden Clubs submitted beautiful year books for judging. The Judges used the schedule as printed in the November, 1954 issue of Horticulture.

The committee felt badly because most of the garden clubs fell down on one of the requirements. (Contents of the Year book, (d): A supplementary list of material related to program topics to be compiled by program chairman. 10 Points.). We felt that most clubs didn't realize just how important that requirement was. It counted 10 points against them which brought most clubs down into the eighty mark and they were just perfect in every other requirement.

Awards

The "First" award goes to the Green Thumb Garden Club of Jefferson County with Mrs. Irving Ley, Pres. This club rated 100%, or a perfect book.

The second award went to Fort Atkinson Garden Club with Mrs. John Kiesling, Pres. Their rating was 99%.

The third award was a tie with Green Gardeners of West Allis, Mrs. F. Fisher, Pres. and The Home Gardeners of West Allis, Mrs. F. Wittberger, Pres. Both clubs rated 98%.

Honorable mention also is a tie with Clara Larson Garden Club of Iola, Mrs. G. Willett, Pres. their rating was 95%. Also Antigo Garden Club, Mrs. R. Lyon,

Pres. and they rated 94%.

Two clubs rated 90 and had they had the required list in their year books they would each have received 100%. They are Amherst Garden Club, Mrs. Lester Ristow, Pres. and the Home Garden Club of Berlin, Mrs. J. Ziehm, Pres.

Respectfully submitted, Year Book Committee: Mrs. Edgar H. Bergmann, Brookfield (Milwaukee Region); Mrs. Marlen Steinbach, Clintonville (Central Region); Mrs. Irving F. Ley, Sullivan (Blackhawk Region); Mrs. E. Thieleke, Kiel, (Winnebagoland); Mrs. John Rasmussen, Oshkosh (Winnebagoland); Mrs. C. H. Brimmer, Wausau, Chairman.

KIEL GARDEN CLUB HOLDS FLOWER SHOW

There were 300 entries at the Kil Garden Club Flower Show on August 2 -28 and 250 guests visited the exhibits, which were shown at the City Hall. Garden Club members were very well pleased with the outcome of the show.

The club has adopted the petunia as its club flower.

Program topics during the past year included the following: pruning our shade and fruit trees; fun with flats; the glory of the gladiolus; Wing Haven birds; the age for chemical caution; grapes abundant; conservation department speaker; winter garden hobbies with bulbs and flowers; gifts that grow for the living. The Kiel Garden Club was organized in 1950.—By Mrs. Mabel Bruns, Sec.

OSHKOSH HORTICULTURAL SOCIETY NEWS

A series of six flower shows at the Paine Arboretum has been the leading project of our society this year. Slides of the blue ribbon winners were made and shown at our last meeting and prizes awarded to the six outstanding arrangements.

Our pot luck suppers have been very popular and we think help our excellent attendance. Informal discussions led by some of our own members have always proved interesting. Outstanding speakers during the year included Mr. Gilbert Hipke, New Holstein, with a brief history of the Horticultural Society and story of the development of the apple industry. Mr. Alex Katovich, Area Farm Forester from the Conservation Department, who spoke on forestry in Wisconsin. Our County Agent, Mr. Vern Peroutky and Mr. R. J. Rahmlow, Secretary of the State Horticultural Society.

-By Viona D. Zentner, Secretary

Men would be a lot better off if they would quit trying to understand women, and just enjoy having them around!

Reformers sometimes have their sights so fixed on success that they forget to start on themselves.—Phillips Bee

October In The Garden

IT'S TIME TO PLANT BULBS. Spring flowering bulbs, such as tulips, daffodils, crocus and hyacinths should be planted as soon as possible in the fall. There is no advantage in storing them, as they only dehydrate. The bulbs grow a root system during the cool fall months and the larger the root system produced the better they will bloom in the spring. In fact, if bulbs are planted after mid-October they should be covered with a mulch to prevent the ground from freezing before root growth can begin. If the bulbs do not produce a good root system below zero to five above zero, depending on decay during the winter.

The best planting depths are: Crocus, 2 inches deep; Scillas, 3 inches; Daffodils, 6 inches; Tulips. 6 to 10 inches and Hyacinths, 6 inches deep.

MOUND SOIL AROUND ROSES NOW. During late October is the best time to begin mounding soil around rose plants. Do it before the ground freezes. Make the mound as 'high as possible because hybrid tea roses will often winter kill 2 or 3 inches below the top of the mound of soil. Remember that hybrid tea roses will winter kill at temperatures from 5 below zero to five above zero, depending on variety and condition of dormancy.

After the ground freezes and during November, place a good fork full of marsh hay or straw over each plant. Prune the canes to within 6 inches above the mound of soil—which will help hold the straw or hay in place during the winter. Leaves may be added to the other mulching material but in themselves are not satisfactory because they blow away or become wet and soggy and do not protect the plants.

PUMPKINS, SQUASH AND SWEET POTATOES may be stored at a temperature between 55 and 65 degrees F., which is often found in a heated basement.

Carrots, beets and turnips may be kept in an unheated garage or shed or where they will keep dry and the air can circulate around them. At low temperatures they may be stored in boxes or baskets with moist soil packed around them. Parsnips and salsify may be left in the ground and dug during thaws. Parsnips are sweeter and more tender after being frozen. An outdoor root cellar may be made by sinking a large drain tile upright in the ground, with its top several inches below the surface. Cover the top with a lid insulated underneath with a straw mat. Hardware cloth may be used on the lid to protect the vegetables from rodents.

Tuberous-rooted Begonia bulbs should be thoroughly dried and if your basement is so dry that the tubers will shrivel during the winter, place them in a closed container, such as a honey pail with the lid pushed down tightly or a large mouthed mason jar or other glass container which can be closed. If the bulbs appear damp looking during winter, dry them out more and then replace or they will become moldy.

COLEUS AND GERANIUM plants should be propagated by making cuttings just before frost destroys them outdoors. Cut the stems of new growth about 3 inches long, remove all the leaves excepting those at the tip of the cutting and place them in a dish of moist sand. Keep the sand quite damp and never let it dry out. In a month or 6 weeks the plants will have a root system and can be transplanted into boxes or pots. They will then grow slowly throughout the winter and be nice plants by spring for the home or for the garden. More cuttings can be made next March for additional plants for the garden.

"Better late then never," is not half so good a maxim as "Better never late." —Beaver Dam Argus

The secret of good breeding is in concealing how much we think of ourselves and how little we think of others.

Questions About House Plants

By L. M. Berninger, Dept. of Horticulture, U. W.

Question: Now that fall and winter seasons are approaching, should I reduce the amount of water applied to my foliage plants?

Answer: Although normal day temperatures are lower during these seasons of the year, one should consider the drier atmosphere in the average home. As a result of a decrease in the humidity level due to our artificially heated homes. plants tend to lose a large amount of water. Unless this is realized one is apt to underwater their plants. The best guide to follow in watering plants is to check the soil moisture supply every day. Simply touch the surface of the soil with your thumb. If the soil feels dry apply water until the excess water drains from the drainage hole. When the soil feels dry to the touch delay watering your plants. By following this daily procedure you can prevent underwatering and also prevent overwatering.

Question: What foliage plants do best in a poorly lighted location?

Answer: Generally the following plants are tough and withstand poorly lighted locations: Chinese Evergreen (Aglaonema modestum), Snakeplant (Sansevieria zeylanica), Iron Plant (Aspidistra elatior), Peperomia (Peperomia obtusifolium), Philodendron (Philodendron cordatum), and Dracaena (Dracaena fragrans massange).

Regal Lilies

Question: Should regal lilies be dug and stored over winter after they have finished blooming and the leaves have dried down? Is it alright to leave them in the garden all the time for a number of years?

Answer: The regal lily is hardy and should be left in the ground until the plants become crowded. They should be covered with a mulch after the soil surface has been frozen. A 4-6" layer of evergreen boughs, marsh hay, or straw will provide adequate protection and prevent injury to the roots from alternat freezing and thawing.

Question: What makes the leaves of my gloxinia turn limp and curl under?

Answer: Probably the plant has been given either too little or too much water As a result the root system has been destroyed and the plant is not receiving sufficient moisture. Remember that this plant will start to die down in the fall after it has completed its blooming season.

SEARCH FOR A WHITE MARIGOLD STILL ON Prizes Given For Light Colored Marigolds

Judges in the Burpee Seed Co. contest to find a white marigold stated that there has been definite progress towards the ideal white flower but it has not yet been found.

The judges were very much impressed with the unusual merits of 20 of the marigold plants in the trail garden, which consisted of 204 rows of marigolds grown from seed, sent by that many persons from 38 states, planted at Floradale Farms near Lompoc, Calif. A \$25.00 award went to Mrs. Thomas Dale of Galesville, Wisconsin, the only winner from this state. There were several winners from Minnesota and Illinois.

It is possible that there may be a mutation at any time and a pure white marigold found. Burpee Seed Co. continues their offer to pay \$10,000 for seed from the first white marigold plant grown at the trial grounds.

SAVE THOSE LEAVES

Is your garden soil hard to hoe when dry? Did large cracks appear during the dry weather of August? Do you feel that your plants do not grow as well as they should? If so, your soil probably needs more organic matter. One way of producting this valuable material is to compost your leaves and other vegetable matter. Annuals which are through blooming, all above ground portions of perennials and weeds (without seeds) should go into the compost pile.

You can make a bin to hold the material or you can pile it up in an out of the way corner of the garden. You can buy chemicals to furnish bacteria or you can spread shovels full of good garden soil over the material which will both hasten decay by adding bacteria and help keep it moist. Addition of complete fertilizer will be helpful. It is best to turn the material over in the course of the year and keep it well watered—if dry, it will not decompose.

HOW TO PROTECT ROSES FOR WINTER

Most hybrid tea roses will winter kill or be severely injured if exposed to temperatures from 5 below zero to 5 above zero, depending upon variety and condition of dormancy.

In Wisconsin therefore, it is necessary that we cover our rose canes in such a way that they will be protected from such killing temperature at any time during the winter.

A WISCONSIN WHITE PINE TREE By Mrs. Charles Nightingale, Solon Springs

Visitors to Solon Springs, Wisconsin are reminded of the virgin forests of white pine that covered northern Wisconsin by the immense pine log in Mildred park.

Left by the early loggers a small stand of large pine was carefully protected by the Douglas County Forestry DepartThe most accepted method of covering is the mound of soil. With a shovel mound the soil in a cone shape around the stems as high as you can—the higher you mound it the better. It should be at least 10 inches high. This can be done anytime before the ground freezes. Soil is quite satisfactory because it stays in place well although heavy rains may wash it away and it should be replaced to the proper height.

Corn Cob Mulch

Mulching roses with coarsly ground corn cobs has been suggested by Iowa State College workers. However, the material would blow away in the wind and must therefore be covered with a waterproof covering. If the ground corn cobs become wet the material looses its insulation value and harbors molds. This applies also to materials such as peat moss. Leaves alone are not satisfactory as they blow away, or pack down when wet and unless covered with a wooden box or some water-proof material loose their insulating value. However, leaves can be piled up over a cone of soil and give added protection.

ment until lightning struck one tree in 1954. When it was cut this sixteen foot section contained 1,340 board feet of lumber and was 15 feet in circumference. The tree was 347 years old.

The log was loaded and moved to its present site by Robert Vincent of the Douglas County Forestry Department and Carl Wallin of the Jackson Box Company.



October 1055



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Women's Auxiliary Meeting WISCONSIN BEEKEEPERS ASSOCIATION WAUSAU, THURSDAY, OCTOBER 27th, 1955 Zion Lutheran Church

9:00-10:00 a.m. Making entries of honey cookery and candies.

10:00 a.m. Meeting called to order by Mrs. Arthur Schultz, president.

What's New In Our Gardens. How To Cover Roses. Colored slides of 10:15 a.m. new flowers for 1956. Garden question box. By H. J. Rahmlow, Madison.

11:00 a.m. Business meeting. Reports of committees. Election of officers.

12:00 m. Luncheon served by church ladies.

1:30 p.m. Joint meeting with beekeepers. Talk by Mrs. Harriet Grace, American Honey Institute.

2:30 p.m. How We Judge Honey Cookery and the Use of Honey in Cooking, by Mrs. Minnie T. Wilson, Home Ec. Dept. of the Vocational School, Wausau. Mrs. Wilson will tell how she judged entries in the cookery contest.

Honey Cookery Contest

Class 1. Honey Chocolate Cake. Not less than 25% honey.

Class 2. Honey Butter White Cake. Not less than 25% honey.

Class 3. Honey Sweet Rolls Yeast. Not less than 25% honey.

Class 4. Honey Chocolate Fudge Candy. Not less than 25% honey.

Recipe requested with each entry.

HONEY BAKING COMMITTEE: Mrs. J. A. Killiam, Dancy; Mrs. Henry Piechowski, Red Granite; Mrs. Carl Brickbower, Cascade.

NOMINATING COMMITTEE: Mrs. Emerson Grebel, Beaver Dam; Mrs. Walter Diehnelt, Menomonee Falls; Mrs. Herb Brown, Edgar.

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AUDITING COMMITTEE: Mrs. Henry Schaefer, Osseo; Mrs. Joe Grys, Mosinee: Mrs. Harold Knight, Dalton.

HOW BEES COMMUNICATE

Many of our beekeepers have no doubt read the wonderful book by Von Frisch of Germany, who discovered how bees communicate.

Many of us have seen the figure 8 dance of bees returning from the field and have merely regarded this dance as an expression of joy. Von Frisch, after

many painstaking experiments proved that this dance has certain meanings. If the bee makes a complete dance, 10 times in 15 seconds, then the food is about 100 yards away. However, if only 5 dances are completed in 15 seconds then food is about 1,000 yards away and if only 21/2 times in 15 seconds, then it is about 2 miles away. If the bee walks a straight line in the middle of a figure 8 and violently wags her body, the direction of this walk in relation to the vertical is the same as the direction from the hive to the food, in relation to the sun.

If the walk is straight up, then the food is towards the sun; if downwards, then away from the sun and so on for all angles in between.

Many of us will wonder how the bees can see this since they are in darkness in the hive. There must be some way of communication to give the information to the worker bees, because it is well known that many of them will immediately fly towards the source of food.

Von Frisch had members of his family place honey in a location unkown to him. As bees came to feed on this honey they were marked. When they returned, Von Frisch watched these bees and by calculating the direction and distance from their dance he himself was able to locate the honey, just as were the bees.

Nature is wonderful.

DADANTS PURCHASE LEWIS BEEWARE DIVISION

Dadant & Sons, Inc., Hamilton, Illinois announce purchase of the "Beeware" division of the G. B. Lewis Co. of Watertown, Wis. They will continue the manufacture and distribution of Lewis Beeware.

The G. B. Lewis Co. in recent years has become interested in the development of products made from glass reinforced plastics. Recently the Lewis and Parks families decided to sell their interests and the Lewis Co. was purchased by an outside financial group.

The Lewis and Dadant name will be continued and the distribution of the Lewis Beeware throughout the country will remain the same as before with but few changes.

Since 1928 the Dadants and the Lewis Co. have cooperated in sales and distribution of bee supplies, publishing a joint catalogue.

WISCONSIN STATE BEEKEEPERS ASSOCIATION MEETING

Auditorium of Zion Lutheran Church, Corner of 6th and Grant Streets, Wausau THURSDAY AND FRIDAY, OCTOBER 27 AND 28, 1955

Thursday, October 27

8:30-10:00 a.m. Registration.

10:00 a.m. Meeting called to order by president, Vernon Howard. President's message and business announcements.

10:30 a.m. Some of the Things We Are Doing At the U.S. Bee Culture Laboratory at Madison—Speaker to be announced.

11:30-11:45 a.m. Question and answer period.

11:50 a.m. Noon recess (a meal will be served by ladies of the church).

1:30 p.m. Talk by Mrs. Harriet Grace of the American Honey Institute.

2:30 p.m. How We Judge Honey Cookery and the Use of Honey in Cooking, by Mrs. Minnie T. Wilson, Home Economics Dept., Vocational Schools, Wausau. Joint meeting with Auxiliary.

3:00 p.m. Beekeeping From the Supply Manufacturer's Viewpoint—John W. Buchanan, The A. I. Root Co., Medina, Ohio; Arthur W. Kehl, G. B. Lewis Co., Watertown; Robert Dadant, Dadant & Sons, Hamilton, Ill.

7:00 p.m. Banquet by the Marathon County Beekeepers Association.

Friday, October 28

9:15 a.m. What the Bee Industry Association Has Been Doing for the Beekeepers of Wisconsin, by H. F. Dankemeyer, president, Industries Association, Marshfield.

10:00 a.m. Getting Along With the Beekeepers, by E. L. Chambers, Madison.

10:30 a.m. The National Beekeepers Federation, by Henry Schaefer, Osseo.

11:30 a.m. Luncheon in church.

1:30 p.m. Business meeting.

October, 1955

October In The Apiary

Reports from beekeepers in various parts of Wisconsin indicate that colonies are in about the same condition as to winter food supply as they were last year—somewhat short of stores.

There seems to be considerable pollen in the brood combs. This must be taken into consideration when weighing colonies.

What might have been one of the best years in the last 10, was a disappointment to many beekeepers because of heavy spring losses due to starvation. We must remember that an ample pollen supply increases brood rearing in February and March, resulting in greater honey consumption by the bees and greater danger of food shortage during those months.

October is the best month for feeding colonies. Brood rearing stops in mid-October in most colonies. The sugar syrup is then stored in the empty cells within the winter cluster and will be available during the coldest period of the winter.

Remember that there is some loss in feeding sugar syrup. A syrup made of 10 pounds of sugar and 5 pounds of water, making a total of 15 pounds, will when fed to a colony add only about 10 pounds of stores—or about the same a mount as the weight of the dry sugar. You cannot feed too much, but you can feed too little. If a colony is light in weight, one 10 pound pail of syrup actually doesn't add very much to their food supply. It is much easier to feed heavily in October than to find them light in stores next March or early April—or even in February.

A good colony headed by a vigorous queen will no doubt consume from 75 to 90 pounds of honey by the time dandelions.bloom next May. One might argue that it would cost less to kill the colonies now and buy package bees in the spring. However, in southern Wisconsin, where the main crop is obtained in June and early July, a strong over-wintered colony often produces 100 pounds more honey than a "package" colony.

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Winter Requirements

The following statement is made by Dr. C. L. Farrar in circular No. 702 USDA entitled "Productive Managemen of Honey Bee Colonies In The Northern States".

"The upper story (brood chamber) should contain not less than 40 pounds of honey preferably in dark brood comb. There should be 3 or 4 full combs of sealed honey on both sides of the hive The remaining combs toward the center should contain approximately 10 pounds of honey as much pollen as possible and a small area of empty cells for the active center of the cluster. The lower hive body should have 20 to 30 pounds of honey, with the heaviest combs near the outside and combs of pollen in the middle.

"The bees will occupy the upper story during the coldest part of the winter. The cluster will cover considerable honey, provided there is an open center 3 to 5 inches in diameter nearly free of honey. The bees will move honey to the upper combs when temperatures permit."

The Entrance

Relative to the entrance the bulletin states, "An upper entrance, in the form of a 1-inch auger hole just below the upper handhold is coming into general use. The lower entrance allows dead bees to be removed and thus keeps molding of combs to a minimum, while the upper hole serves as a flight entrance and an escape for moisture-laden air."

Protection

"A location exposed to sunlight and sheltered from prevailing winds is the most economical protection that can be given colonies."

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October, 1955



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State Horticultural Society. Annual dues are \$1.50 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

Entered at the post office at Madison, Wisconsin, as second-class matter. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 15, 1918.

How We Developed A Modern Farm Market

By Harold Rasmussen, Oshkosh

The first apple trees on Rasmussen Farms were planted in 1905 by my father, N. A. Rasmussen. We have been growing vegetables and berries on the original 20 acres here for over 60 years.

Our farms now total 110 acres, 30 acres in bearing apple trees and 30 more planted and we will continue to increase the acreage in apples and some pears. My boys Jack and Dick favor this idea.

After many years of selling our produce at both wholesale and retail, including a delivery route locally, we decided that our best move appeared to be the construction of a new modern farm market on our Highway 21 location which carries a heavy traffic load, and discontinue delivery to customers, concentrating our efforts on better production methods and selling-at-the-farm, wholesale and retail.

Our concrete block building is oil-heated for year round operation and includes the salesroom, refrigerated storage, work room and modern restrooms that customers appreciate, as they do the cold water for drinking.

We find the refrigerated room so valuable to us all through the year that we have added another unit this year and our plans include construction of more cold storage space.

We are satisfied that our present way of marketing is very satisfactory and suitable to our specific conditions and I believe that direct selling may be a practical and profitable venture for other growers who have, or who can secure a location that offers good prospects for success of this type of business.

Of course, one who plans to go into direct selling should really like to deal with the public and should know beforehand that he can secure dependable help.

We think it is important to be sure of a steady supply of top grade merchandise and that at least the larger part of the produce offered is from your own farm.

Our principle crop of course, is apples. We grow some cherries, plums and pears. Leaders in our vegetable department are green corn, of which we produce a succession of crops from very early until very late, and tomatoes.

Cantaloupe and watermelons are important among our crops too, and we find



Modern farm market at Rasmussen Farms, Oshkosh.

November, 1955

the demand is always there when you have the quality.

And perhaps most important of all, in our opinion, is that the grower should always pack exactly the same quality merchandise in the bottom of every package that he packs on the top.

APPLE PRODUCTION COST

How much does it cost to produce a box of apples? How many hours of labor go into an acre of orchard? These are questions answered by Washington State College studies jointly sponsored by the Washington State Apple Commission.

Labor Costs

In 1953, it took the Washington State apple growers 162 hours of labor to raise an acre of apples. The biggest single labor item was thinning, requiring 50 hours and using 30.9% of the year's labor. Pruning required almost as much time, 42.9 hours, a little less than an hour per tree.

The biggest labor item during the summer is irrigation using 23 hours and 44.2% of the year's labor requirement. Harvesting operations, including scattering boxes and hauling the fruit to the warehouse, accounted for 15.8% of the labor bill.

Labor	Per	Acre	of	Apple	Orcha	rd
Pruning						42.9
Thinning						50.0
Irrigation						23.0
Propping						8.0
Spraying						4.7
Other						7.8
Harvestin	g					25.6

Cost Per Box \$1.41

The total cost to produce a packed box of apples was shown by the Washington State College figures to be \$1.41 in 1953 based on a yield of 511 packed boxes per acre. This cost is not grealy out of line with recent years being about the same as the figure estimated by the Washington State College for 1952 of \$1.39 (on a 514 boxes per acre basis.) However, in 1951, the cost ran 21c higher, in 1950 they were 23c lower.

Per Acre Cost of Fertilizing Apples

Cost of fertilizing apples rose from 1926 to 1946. As high as \$46 per acre went into fertilizer cost. However, by 1950 this expenditure was much lower and in the Washington State College study of 1953 it was still less than half of the 1946 level. Only about two hours of labor were used per acre for applying fertilizers in 1953.—From the Apple Research Digest.

HOW APPLES WERE MARKETED IN 1893

In the annual report of the Wisconsin State Horticultural Society for 1893 we find a paper by A. L. Hatch of Ithaca, Wis. on marketing apples. Mr. Hatch was one of the leading fruit growers of the day, who frequently appeared on the programs of the society and was an officer for many years. He talked at the Court House at Baraboo during the summer convention, June 29, 1892 and stated:

"Those who do not have wagons with springs may market by putting straw in the bottom of the wagon box, then raising the box and putting a bundle of hay or straw right under the box; this will do away with a large part of the jar. Sort as they are picked, put them into barrels; face up the barrel with fine apples; shake the apples down well every time you put in a half bushel. If you have good, careful pickers and superintend the work yourself, it will be very rare that a wormy or defective apple will go in. Apples properly picked and packed are half sold.

"It is better for the grower to sell direct to those who use them; that is, direct to consumers. If we ship into Chicago we are dealing mostly with men who only handle the fruit. I shipped to Chicago and was astonished to find that Wisconsin apples had a market value that was above some other states."

A New Rabbit Repellent

By G. C. Oderkirk U. S. Fish & Wildlife Service

Fruit growers, nurserymen, and householders interested in protecting home plantings will be able to use a new repellent this fall to stop damage by rabbits. It has the chemical name "trinitrobenzene-aniline complex" (TNBA) and has the trade name "Ringwood Repellent." It is a product of the Ringwood Chemical Corp., Ringwood, Illinois.

Studies of this new chemical were conducted by workers of the U.S. Fish and Wildlife Service. During the course of the research project the repellent was used on a great many varieties of deciduous and coniferous plants. Burning occurred in the treatment of some conifers, hence it is recommended for use only on deciduous plants.

TNBA seems to be very objectionable to rabbits. Although a rabbit may take a initial nip of bark from a treated tree or shrub there is no inclination to renew the attack. Shrubs and trees have come through the winter unscathed or with very light damage in places where there were heavy rabbit populations.

Acetone is used as the diluent for TNBA. It is very fluid,—almost like water. It volatilizes very rapidly, even in rather cold weather, leaving a thin coating of the repellent substance on the bark. In our experience it is best to use a sprayer to apply the TNBA to shrubs and small trees, whereas larger trees, about 1½ inches and larger in diameter, are best treated with a 2 to 4 inch paint brush.

Now is the best time to treat shrubs and trees for winter protection. Considerable damage may occur in November if we get a freezing rain or heavy snowfall that covers vegetation and forces rabbits to attack shrubs and trees for succulent food.

Another commercial repellent that has proven quite effective against rabbits is called Goodrite Z.I.P. It is available



Apply Rabbit Repellent With Brush On Larger Trees Use one of the new repellents described in the article by Mr. G. C. Oderkirk.

through the B. F. Goodrich Chemical Co., Rose Bldg., Cleveland, Ohio. Now that a few quite good repellents are commercially available they will likely supplant Formula 96a, a repellent prepared through cooperative facilities of the U.S. Fish and Wildlife Service.

DWARF TREES

Dwarf trees have commercial possibilities but they require special treatment. At Vineland Station, Ontario, Malling 9 stocks giving trees about 8 to 10 feet high, have been planted for 17 years. The trees are trained to 4 wires, the trees 12 feet apart. The accumulated yield of these trees (McIntosh variety), over the 17 years was 2329 bushels, and yield from comparable standard trees was 646 bushels total during that time. All work in caring for these trees was done from the ground, even to harvesting the crops. —From Maryland Fruit Growers newsletter.

Ladder of success is full of splinters, but you won't feel them unless you start to slide down.—Enterprise Herald.

What Are Your Favorite Varieties of

Apples For Baking

Taste Tests Reveal the Kinds Consumers Like Best

In order to find the answer to this question, the leading Wisconsin apple varieties available in October were baked and taste tests conducted. The results were rather surprising and did not agree at all with the variety charts published in the past and found in the rear of the Wisconsin Apple Institute's recipe book "Use Wisconsin Apples, 55 New Ways".

The tests were conducted in two different places—at the Madison Food and Home Show and in the Horticultural Building, University of Wisconsin. Testers were selected at random. At the Home Show they were visitors and exhibitors while in the Horticulture Building they were members of the faculty and students. The results were the same.

Best Varieties

In the two different tests McIntosh, Jonathan, Cortland and Wealthy received the highest number of votes and were rated "excellent" by tasters.

Almost unanimously the tasters voted these varieties as less desirable after baking: Wolf, Red Delicious, Golden Delicious and North Western Greening.

The baking had been done by Mr. Carson Gulley, former University chef and now conducting a television program, "What's Cooking" on WMTV in Madison. Two programs on how to bake apples and best varieties for baking were given on WMTV by Mr. Gulley with the assisance of H. J. Rahmlow, secretary.

Varieties listed as best for baking on the variety chart, which has not been changed for many years, are: Cortland, Dudley, McMahon, N.W. Greening and Wolf River. As Dudley and McMahon are not in season in October, it left only Cortland, N.W. Greening and Wolf River recommended for baking. Of these three, Wolf River was almost unanimously voted the poorest, while N.W. Greening received more votes as the poorest variety than it did as a very good or good varie y. Oddly enough, there is always someone who likes any variety. Wolf River and N.W. Greening each received one vote as the best variety. Golden Delicious two votes as the best, while Jonathan, Wealthy, Cortland and McIntosh received one vote each as the poorest varieties. This indicates however, that the percentage of those who do not agree with the majority is very, very small.

In making comments, the testers said that they do not like a hard, firm apple after it is baked but prefer the flesh to be soft and well flavored. The reason they did not like Wolf River or N.W. Greening is due to the lack of good flavor which they tasted in McIntosh, Jonathan, Cortland and Wealthy. Red Delicious was too hard and leathery.

Immature apples were baked and tested but the tasters did not like them. In other words, for baking, an apple must be at its best.

How To Bake Apples

Chef Carson Gulley, after a number of trials, states, "A mature, soft apple such as McIntosh must be baked at a relatively low temperature: 350 to 375 degrees F. is best. Bake until done, which means to a texture you like." He found that a firm apple like N.W. Greening can be baked at 400 degrees F. when it will bake more quickly and have a softer texture when done. He found it best to bake in an open pan or dish rather than one covered. When covered, the steam bursts the skin of the apple; it turns mushy and has a poor appearance. He tested honey as a sweetener and found that it improved the quality and flavor of the product.

Value of Test

Wisconsin apple growers can take advantage of this taste test because they can recommend the varieties produced in greatest abundance in this state as good baking apples. While restaurants may desire a firm apple, such as N.W. Greening for baking because it holds its form and shape well, nevertheless consumers—the largest users of apples, prefer the softer kinds. McIntosh will not break down and become soft if it is baked at 350 degrees until it is done but not overdone. It had a very nice appearance as did the other varieties when properly baked.

ORCHARD IRRIGATION By Albert A. Ten Eyck, Pine Bluff Fruit Farm, Brodhead

Due to the severe drought in the summer of 1955, irrigation really paid off at Pine Bluff Fruit Farm. Our Jonathan apples received two applications of water in August, totaling an estimated 8 inches (27,154 gallons equals one acre inch).

The results were so marked that pickers asked the reason for the smaller size of apples on trees which were not irrigated without knowing they had been left as checks.

Our pump is a 4 inch Marlowe, powered by a 6 cylinder Chrysler engine, (Capacity 500 GPM at 90 lbs pressure, 800 gallons at 30 lbs. pressure.) We use 6 inch and 4 inch aluminum tubing with quick couplers.

Because we must pump water to an elevation of 110 feet, which requires about 47 lbs. pressure, we do not use sprinklers. That would require at least an additional 35 lbs. pressure. Instead we get the maximum amount of water possible by allowing the water to run directly on to the ground from the 4 inch tubing. The orchard must be in sod to do this.

We go down each tree row with a line of tubing, attaching 20 foot sections at regular intervals while the water is running.

A 10 foot section of tubing is carried along and is used as needed to insure even coverage.

Education is no help. If you could not read political speeches, you would not know what wrongs you are enduring. —Iron County Miner.

THE FRUIT GROWERS CONVENTION AT LACROSSE

The joint convention with our Western Wisconsin fruit growers and the Minnesota Fruit Growers Association held at LaCrosse on October 31-November 1 was well attended and the program excellent. Everyone seemed to enjoy the meeting very much. Dr. D. H. Dewey, Michigan State College gave two excellent papers on Apple Storages and Apple Bagging On The Farm. He said there has been an increase in new storage space in Michigan this year to accommodate 350,000 bushels of apples. From 8 to 10 million 3 to 5 pound bags are being used in bagging operations. About 50% of the apples are bagged at the orchards and the rest by the stores. The trend is to increase bagging. The size of the apples placed in bags depends a great deal on the market and growers must ascertain what the market wants. Some areas take small apples, some prefer mixed sizes, but most stores do not like bags entirely with apples of large size. We will publish Dr. Dewey's papers in early issues.

Materials for insect and disease control were thoroughly discussed and new recommendations will appear in this magazine in late winter. Dr. J. D. Moore said that this was not a bad "scab year" as a whole, but that he saw some very scabby orchards. Many growers however, had very clean fruit. The most leaf injury was again found on straight lime sulphur sprayed trees. Fireblight control with antibiotics was not found to be entirely successful, especially where the disease appeared after bloom, on new growth. Bitterpit, as found on large Wealthies in the LaCrescent area this fall might be associated with boron deficiency.

Dr. C. L. Fluke emphasized the need for using bait traps to determine when apple maggot flies are present, to get satisfactory control. Ammonia should be added every two or three days to keep the material active.

Senator Ray Bice of LaCrosse proved a very entertaining banquet speaker. The banquet was attended by 90 growers and wives.

November, 1955

November in the

Orchard and Berry Patch

With George Klingbeil

PRUNING TODAY

Why do you prune an apple tree? To begin with pruning is required to train the tree for the development of a strong framework that will support heavy crops without breakage and to develop a tree that can be efficiently sprayed, thinned, and harvested. High quality fruit is largely dependent on proper pruning.

Today much of our pruning is of a remedial nature. Trees in the past were grown to be sprayed with a hand gun. Today due to rapid mechanical developments most of the spraying is done with one man rigs and is entirely mechanical. Many growers are using air blast concentrate machines. Why is it remedial? The older trees must be changed and adapted to the new equipment. Trees must be thinned out and the tops must be lowered to provide satisfactory penetration and coverage of pest control materials. This type of pruning is not a detailed thinning out operation but rather the removal of larger branches, even in, many cases an entire scaffold limb. Diseased, broken, and injured branches should also be removed along with all branches that cause limb rubbing and nesting. Nesting branches are apparent when the weight of foliage and fruit causes them to pile or nest together and will prevent penetration of spray materials.

Trees must Be Open

It is quite important when air blast type sprayers are used to have the tree open. In order to have coverage there must be complete displacement of air within the volume of the tree. Dense growth will prevent complete displacement and will result in poor coverage of spray materials.



In heading back the tops of trees it is desirable to cut back to a good size lateral branch or in some cases removing the entire top to the first scaffold limb. Failure to head back properly will result in a whorl of shoots and a very dense top.

In orchards where trees are planted too close it is best to remove entire trees in diagonal rows rather than to "fan" or try to raise lower limbs. Such type pruning is only temporary and leads to more "high" fruiting wood.

VIRUS FREE STRAWBERRY PLANTS

Many growers this year and in future years will be interested in obtaining strawberry plants listed as being virus free and in some cases, nematode free.

Tests around the state have in most cases indicated that virus free plants have increased vigor, will produce more runner plants and will produce more fruit over a longer period of time. All these factors are important to berry growers.

No virus free plants are available at the present time of the following varieties commonly grown in Wisconsin: Beaver, Wis. 537, Wis. 214 and Wis. 261.

The virus free Premier variety introduced by the U.S.D.A. and commonly available from most nurseries, does not appear to have the plant character or fruit quality of the old Premier. Workers in the Dept. of Horticulture have agreed to discard all stock of this selection and attempt to obtain the true Premier variety.

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Growing Better Vegetables



Newer Vegetable Varieties

Interest in new varieties is almost universal among gardeners and growers. New varieties and strains of vegetables are appearing in increasing numbers each year. Why all of this interest and effort toward newer vegetable varieties? There are a number of reasons. In general there are four things breeders strive for in producing new vegetable varieties: (1) Higher yields; this is a factor which can mean more profit to growers, (2) Better quality; this is a point that covers quite a few things. It may mean better color or flavor, greater uniformity, better storage or holding quality, or other similar things, (3) Earliness of maturity; with certain crops this is of extreme importance to home gardeners and commercial growers alike, (4) Disease resistance; this is an ideal way to combat many plant diseases if it can be combined in a variety together with other horticultural qualities. In addition, the plant breeder may be interested in incorporating certain other things in a new variety to meet special needs. A good example of this is the effort to obtain the right type of snap bean plant which can be suited to mechanical harvesting of the crop. Another example would be the tendency for non-bolting in lettuce, spinach, or celery.

The importance of selecting proven adapted varieties of suitable quality cannot be overemphasized. This is the first step to success for both the home gardener and the commercial vegetable grower. Good varieties cost little if any more than inferior ones. In addition it costs as much in terms of labor, and other pro-



duction costs to produce a crop of questionable quality and yield from an inferior variety as it does to produce a good sized, high quality crop from proven adapted varieties. In short, the proper selection of varieties is the most simple and cheapest thing a grower can do to insure success with the production of vegetable crops.

Some Newer Varieties of Special Merit

There are a number of newer varieties of vegetables which have been tested and proven adapted to Wisconsin growing conditions. Seminole is a new green snap bean variety released last year. It is a new round-podded variety for fresh use, shipping and canning. The new Pennsweet muskmelon is very early, highly productive and shows acceptable table quality. It is a small to medium size variety. Both Wis. SMR 9 and SMR 12 pickling cucumber varieties possess good resistance to spot rot and mosaic diseases. The new Long Marketer slicing cucumber produced by Ferry-Morse is a selection from Marketer. It produces fruits of the same high quality but averaging somewhat longer in length. Golden Beauty is a new hybrid sweet corn variety of early to midseason maturity. Ears are very uniform averaging about 8 inches in length and of good market quality. The new Early Harvest onion is an exceptionally early, mild, high yielding variety. It will probably replace the production of early onions from sets in some onion producing areas. For gardeners wanting a very early watermelon variety of small size and good quality try New Hampshire

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Wisconsin Berry and Vegetable Growers Ass'n. DIRECTORS: Charles Braman, Waupaca: Gerald Hipp, Janesville; F. A. Burchell, DePere; Harry Barlament, Green Bay; F. W. Van Lare, Oconomowoc; G. E. Fieldhouse, Dodgeville; H. J. Rahmlow, Madison, Ex-officio.

CONDITION OF RASPBERRIES AND STRAWBERRIES, FALL 1955 By Geo. E. Hafstad

Raspberries and strawberries in 1955 present a peculiar picture. Most Wisconsin growers enjoyed a better than average year both as to yield and price; in fact, strawberry growers had one of the best years since the war. But all this occurred before the record-breaking drouth and heat of July, August and September. Many raspberries in August of this year dried up and looked like plants usually look in late October. Strawberry plants stopped growing and often barely stayed alive. Inspection for disease and insects proved very difficult. The strawberry leafroller appears to be coming well established in most plantings, and mites were found much more frequently than usual on the raspberries. The red neck caneborer and the mites, apparently thrived with the hot, dry weather. Madison had more than 40 days when the temperature reached 90 degrees or more.

growers who could irrigate Those had better-looking plants than those who did not; but even plants given ample water did not grow as well as they might, had the weather been cooler. In mid-September the weather became more normal and most areas have had some rain. Because of the cooler weather and more moisture. raspberry and strawberry plants have recently shown signs of "revival". Raspberry shoots are no longer wilted and strawberry plants are making runners. A long fall with considerable rain, however, is needed to help make up for the lack of growth during the summer.

Growers having plants to sell should take as good care as possible of all plants

so far as irrigating, mulching and avoidance of winter injury are concerned; because all indications point toward a lack of plants next spring.

VIRUS-FREE STRAWBERRY PLANTS **Continued from page 104**

What Is A Virus Free Plant

This year many strawberry plants are being advertised as "virus free". Let's look at this term. A virus free plant must be free of all plant disease causing viruses. To date, the most common way of detecting viruses in strawberry plants is to runner graft the variety to a susceptible indicator plant. In order to keep the plant "virus free" the factors that transmit viruses must be controlled. In strawberies the most common transmitters are aphids. Now then, if you start with plants that are known to be virus free and control all factors that transmit viruses during the growing sea. son, you should have plant stock that is reasonably virus free.

How To Control Insects

The most common method of controlling the disease transmitting aphids is to spray or dust the plants every 10 days to 2 weeks with parathion during the growing season. The fact that virus free stock was used to grow plant stock does not necessarily mean that the plants are virus free, unless rigid control procedures are followed. The sources of virus free strawberry stock is limited. However, there is adequate stock of plants that have been grown from virus free plant stock which may or may not be virus free. If you are buying virus free plants read carefully and consider the advertising and source of the plants.

Strawberry Plant Root System

Why Strawberries Need A Soil With Organic Matter

Back in 1897, Prof. E. S. Goff, then head of the Department of Horticulture, University of Wisconsin, investigated the root system of the strawberry plant. He gave a report at the annual convention of the Wisconsin State Horticultural Society at that time which is very interesting even in this day.

Have Short Roots

"The strawberry roots spread but a very short distance beyond the leaves and run downward mostly, and not as I expected to find them. We find that the deepest roots scarcely extend deeper than two feet and most of them one foot from the surface. When we think that the top of the strawberry plant is almost the shortest of any crops that we can growthat is why they do not run deeper and do not spread more. We washed out a section of a matted row two feet wide. The roots extended three inches on either side and the leaves extended about two feet. I make this statement of the strawberry plant that I cannot make of any other, and that is that the roots are beneath the leaves and not elsewhere to any great extent. Now, this fact has already caused the formulation of a new system of cultivation.

"We have found that the roots of strawberries are almost all small delicate roots, that they branch beneath the plants and do not extend beyond the plants. There are no large leaders. They are like the roots of grasses. The system is delicate and elaborate, and the closer we study it, the more delicate we find it. We can use but a small stream of water on the roots, and the stream will break them if there is too much water. The root hairs, which are really the part that takes in the water, are so delicate that it is practically impossible to remove them from the soil. We have found them by the use of a magnifying glass. It is difficult to do this. The root hairs take

in the most water. The system is extremely delicate and extremely elaborate. If we compare it with our plumbing systems in our large cities, it would put them to shame. It is simply marvelous. Each hair root is a pump, in that it has valves. It absorbs water from the soil with considerable force.

Need Open Soil

"What then is the ideal soil for the strawberry plant? It should be a soil that these delicate roots can penetrate, not heavy clay. These root hairs, it is very well proved, cannot exist any long time without oxygen. If it were flooded to a driving out of all the oxygen, it would kill them. If a corn crop is overflooded, it will kill the crop—so it is with the strawberry plants. The root hairs are then starved. It must be permeable. If soil is in its proper condition it is surrounded by a little layer of water. We should strive to make the soil as it should be."

STRAWBERRY PLANTS

We are now mailing our advanced listing of plants available next Spring. Have a good supply of healthy plants in spite of hot weather. Our selection includes "virus free" plants of Premier, Catskill, Sparkle, Robinson, Armore, Senator Dunlap, Tennessee Beauty, Bellmar, Blakemore, Empire, Vermilion, Plentiful, Pocahontas, Paymaster and Jumbo. Lots of, No. 2-14 and both kinds of No. 2-61. Our supply of Sharon is large but it will be all ordered close to this early date. No more Esteem until Fall of 1956.

Fieldhouse Fruit Farm, Dodgeville, Wisconsin. Home of Quality Since 1855.

Any Girl who thinks marriage is the end of her education has a lot to learn. ---Woodville Leader.

Man, like a postage stamp, isn't worth much unless he sticks to his job.—Ettrick Advance.


39th ANNUAL CONVENTION WISCONSIN NURSERYMEN'S ASSOCIATION SCHROEDER HOTEL, MILWAUKEE NOVEMBER 30-DECEMBER 2

The third annual short course held in connection with the Wisconsin Nurserymen's Association Convention will be held on Wednesday, November 30.

BUCKTHORN REMOVAL GAINING MOMENTUM

By Geo. E. Hafstad

The common Buckthorn, Rhamnus carthartica, which is the alternate host for the leaf rust of oats, will soon be on the way out in Rock County, if plans now being made develop. County and town officials are anxious to eradicate the buckthorn in the area as soon as possible. Recently, under Mr. Frank Campbell's guidance, members of the State Department of Agriculture, the Agronomy Division of the University and three or four town chairmen made a survey of part of Rock County to determine roughly the amount and extent of buckthorn in the area. A total of approximately 3 miles of old buckthorn hedges as well as many individual bushes were located growing along fence rows, roadsides and in pastures and woodlots.

Causes Losses to Oat Growers

It is on the buckthorn that the leaf rust of oats completes its life cycle in Wisconsin and from which new races may develop. The presence of buckthorn helps give the leaf rust an early start in the spring and thus causes oat growers large losses whenever weather conditions are suitable for leaf rust to develop. The problem therefore, is one of helping the owners of this harmful shrub to eradicate it. Tentative plans at present are that the county and town officials have agreed to furnish, free of charge, to any owner of buckthorn, the chemical spray needed to kill the bushes. In addition, when an owner has more than five rods of hedge, because of the amount of work involved, the county or town will also furnish labor and equipment. These plans are still in the formative stage but it is hoped that they will materialize and that farmers in Rock County will avail themselves of this opportunity to eradicate the buckthorn and thus reduce the annual losses due to leaf rust of oats.

OUT-OF-THE-ORDINARY BERRIED SHRUBS FOR SOUTHERN WISCONSIN

Red Chokeberry, Aronia arbutifolia, has bright-red clusters of pea-sized fruit that hang on a long time.

A small shrub to about five feet, it is bushy and vigorous. Small, pinky-white flowers come in May. Leaves turn red in fall. It goes well with evergreens, likes moist soil, and will stand a little light shade. The variety "brilliantissima" is recommended.

Silver Buffaloberry produces showy scarlet berries that please people as well as birds. They make good jelly. This is a somewhat thorny shrub — it can be trimmed up as a little tree—with narrow leaves silvery on both sides. It is also a good hedge plant. The small yellow flowers are not showy. Shepherdia argentea stands both cold and drought.

Chenault's Coralberry is a hybrid between the American Indian-current Coralberry and a Mexican species. A small shrub, fine for the front of the shrub

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WISCONSIN GLADIOLUS SOCIETY

OFFICERS

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Mrs. Joseph Rezek, tary 2, R.

Manitowoc r---Dr. H. A. Kasten, 315 Wausau urer_ Washington St.,

DIRECTORS: Manitowoe Chapter: Joseph Resek and Gil Thompson, Manitowoc. Twin City: Jerry Merchart, Marinstte; Arthur Kottke, Oconto. Madison: John Flad, Madison; Ed Lins, Spring Green. Sheboygan: Paul Beer, Port Washington; Walter Axel, Sheboygan. Marathon Co.: Ed Schaege, Wausau: Ray Quady, Minoequa. At large: Al Schmidt, Two Rivers; Leland Shaw, Milton; Gordon Shepeck, Green Bay; Dr. R. Juers, Wausau; Charles Melk, Milwaukee; R. Burdick, Edgerton.

ANNUAL MEETING REPORT

The annual fall meeting of the Wisconsin Gladiolus Society at Appleton on November 6 was well attended-the best attendance in years, with almost full attendance of the Board of Directors.

We extend thanks to the Fox River Valley Gladiolus Chapter for their hospitality and the excellent arrangements made.

This issue is ready for the press and we can only give a brief report. Details will be published in our next issue-January, with a full list of new officers and members of the Board of Directors.

All officers were reelected excepting that Mr. Al Schmidt of Two Rivers was elected vice-president.

Dr. S. F. Darling, Appleton and Mr. Al. Schmidt, were elected on the Wisconsin Central International Gladiolus Show executive committee from the northern section. This committee of seven, three more to be appointed by the Madison chapter and two by the Southern Wis .-N. Illinois Gladiolus Society, will make plans for the coming show.

Plans for holding the show in the University Fieldhouse at Madison next August are taking shape. The society voted to make available to the executive committee the amount of \$200 for advance expenses.

Mr. Ted Woods of Madison was elected to represent Wisconsin on the Central International Show committee.

Speakers on the program were Mr. Sidney Wilson of Menasha who presented an excellent paper on Better Promotion For Our Gladiolus Shows. It contained a number of valuable suggestions for mak-

(Continued on Page 110)



MARATHON COUNTY GLADIOLUS CHAPTER ENCOURAGES AMATEUR ARRANGERS

Shown in the picture are Miss Betsy White and Miss Toddy Kramer, who tied for the Champion Artistic Arrangements Sweepstakes at the Marathon County Chapter Show in August. The Champion Artistic Arrangement was shown by Miss White and the two girls both scored the same number of points and won the same number of blue ribbons at the show.

The Marathon County Chapter is to be congratulated for promoting this splendid educational project of interesting amateurs in gladiolus and flower arrangement.

(Continued from Page 109)

ing our most beautiful flower more popular with the public. His paper will be published in an early issue. If Mr. Wilson's suggestions can be carried out by each chapter and by the state society, not only will our shows be well attended but the beauty of the gladiolus will be more highly appreciated.

Prof. Louis Berninger, Extension Floriculturist in the Dept. of Horticulture, U.W. gave an excellent presentation with colored slides on Chemical Weed Control For Gladiolus and a number of suggestions for insect and disease control.

Bacterial Scab Control

Prof. Berninger reported on 1954 gladiolus disease control tests in Illinois. Bacterial scab has become one of the most troublesome gladiolus diseases. Corm treatment with various mercury compounds has in some cases been helpful but in others have been very disappointing. Results of experiments in Illinois demonstrated that bacterial scab can be reduced greatly by use of insecticides. These results helped to confirm the supposition that the scab organism is spread by soil insects. While the kinds of insects involved are still unknown, soils heavily infested with white grubs nearly always produce scabby corms. The Illinois workers observed that soil samples from the gladiolus test plots carried large populations of various species of nematodes. It is therefore conceivable that nematodes may be the agents responsible for spreading scab.

It is not trying and failing that proves the metal of a man, but in his failing to try.—Phillips Bee.

THE CENTRAL INTERNATIONAL SHOW

The Central International Gladiolus Show was again the most outstanding show in the midwest. It was sponsored by the Indiana Gladiolus Society which celebrated its Silver Anniversary and was held at Wabash, Indiana in the air conditioned and beautiful Honeywell Memorial Building.

There were representatives from Ore-

gon, California, the Midwest states, th East and Canada. From the East cam Gove, Arenius, Summerville, Hartmar Sebesy and many others; also, the presi dent of the N.A.G.C., Mr. H. M. Sherman Jr., but his stay was short as hurrican Connie was flooding his home. Represent ing Wisconsin were Mr. Dave Puerne and Mr. and Mrs. Ted Woods.

The quantity of bloom was not as plentiful as in previous years but the quality was excellent in spite of adverse weather conditions which were general this year.

Grand Champion single spike was Heirloom; 3 spike Grand Champion, Vera: Resent Introduction, Ethereal. The American Home Achievement Award and 3 spike Reserve Champion went to Ted Woods on a beautiful white seedling 1-51-50, which was named Larchmont, by H. M. Sherman, Jr., for his home town.

The banquet was held in the spacious dining rooms of the Honeywell Building and served smorgasbord style. There was turkey, chicken and barbecued beef, a dozen kinds of salad and as many kinds of pie. This banquet will long be remembered by everyone who took part in it.—By Ted Woods, Madison.

MARATHON COUNTY CHAPTER ELECTS

The Marathon County Gladiolus Chapter met on September 28th and elected Dr. R. H. Juers and Mr. Mark Splaine members of the state Board of Directors.

The annual meeting and banquet of the chapter will be held on November 9. Trophies and ribbons were handed to winners at our local show, which was held August 13-14.—By A. W. Schulz, Pres.



Wisconsin Horticulture

Some Trials and Tribulations **Growing Gladiolus In 1955**

By James Torrie, Madison

I have grown gladiolus in the Madison area for the past 15 years. The quality of the bloom and corms this year were the poorest that I have experienced. This I believe was primarily the result of adverse weather conditions. At Madison we had approximately 40 days with the temperature over 90 degrees F and no rain from early August till early October.

Part of my planting was in an area where I was not able to apply any water. In this planting the performance of the glads was much poorer than the planting I had at my residence where I was able to water until Mid-August. At this time the water supply in Madison was critical and sprinkling was discouraged. The bloom from late plantings and even early plantings of late varieties were only mediocre. In the area where no water was applied the season was over by the third week in August. Planting stock which normally blooms in September either did not bloom, due to poor growth or produced spikes on which only a few buds opened. John Flad had most of his bulblets and planting stock planted in an area where he was able to irrigate most of the area. In the part where irrigation was possible the bulblets and planting stock made excellent growth during the past six weeks and bloom was profuse, whereas in the other part growth was poor.

Harvesting

I harvested my bulbs early this season, starting about September 10th and finishing about October. In the area where no water was applied I did not get back what I planted. Corm size was small even from large corms. The corms produced from planting stock were about the same size as those I planted, whereas those from the bulblets were about the size of a large bulblet. Where I was able to water to a limited extent the corm size was much better but still not up to other years .

A friend made an interesting observa-

not able to apply any water this year. He had two adjacent rows of Red Charm. One he harvested around September 15th, the other October 15th. During the last week in September we received about 1 inch of rain. The corms harvested at the later date were considerable larger than those harvested early. At the time the first row was harvested the soil was completely dry and had been in this condition for over a month. The roots of the plants appeared to be completely dried up. The large increase in corm size during this period indicates that the plants were in a dormant condition earlier and when moisture was available growth of the corm was resumed.

tion regarding corm development. He was

Curing

It is desirable to cure gladiolus corms rapidly. This can be done by applying heat at about 80 degrees F. Another way is to spread the corms in boxes raised off the basement floor and blow a current of air across them by means of an electric fan.

After the corms have been cured, remove the old corm and dust with a mixture of 5% DDT and Arasan or Spergon. For small lots this can be accomplished by placing the corms in a paper bag, then add one teaspoon of mixture and shake thoroughly. Many large growers dip their corms in a solution of wettable DDT plus either Spergon or Arasan directly after harvest. The DDT is to control a small insect called the thrip whereas the Spergon or Arasan is to help control surface borne diseases.

MOULTON IRRIGATION COMPANY Represented by H. D. Roberts

From the Editor's Desk

OUR COVER PICTURE

The beautiful picture on our cover this month illustrates the article in this issue by Mrs R. H. Sewell, Milwaukee, "Let's Talk About Niches".

"The nich", writes Mrs. Sewell," is a receptacle in a wall, especially one for a bust."

Mrs. Sewell presented the article as a lecture to several garden clubs, and the members requested that it be printed. We express our appreciation to Mrs. Sewell for both the article and the picture.

WE'LL BE WITH YOU AGAIN IN JANUARY

As most of our members know Wisconsin Horticulture is not issued in December. We know you will be very busy that month preparing for the Christmas holidays. However, in January we'll again be with you and report on convention proceedings, with some of the papers given by speakers.

He is wise who can make a friend of a foe.—Cuba City News-Herald.

Members Honored For Services

Society Presents Certificates of Honorary Recognition to Wm. Connell and Arno Meyer at Annual Convention For Services To Horticulture

WILLIAM F. CONNELL

Mr. William F. Connell was born on a farm in Chippewa County, where both his father and grandfather operated medium sized orchards along with general farming.

He owned an orchard and farm in Chippewa County from 1931 until 1940 when Sunridge Orchards of Menomonie was purchased from the Federal Government, the former management having experienced financial difficulty, lost possession. Parts of the orchards had not been pruned for 10 years; drought had hit the area in 1933 and 34, causing many trees to die. Terrific mouse damage had killed trees by the hundred, blight hit hard and took its toll, at least 1/3 of the trees were missing in the orchard when Mr. Connell took it over. He immediately started a tree planting program, filling in all empty spaces and increased the size of the orchard from 105 to 150 acres. He has modernized the orchard, built modern houses for his workers and is



Mr. William Connell, Menomonie, Wis.

operating an exceptionally effecient packing house.

Mr. Connell helped to organize the Wisconsin apple Institute and was its first vice-president. He served as director, president and vice-president of the Wisconsin State Horticultural Society. He has been a member of the Dunn County Board and of the Menomonie City Council.

Mr. Connell originated and has operated the Wisconsin Apple Market at Clearwater, Florida for the past two years. He is advertising Wisconsin apples as well as cheese over radio and through newspapers.

He has introduced a new apple called Connell's Red, which was discovered in the orchard and which will soon be available to growers.

Mr. Connell has ever been helpful in giving information from his experience to other orchardists who have come to him. He was active in helping organize the joint Convention of the Minnesota Fruit Growers Association and Western Section of the Wisconsin State Horticultural Society, which has become very successful. Several interesting orchard tours and meetings have been held at Sunridge Orchard.

ARNO MEYER, WALDO

Arno Meyer of Waldo has been connected with orchard work ever since he graduated from the University of Wisconsin, with exception of the time he served in World War I.

Mr. Meyer was born at Cascade, Wis., just two miles from where he now lives. He attended Waldo High School and majored in horticulture at the University of Wisconsin. He spent a season in a Michigan orchard and one in an orchard near Sturgeon Bay. In 1916 Mr. Meyer operated an orchard service and rented farm orchards. In 1918-19 he served in the U.S. Army and in the North Russian expedition to Archangel. On his return he resumed orchard work, and married Norma Angel in 1921, settling down with a small orchard in the village of Waldo. In 1923 he started the orchard on which his family now lives. An adjoining farm

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was purchased in 1944 and the orchard now covers 50 acres of cherries and apples. A large share of the later planting has been top worked on hardy stocks with some pleasant and some unhappy results.

Mr. Meyer has been a member of the Wisconsin State Horticultural Society since 1914; a member of the Board of Directors for several terms and vicepresident and president for 2 terms each. It was during his term as president that the Wisconsin Apple Institute was organized and he has taken an active interest in its welfare ever since.



Mr. Arno Meyer, Waldo, Wis.

Mr. Meyer has two sons who are now actively engaged in operating the orchard and he is very happy that they take a real interest in it. They have always worked with apples and like them. There are four life members in the State Horticultural Society in the Meyer family.

Since 1916 Mr. Meyer has been a consistent exhibitor at the Wisconsin State Fair, this last season being his 40th year of exhibiting.

Mr. Meyer has been president of the Sheboygan County Fruit Growers Association since its organization and has contributed largely to its success.

Garden Club News

GARDEN CLUB OF WISCONSIN EXEC. BOARD: Mrs. George Willett, Iola: Mrs. C. H. Braman, Waupaca; Mrs. Ray Luckow, Milwaukee; Mrs. J. C. Ziehm, Berlin; Parliamentarian—Mrs. Roy H. Sewell, 7341 N. 76th §t., Milwaukee. Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

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Vice Pres.____Mrs. John Miller, Berlin

Regional Meeting Highlights

The Regional meetings of the Garden Club of Wisconsin were well attended this year and programs were unusually good.

Blackhawk Region

President, Mrs. Allen Ley reports evervone had a most enjoyable time at the Blackhawk Regional meeting at Helenville, September 26th. The Green Thumb Garden Club sponsored a flower show and the achievements with a few flowers remaining at that season of the year and dried materials were surprising.

The Region is investigating opportunity to give help to the veterans at the Waukesha Hospital in obtaining materials for games and activities in which they are in great need. Mrs. Howard Smith of Lake Mills showed colored slides of the 1955 Rose Parade.

Central Region

The Central Region met in the Lutheran Church, Amherst, September 27. Represented were members from the garden clubs in Wausau, New London, Clintonville, Antigo, Iola, Waupaca, Park Ridge (Stevens Point), Rosholt, Amherst and Ogdensburg. Speakers who gave instructive talks were Prof. George Ziegler, Madison; Mrs. A. J. Wiesender of Berlin: Mrs. Chester Thomas of Milwaukee; Mr. C. H. Braman, Waupaca and Mr. H. J. Rahmlow, Madison. There was a delightful luncheon, prepared by the church ladies and a tea served by the Amherst Garden Club after the program. Mrs. E. A. Lutz, Iola is the publicity chairman.

THE MILWAUKEE REGIONAL MEETING

About 160 members attended the Mil-

waukee Regional meeting and workshop on October 25.

Mrs. L. Reinsch, publicity chairman, writes, "The speakers for the work shops used wonderful philosophy in showing their ideas. Mrs. Victor Schmitt instilled the thought of Christmas and its meaning. Working as a family can be fun in making your decorations and getting a closer relationship within the home.

"Mrs. Harold Buerosse gave the women an idea of how not to get bored by getting a hobby such as candle making, which it seems has been a lost art for some time. She demonstrated how to make glamorous candles for decorations and beauty and to find many more new ways of using them in the home.

"Mrs. L. G. Stewart used three words in her talk which made all members do just what the words imply: Think; use your imagination and creativeness by using the imagination.

"At the afternoon session Mr. Fred Quade of the Becker Floral Shop showed arrangements for holidays throughout the year."

Everyone was happy about the enthusiasm of the members and attendance at this meeting.

REGIONAL MEETING WINNEBAGOLAND REGION

The Winnebagoland Regional meeting, with the Berlin Garden Club as host was most interesting and enjoyable. The afternoon attendance to hear Mrs. Victor Schmidt of West Allis on Holiday Arrangement was 90 members and guests. The program was well balanced, with

Continued on page 121

CONSERVATION PROGRAM AT OUR CONVENTION

By Mrs. J. W. Dooley, West Allis

At our evening session at the Convention Mr. Jerry Olson, Educational Director for **Trees For Tomorrow**, was the speaker and told us about the origin and purpose of the organization. He listed the three periods in the development of Forest Conservation:

Too many trees.

Too few trees.

Resource management.

Much of northern Wisconsin is good only for growing trees, which create watersheds and homes for wildlife, and hold the soil in place.

Trees For Tomorrow is sponsored by paper and power companies and is in its twelfth year. Its objections are fourfold:

1. Distribution of free trees (to promote interest in forestry).

2. Furnishes machines for planting trees. (To promote large scale reforestration and encourage sustained yield on privately owned woodlots).

3. Offers preparation plans—when and how to plant. (To get on the land and furnish expert acre by acre service).

4. Resource Education at the Camp at Eagle River.

The camp operates from March 15th to November 15th. Each year it serves 1500 students and 1500 adults. Under the Educational Director, it provides a workshop curriculum about 3½ days in duration; also furnishes living quarters, meals and transportation from camp.

Cooperating agencies assist the program, such as schools, colleges, universities, industries, agriculturists, etc.

The program varies according to the current interest or special requests.

There are 2½ million acres that need reforestration and 14 million acres that need to be managed to encourage sustained yield on privately owned woodlots.

Workshop Next June

The Garden Club of Wisconsin was offered a Workshop Period for 1956 on the weekend of June 10th. As the camp only accommodates 35 people, it means "first come first served". The cost of the workshop is \$19 to \$20, including rooms, meals, and transportation while at camp.

As we must make reservations for that period, if interested, please write me within the next month. (Write Mrs. Dooley at 7724 W. Rogers St., West Allis 14, Milwaukee).

The evening closed with a very entertaining colored cartoon called "Johnny Raindrop". It is available from the Conservation Department, State Office Building, Madison, Wis. We also had a display of some of the "nature displays" to supplement programs, also available from the Department.

It's great to live in a free country. If you don't like the weather where you live, you can move somewhere else and not like the weather there either.



TWENTY-SECOND ANNUAL HOME AND GARDEN PILGRIMAGE TO MEXICO

February 10-20, 1956

This is the annual Pilgrimage of the TEXAS GARDEN CLUBS, INC. It offers Club members and their families unprecedented courtesies. Gardeners are invited to join the Pilgrimage in San Antonio, Texas.

Luncheons, teas, dinners, flower arrangements in the exotic manner of Mexico, make this a rare opportunity. Mexico will be seen as few others see it. The private homes seen are magnificent. And, in addition, there will be hundreds of miles of sight seeing . . . Cuernavaca, Tasco, Xochimilco, etc. . . all are included. Acapulco and the Orchid Country are optional trips.

Garden Club members and their friends should write to Mrs. Ben G. Oneal, International Pilgrimage Chairman, 2201 Miramar, Country Club Estates, Wichita Falls, Texas for literature and reservations. Early reservation insures choice Pullman space.

WELCOME WEST MILWAUKEE GARDEN GATE CLUB

The officers of the Garden Club of Wisconsin and Wisconsin State Horticultural Society are pleased to welcome to membership the newly organized West Milwaukee Garden Gate Club. The club met on October 12th at the home of Mrs. Marion Hall. Mr. H. J. Rahmlow, Madison. installed the officers and presented the program. Mrs. Ray Luckow welcomed the club to membership in the Milwaukee District. Mrs. Marion Ermenc is president, Mrs. Jane Beattie, vice-president, Mrs. Elsie Santarius, recording secretary, Mrs. Sylvia Arnold, corresponding sec.treasurer and Mrs. Maxine Sweeney, historian. The club is planning a very active program for 1956.

Don't worry about the younger generation not knowing the value of money. Just wait until they start paying off our debts.—Menomonee Falls News.

FILMS AVAILABLE FOR YOUR CLUB MEETINGS

The following full-color, 16 mm. sound movies, with an expert speaker who will show the films and answer questions and gardening problems are available from Swift & Company. Wisconsin clubs should write to this address: Swift & Company, Plant Food Division, Box 152, Madison, Wis. The following are the films.

"Dreams Come True" (No. 1 and No. 2) —each 27 minutes—depict a series inwhich a young couple plan, landscape, and care for their new home surroundings.

"How Does Your Garden Grow?"—(30 minutes)—Deals with insect identification, habits, and controls. This is excellent time-lapse photography.

"Food For Thought", (27 minutes) is on plant nutrients—what goes into a complete plant food.

"Bouquet of Beauty", (12 minutes), gives recommended practices of planting, pruning, dusting and feeding roses.

"The Way to Better Vegetables", (11 minutes), gives 10 specific steps to growing better vegetables in the home garden.

WINTER BIRD SURVEY

This year, as usual, the Audubon Societies join with similar groups throughout the country in making a survey of the birds remaining during the Holiday Season.

Bird lovers are asked to help in this count by observing the birds at feeding stations and in the neighborhood. Of particular interest will be those birds not usually seen during the winter. Most birds that are common in the summer are unusual in the winter—such as the Catbird, Brown Thrasher, Mourning Dove, Flicker or Robin.

The presence of these birds may be reported to some member of your local bird club, or to me.

Mrs. R. A. Walker, 2222 Chamberlain Ave., Madison, President Madison Audubon Society.

Let's Talk About Niches

By Mrs. R. H. Sewell, Milwaukee

(Illustration on Front Cover)

According to the dictionary, "A niche (pronounced nich) is a receptacle in a wall, especially one for a bust." The word is a Latin derivative, indicating that its origin was in Italy. Later it was introduced in Greece. Statues of Gods and Goddesses, Heroes and Sacred figures were displayed in niches. In England, niches are found in Westminister Abbey. All over the world and in our own state, grottos are built for sacred worship.

Shadow Boxes

The terms "Shadow Boxes" were the first niches used for flower arrangements. They required skill not only in arrangements but in the use and placement of lights to form an artistic, well designed and definite "shadow".

It was a challenge which should be revived because of its unusual possibilities. "A line arrangement produces a fine shadow". The shadow reflects lines and spaces in their true relationship. It is most valuable in testing the perfection of a flower arrangement.

Still Life

Following the shadow box were the still life pictures. There were large niches, 6 feet high, 4 feet wide and 2 feet deep. They were used horizontally and required a great deal of material. Fruits, vegetables, artificial and dry materials were employed. In the schedules they were listed to represent the seasons, snow, rainbow, harvest, etc.

Modern Niches

Smaller niches, 36"x24"x18", which are the dimensions used in present day exhibits are always popular.

At first copies of old prints, flower pictures and still life pictures were called for in the Flower Show schedules.

Today originality is stressed in the topics and in the niche arrangement themselves. F. Gregory Conway writes "Numerous opportunities for flower designs exist in modern homes. Some architects even include a recessed niche for a flower arrangement and when planned as a focal point for the room, it functions in much the same way as a mural."

In the home a niche sometimes presents a problem. Always have a substitute ready when the previous arrangement has lost its interest or freshness. This is acquired by the use of a beautiful vase, statuette, dried material or foliage combined with a figurine.

Principles of Arrangement

The following principles apply in to niche arrangements:

1. Design

2. Color Harmony

3. Proportion

4. Unity of Textures

Design. The same rudiments of design used in flower arrangement apply to a niche exhibit. When draperies are added they should be either plain or in soft vertical folds. If a triangle drapery is desired the diagonal should not cut the lines of the arrangement which should also be a triangle in its formation.

Color Harmony. Color harmony is most important. In the niche, a background of neutral gray or green blends with the other colors in the picture. The background should always be submissive so as not to detract from the center of interest. German and Italian modern decorations use a deep blue. Red is appropriate for patriotic themes.

Proportions. In a niche, because of it being an inclosure a small margin is needed on each side and the high line about two thirds of the height. The niche should be placed slightly above eye level. Sometimes a block is used to raise the arrangement and add stability at the base.

Textures. Harmony in textures should exist between the container, the background, dried materials and a figurine if they are used. Often a figurine emphasizes the theme and completes the rhythm required but should always be a related part of the arragement.

Use And Purpose of Niches

A lighted niche adds glamour to its contents. The light must intensify the arrangement and should be in frosted or amber bulb.

Whether simple or exotic the picture should demand admiration. It should express the theme the floral artist has sought to portray. Whether the theme is specified in schedule or of her own selection, it is the arranger's personal origination and the reward for thought, labor and imagination. Without it the picture is abstract, lacks animation and becomes commonplace.

In conclusion, Dorothy Biddle writes, "Flower Arrangement has come to be one of the outstanding ways in which modern American women increase the joy of living. To know the delight of creating beautiful pictures with flowers is now the gracious heritage of all."

CRAB APPLES FOR AMERICA

Mr. Donald Wyman, Horticulturist at the Arnold Arboretum, Massachusetts, has written the bulletin "Crab Apples For America." The 1955 revised edition is now available from the American Association of Botanical Gardens and Arboretums, 1632 Chestnut St., Philadelphia 3, Pa. Price 1 to 9 copies, \$2.00 each.

The bulletin states, "The object of this present survey of crab apples is to list all that are known to be growing in North America at the persent time (excluding hundreds of named seedlings). For the purpose of this survey a crab apple is considered as any tree of the genus Malus, with fruits 2 inches or less in diameter.

The bulletin has chapters on Best Varieties for Flowers; For Ornamental fruits; With Colored Foliage; With Autumn Color; With Double or Semi-Double Flowers; With Edible Fruits. Originators and Introducers are also given.

IN YOUR HOME, ENJOY FLOWERING PLANTS LONGER

Flowering plants do best in uniformly moist soil. Check the soil surface twice a day. If it feels dry, apply water until the excess drains into a saucer or other container.

If the soil is very dry or if your plants have wilted, place them, pot and all in a container of water. Leave 'them there until the soil is thoroughly moistened at least 30 minutes.

Keep plants away from heat, drafts. As blossoms wither, remove them.

Temperature Chart

Not all plants need the same amount of light and warmth. Use this chart to find the right location for your plant.

Below 65 Degrees, Sunny-Cool

Hydrangea, Azalea, Tulip, Daffodil, Hyacinth, Fuchsia, Geranium, Chrysanthemum, Easter Lily, Calceolaria, Crocus and other spring bulbs, Cyclamen—keep below 60 degrees.

Sunny, Moderately Warm

65-70 degrees: Begonia, Cineraria, Salvia, Jeruselum Cherry. 70-75 degrees: Poinsettia, Rose, Kalanchoe, Christmas Pepper.

Shady, Moderately Warm— 70 Degrees

Gloxinia, Tuberous Begonia.—By the Dept. of Horticulture, U.W. Extension Service, U.W.

THINGS HAVE CHANGED

Back in the 1920's, it is estimated a housewife had to spend 5½ hours' kitchen time preparing a day's food for a family of four. Today, she can do it in $1\frac{1}{2}$ hours, according to the U.S. Department of Agriculture.

Groceries bought today come with "built-in" maid service. This extra service costs money. Processing, transporting and marketing now take more of the family food dollar than farmers get for growing the food. Nevertheless, the family grocery bill doesn't take any greater percentage of the net family income than it did 30 years ago. —From Mary'and Fruit Growers Newsletter.

The Christmas Rose

By Mrs. Robert Holly, Waupaca

For my first little chat about some of our "lesser known" and much "lesser grown" perennials, I have chosen the Christmas Rose, or Helleborus niger. It seems quite appropriate to this particular season of the year.

The Helleborus are mostly imports of the Old World; however they are rapidly becoming naturalized here in America; I might add also improved. They belong to the buttercup family, which in turn is a part of the family ranunculacae.

They are really beautiful and very interesting, having deeply cut thick leathery, dark green leaves that look as if varnished. The flowers are waxy white—with myriads of golden stamens. Exquisite is the word to describe these blooms, they are all but breath taking. The buds usually show a pink flush, and on occasions the flowers also. You will notice quite a resemblance to the buttercups, but on a much larger scale.

I am well acquainted with Helleborus niger and two other varieties, the H. orientalis, called the Lenten Rose, and H. foetidus, which has an unpleasant ordor and both spring bloomers. The H. niger usually starts blooming for me in October and continues on through the holiday season, sometimes into February. The H. Orientalis has blooms in a variety of combinations and colorings of pinks, greens and brownish purples. H. foetidus gives us flowers in a peculiar yellow green shade, sort of a chartreuse.

There are perhaps eight or nine varieties on the market, but H. niger is the most popular and has been improved the most.

Their wants are few, but must be supplied or there will be no response. Give them a partially shaded, eastern or northeastern exposure with protection from' the bitter winter winds; the shade is to protect the beautiful glossy leaves from sun burn. Feed them generously with plenty of fertilizer and water well; they are hearty eaters. If you must move them, do it in the fall as they resent being transplanted very much and usually sulk for a year or two after moving; so best put them where they can remain permanently and put up a sign "DO NOT DISTURB".

I am frequently asked, "Are they hardy in Wisconsin?" "Yes, indeed", I have found mine, several times, under a foot or more of snow, frozen in chunks of ice, brought them into the basement to thaw slowly. They come up smiling as if to say "thank you" for being released from their icy home. I do think however, that the unfrozen ones will last longer as cut flowers than those that have been in the ice and snow.

A friend who does a lot of flower arranging and corsage making, says that the Christmas Rose is TOPS for both. As an outdoor winter plant it cannot be equaled, so what more can we ask for. Why not try out one or more and see for yourselves what joy and pride this one of our lesser grown perennials can give to you.

BOOK OF GARDENS

The most beautiful gardening book we have ever seen is the **Book of Gardens** just issued by House and Garden Magazine. Here is a book that will make a wonderful Christmas present for a real gardener. Written by the editors of House and Garden with an introduction by Richardson Wright and published by Simon and Schuster, 630 Fifth Ave., Rockfeller Center, New York 20, N.Y., it sells for \$10.00.

It covers everything from repotting house plants to landscaping an entire lot. It contains pictures of hundreds of gardens of all sizes, suited to a wide variety of climate conditions. It answers your questions about trees and lawns, landscaping and vegetables, hedges and fruits, rock gardens and roses. In size it is 9½ by 13, contains 320 pages with pictures or drawings on almost every page. There are many full page pictures in color.

Something New In Gardening

DO IT YOURSELF ALUMINUM PLANT CONTAINERS

According to C. E. Wildon and C. L. Hamner of Michigan State University, flower pots, window sill trays, and plant boxes can easily be made of sheet aluminum.

A tray for a window sill, or a plant box to take a dozen seedling plants, can be made by using a lead pencil and straight edge to mark off on the aluminum a rectangle the size desired. Another rectangle is drawn around and outside of the first rectangle sufficiently larger in size to allow for the sides of the tray. The aluminum is cut with shears around the marked outer rectangle. The tray is then formed by bending the aluminum along the line of the inner rectangle, the corners folded inside and stapled in place with a stapler. The gauge of sheet aluminum used is .055-H18, although for flower pots up to 4-inch standard the .004-H18 may be used.

The flower pots are cut from a pattern made by rolling a standard clay pot on a paper and tracing the path of the top and bottom of the pot with a pencil. A quarter circle path is sufficient. The aluminum is cut to the pattern and after forming, is stapled.

The sheet aluminum has not proven toxic to any plants used. The window trays have an advantage for the homemaker in that these trays will hold water thus making it possible to leave water in trays for plants when absent for a few days. The pots and trays may easily be colored with spray enamel to harmonize with room decorations.—From Garden Facts, U.S.D.A., Extension Service Bulletin.

Seems funny to me that a man who is too scared to go to a dentist will still race a Diesel locomotive to a crossing.

Sign near school: "Drive slow! Teachers are Scarce."—Woodville Leader.

OUT - OF - THE - ORDINARY FLOWERING PLANTS FOR SOUTHERN WISCONSIN

By C. P. Holway

Tree peonies—actually, small woody shrubs—are expensive but well worth the money. With some winter wind protection and a light mulch covering they are as hardy as herbaceous species. I have one at least 25 years old that grows larger and flowers more abundantly every year. Tree peonies provide colors (yellow, for instance) and fragrance not found in other peonies.

Large - flowered Clematis, dazzling in container arrangements as well as on the vine, should be considered solely for their flowers and not as foliage vines. The old purple hybrid "Jackman" is well known. There are many others-magnificent flowers in rose, crimson, white, blue, plum etc., and in various combinations. In hard winters they die back to the ground. Soil should be deeply dug (two feet) and mixed with plenty of sharp sand and compost. Set the crown three inches below the surface. Keep a mulch of fine compost or screened spaghnum moss on the surface. Feed bone meal and liquid fertilizers. No manure. Provide climbing support.

True Monks-hood (Aconitum napellus) blooms so late that it is often cut down by an early freeze. But it is worth having. When a mild fall lets it flower, the rich blue blossoms are worth waiting for. For sure flowering before frost, choose Spark's variety, a violet-blue in stately spikes in July and August.

Shrubby Cinquefoil is a northern native, a little shrub small enough for the sunny perennial border. You may have seen it along the north shore of Lake Superior. Branches are covered with small, fernlike, gray-green leaves. Buttercup flowers appear from June till fall. Potentilla Fruticosa is its name, and a good-flowering selection of the species, "Gold Drop," is in commerce.

OUT-OF-THE ORDINARY SHRUBS FOR WISCONSIN

Continued from page 108

border, it is airy and light, with shining, long-lasting leaves. The tiny flowers are unimportant. Its value is in the strings of pink berries that form along the arching branches in fall. Low branches quickly layer. Ask for Symphoricarpus chenaulti.

Juneberry is called Shadbush in the East and Sarvisberry in the West. Those who know the northern lake shores in Wisconsin and Minnesota are familiar with it-profuse white bloom in spring, tiny purple "apples" (they look like blueberries) in summer, red leaves in the fall. Juneberries can be grown either as a bushy tall shrub or trimmed as a small tree. Young leaves in spring are a sort of wooly-white. Two kinds are widely recommended: Amelanchier canadensis, an upright grower, and A. laevis, which is more graceful and spreading. This is a genus that is greately confused in name and species, and not even the experts are sure which is which. The species found around Lake Superior is considered to be A. alnifolia.-By C. P. Holway, Chilton, Wis.

HOW TO GROW AFRICAN VIOLETS UNDER FLUORESCENT LIGHTS

The plants that do the best for me are grown under fluorescent light. I have between 500 and 800 plants grown under light. My lights are the 20-and-40watt daylight tubes. There are six 40-watt tubes over one table 14 feet long by 3 feet wide. There are eight 20-watt tubes over another table 6 feet long and 27 inches wide. The lights are about 12 inches above the tops of the plants. They could be lower, but it is difficult to water the plants when the lights are hanging too low. The lights burn about fourteen hours a day. I would not give up fluorescent lights for growing African Violets. The plants grow more symmetrical; you do not have to worry about turning them in the windows; and they also have

a much deeper shade of foliage and flowers.

A plant started in life with a good root system, not over-potted or over watered, under a good strong light, all the suckers removed, and fed about once or twice a month, stands a good chance of becoming a show plant of beauty.—By a Writer in the Missouri Botanical Garden Bulletin.

REGIONAL MEETING HIGHLIGHTS Continued from page 114

gardening talks and demonstrations in the forenoon: What To Do In Our Gardens In October and November by H. J. Rahmlow, Madison and Garden Flower Arrangement by Mrs. A. J. Wiesender of Berlin. This topic, Garden Flower Arrangement should be one of our important projects for the coming year.

The meeting closed with a very pleasant tea and informal gathering in which everyone got better acquainted. Table decorations, which were very beautiful were by Mrs. N. H. Fortnum and Mrs. J. C. Miller. Corsages and flower arrangements were made by Mrs. A. A. Wawrzyniak and Mrs. A. Huebner. Committee on tea table were Mrs. W. N. Crawford; Mrs. Earl Kolb; Mrs. H. J. Wilson and Mrs. N. H. Fortnum.

A man wanted too buy a riding horse for his wife and was trying one out. Noticing that the horse required a firm hand, he asked doubtfully: "Do you think this is a suitable horse for a woman?"

The owner of the horse was a tolerable honest man, so he answered carefully: "Well, I think a woman could handle the horse—but I wouldn't want to be the husband of the woman who could do it!"

I never do what I want to do, because I have to do what I have to do, and I never get time to do what I want to do. —Walworth Times.

Growing Better Vegetables

Continued from page 105

Midget. Although its quality cannot compete with some other later maturing large fruited varieties it has a place as an early melon for home garden use.

What are All-America Selections?

Some varieties are listed in seed catalogs as being All-America Selections. These awards are made by a committee of seedsmen, the All America Selections Council of Harrisburg, Pennsylvania. Twenty or more judges grow identical samples, under number only, in their trial grounds in various sections of the United States and Canada. Their individual votes form the basis for awarding the Gold Medal, Silver Medal, Bronze Medal or Honorable Mention to various vegetable and flower varieties. These ratings, of course, definitely indicate much evidence of merit in a variety but do not necessarily mean in every case that the variety is ideally suited to all areas, soil types, and climatic conditions on a countrywide basis.

Some vegetable varieties, however, which have won the distinction as Gold Medal winners in the past, and are highly recommended for Wisconsin growing conditions are: Topcrop snap bean, Morse's Bunching carrot, Iochief sweet corn, Straight Eight cucumber, Caserta summer squash, Uconn winter squash, Salad Bowl Lettuce, and New Hampshire Midget watermelon.

Gold Pak Carrot 1956 All-America Vegetable Selection

Gold Pak carrot is a new exceptionally long, slim bunching type carrot introduced by the Ferry-Morse Seed Company. It has a very rich orange interior and exterior color. It has short, strong tops and very smooth roots. It is longer and more slender compared to Imperator. Adapted to sandy, loamy, or muck soil it will do well in heavy, stiff soils. Perhaps it is better adapted in Wisconsin as a commercial market variety rather than for most home gardens. The Gold Pak carrot is a Bronze Medal winner for 1956.

What About Hybrid Vegetable Varieties?

There has been some confusion in recent years about the meaning of the word "hybrid". At one time it meant a stable variety selected from a cross. However, in recent years the term "hybrid" means only the first generation of a cross. In other words, this means that present day hybrid seed must be produced each year by crossing two different parents and that seed cannot be saved from hybrids without the risk of poor results.

There are basic differences between a present day "hybrid" and an "ordinary variety". In the case of the variety the seed for the crop is produced through pollination which is not controlled. Trueness to type is maintained by eliminating off-types and by selection. With a hybrid the seed for the crop is produced as a result of controlled pollination. With hybrid sweet corn for example seed is produced by making sure that only pollen from a selected male parent falls on the silks of the ears of a selected female parent.

The superiority of certain hybrid vegetables like sweet corn over ordinary varieties has led some people to believe that all hybrids of any crop are naturally better than ordinary varieties. This is not necessarily true. While hybrid vigor and other qualities look promising for onions, cucumbers, spinach, carrots, squash, and a few other vegetables many hybrids have not proven of extra merit over open-pollinated varieties. Hybrids like non-hybrids must be carefully tested and proven as to their superiority and adaptability to local conditions before being recommended for use.

Besides certain hybrid sweet corn, onion, slicing cucumber, and tomato varieties which are worth using, hybrid varieties of carrots, spinach, pickling cucumbers, and perhaps cabbage are not too far in the future for gardeners and growers.



President V. G. Heward, Milwaukee 1st Vice Pres ident_Harold Richter, Whitehall 2nd Vice President Marcus Osborne, Beloit Sec.-Treas. Mrs. Rec. Louise Bruggeman, Box 60, Menom-Falls one Allan Vosburg.

OFFICERS

Wisconsin State Beekeepers Ass'n. Corres. Sec.____Allan Ft. Atkinson

DISTRICT CHAIRMEN: Newton Boggs, Viroqua; Joseph Dieser, Superior; Emerson Grebel, Beaver Dam; Robert Knutson, Ladysmith; Len. Otto, Forest Junction; E. Schroeder, Marshfield; Don Williams, Beloit. Exec. Committee Members: Wm. Judd, Stoughton; C. Meyer, Appleton; Clarence Pfluger, DePere.

Some Convention Highlights

The Wisconsin State Beekeepers Association had a very successful convention at Wausau, October 27-28 and were well entertained by their hosts the Marathon County Beekeepers Association.

As we are about to go to press we cannot give a complete report in this issue. However here are the highlights: The officers as given at the top of this page were reelected—excepting that Mr. Marc Osborne, Beloit was elected 1st vicepresident and Henry Piechowski, Redgranite, 2nd vice-president.

Resolutions passed: That the Association sponsor a Honey Queen contest on the state level next year; contestants to be sponsored by the County Associations. The Waushara County queen will be adopted as the State Honey Queen until a new queen is chosen.

That the Extension Specialist Committee asks the State Farm Bureau for assistance in securing an Extension Specialist.

That the American Beekeeping Federation be requested to accept as one of its projects securing daily publication of wholesale honey prices in newspapers.

Mr. Osborne and Mr. Piechowski were elected delegates to the National Convention of the Federation in January.

The amount of \$100 was voted to the American Honey Institute and \$50 to the American Beekeeping Federation. There was a balance of \$1512.35 in the treasury at the end of the year. There were 411 paid memberships. State Fair profits were \$965.07. The next convention will be held at Viroqua—the Association accepting the invitation of Mr. Newton Boggs. There were 130 registered at the convention.

THE AUXILIARY PROGRAM

The Auxiliary had a very nice program and good attendance. Mrs. Arthur Schultz of Ripon was reelected for the third term as president; Mrs. Otto Koeppsel, Mayville, vice-president and Mrs. Felix Elsinger of Knowles, secretarytreasurer.

Winners in the honey cookery contest were: Chocolate cake 1st.; Mrs. Joe Mills, Ripon; 2nd. Mrs. Emerson Grebel, Beaver Dam; 3rd. Mrs. Felix Elsinger, Knowles.

White cake: 1st. Mrs. Grebel; 2nd. Mrs. Elsinger; 3rd. Mrs. Arthur Schultz, Ripon.

Sweet Rolls: 1st. Mrs. H. Piechowski, Redgranite; 2nd. Mrs. Grebel; 3rd. Mrs. Schultz.

Fudge: 1st. Mrs. Piechowski; 2nd. Mrs. Grebel; 3rd. Mrs. L. Moser, Lowell.

BEEKEEPING PROGRESS REPORT

From the Apiculture Division, Dominion Experimental Farm, Ottawa, Canada comes a progress report for 1949-1953, which is very interesting for all beekeepers. It covers a wide range of subjects from a study of the toxicity of insecticides, equipment for processing honey, bee diseases to colony management.

FOR SALE

19 colonies of Bees and all the necessary equipment. Call Madison, Cedar 3-3253 or Black Earth 91, or write to Lloyd Meister, 209 S. Midvale Blvd., Madison, Wis.

The Honey Queen Contest

HONEY QUEEN CONTEST

Fourteen 4-H club workers entered the Waushara County Honey Queen Contest, sponsored by Henry's Honey Farm, Red Granite (Mr. and Mrs. Henry Piechowski). It was an outstanding promotional project because the winner appeared on the Milwaukee Journal TV Station, WLS and WKOW, during the Wisconsin State Fair. On September 8th she was a guest on "What's New In The Kitchen", Breta Griem's program on WTMJ-TV, where she demonstrated baking honey cookies. nut bread and cake during the 45 minute program. The queen also received \$10.00 and five additional winners \$5.00, \$4.00, \$3.00, \$2.00, and \$1.00 each.

The queen and her court of honor were guests of the Piechowski's for a day at the State Fair, where each of the girls met the Governor. The queen presented the Governor with a duplicate of her prize winning cake and also 2 jars of honey.

Our hats off to the Piechowski's. They are on the job in promoting honey. Why not extend the honey queen contest to other counties. TV and Radio stations are always glad to put the winners on their programs, and it keeps honey before the consumer.

LOCAL MERCHANDISING FOR SMALL BEEKEEPERS

In terms of dollar sales, a single super market does business equivalent to seventeen non-super grocery stores. 76% of these super markets are concentrated 233 metropolitan areas.

Honey-wise, that leaves a lot of room for marketing honey in the small rural communities in which most of the beekeepers live. Although volume is not with the small grocer, most beekeepers do not produce in volume either. Local merchandising in smaller local stores might be the most economical and profitable market for the small beekeeper.—By the American Honey Institute, Madison.



Carol Ann Lehman, Waushara County's "Honey Queen". She was chosen on the basis of cakes and cookies made with honey and a poster showing various uses of honey. The picture shows her being crowned by Carl Hanson of Wautoma at the Waushara County Fair.

THE HONEY COOKBOOK

A new Honey Cookbook has just been issued by Alfred A. Knopf, Inc., 501 Madison Ave., New York City 22, N.Y. The Honey Cookbook contains more than 250 recipes for cookies, cakes, desserts, relishes, candies and other foods. It is written by Juliette Elkon. She is a beekeeper and gentle women farmer, who supervises the raising of fruits, berries and herbs on a 13 acre farm in New York state. She is also the author of The Belgian War Relief Cook Book, published in 1943. Price is \$3.00 net.

The author thanks Mrs. Harriet Grace, Director of American Honey Institute, Madison for her permission to use certain recipes perfected by the American Honey Institute. A chapter "All About Honey" is most interesting.

Blessed are they who were not satisfied to let well enough alone. All the progress the world has made, we owe to them.—DAC Adviser.

ENGLISH BEEKEEPERS VERY ACTIVE

The Bee Keepers News, published in England, filled with "News-Practical Beekeeping - Research - New Ideas", is a very breezy magazine. Editor is I. G. Rankin, The Ash Tree, Wargrave Reading, Berks, England. Reading this interesting magazine we get the impression that English beekeepers are very friendly and socially minded. In the September-October issue we find announcements of a "British Beekeepers Dinner and Dance". a number of shows and beekeeping classes, lecture tours, national beekeeper museums and 13 "coming events" in a period of two and one-half months. A total of 23 "open honey shows" are listed through September, October and November.

There are pages of selections from Bee Journals from all over the world. These interesting items are from Great Britain.

From The British Bee Journal:

Inexperience is no excuse in selling rubbish to unsuspecting customer who will not return but change to something tastier and cheaper!

Old Myth—the more savage the bees the better for honey getting was exploded long ago.

Our 1955 Selling Slogan—should be— Lay In A Store of Our Vintage Clover Honey—Now!!

South African Bee Journal, July-August, bye - Tydskrif

Beekeeping our most neglected Agricultural industry and estimated loss of honey \$4,000,000 yearly.

Honey Imports from overseas is prohibited and producers here have the market to themselves.

10-frame Langstroth hives—outnumber all other types of movable comb hives and will probably become standard—for South Africa!

Edinburg Bulletin: "Does it ever occur to us—how hard the bee works to provide us with our tea-table treat? In Summer, hard work kills bees in 5-6 weeks but idle Winter bees live 5 to 6 months!

Now I quite expect to read in the "Bee Keepers News" that a nation-wide strike has been ordered by the **Hive Stewards!** More sugar, less water, no foreign workers.

The magazine quoted a number of items from the June-August issues of Wisconsin Horticulture, beekeeping section.

A MYTH AROSE—some years ago by someone blowing a bugle outside a beehive—the bees failed to respond, and the story spread that bees were stone deaf!

SUCH EVIDENCE will take a lot of shaking but Nature seems to have provided for our bees—**against sound monstrosities** such as a bugle or a loud explosion which, very near to us, would make us stone deaf for life.

IF BEES WERE DEAF and could not hear a queen piping or the hiss of their fellow workers and could not talk and answer one another—then their sounds would be useless.

BEESWAX USED IN AUTOMOBILE INDUSTRY

In the magazine "Automoblie Facts", we find the statement that **beeswax** is applied to bolt threads and speeds the tightening of nuts.

Walnut shells, ground into particals, one, thirty-second of an inch in diameter, are used as shot in blasting burrs of metal from castings.

Ground apricot pits, in another instance help clean the armature pores of electric motors.

DOES HONEY ASSURE A LONG LIFE

In the American Bee Journal, we find the statement "Russia claims 200 men and women, between the ages of 110 and 150. Investigation has revealed, Moscow reports, that nearly all are or have been beekeepers and have made honey an important part of their diet."

With Our Bees In November

November and December are the months of least activity in our bee colonies. The queens have stopped laying eggs and are resting and will continue to rest until early January. Consumption of stores is therefore not large and so the colonies will be in good condition with very little winter loss, because there will be plenty of food. Starvation comes later, in late February and March.

Winter stores. At the close of the honey flow in mid-August, we were afraid that brood chambers might be light and feeding would have to be done. Since feeding entails a great deal of labor we would rather have the colonies store their own winter supply of food. We were therefore much pleased in mid-October to find that the bees had moved stores from the lower brood chambers, left there since the last "reversing" in early June, and and that now the upper brood chambers were very heavy. We did not have to do any feeding and colonies are heavier by far than they were a year ago.

Three Brood Chambers?

The other day a beekeeper told us that one of our inspectors was opposed to using three brood chambers until about three years ago, when he tried it for the first time. Today he is an enthusiastic supporter of the system and can't say enough good things about it. Well, we are all entitled to change our opinions and this time we're sure it was for the better.

Honey Prices have been firm with buyers from New York, Michigan and Canada bidding for the Wisconsin crop. Of course, they knew it was of superior quality this year.

We cannot help but feel that with the kind of crop we obtained this year and at present prices, beekeeping is a profitable undertaking for those who will learn how to get a maximum crop. There is still a great deal to be learned about good beekeeping, however. This is obvious when at meetings we hear some beekeepers tell about the "wonderful crop" they obtained this year—"about 100 pounds per colony", when another beekeeper in the same territory obtained more than twice that amount.

HONEY CROP LARGER THIS YEAR

The National honey crop this year, as reported by the U.S. Dept. of Agriculture, is slightly larger than in the past two years—although not a bumper crop nationally. Here are the estimates for the United States: in 1955 243 million lbs., in 1954, 217.1 million lbs. and in 1953, 224.4 million lbs.

The Wisconsin crop this year is about 2 million lbs. more than it was in 1953, 17,264,000 lbs. In 1954 it was 10,182,000 lbs. and in 1953 it was 15,600,000 lbs.

We had 4,000 more colonies this year than last year or a total of 208,000 colonies. In 1954 there were 204,000 and in 1953, 200,000. The colony average this year was 83 lbs. per colony. Last year it was 53 lbs. and in 1953, 78 lbs. per colony.

The Crop By States

California leads the nation in production of honey this year with 27.9 million lbs. compared to 33.8 million last year and 23.6 million in 1953. Minnesota is second with 21.6 million. They had 19.4 million lbs. last year and 21.3 million in 1953. Iowa ranks third this year with 17.5 million lbs. Wisconsin is fourth with 17.3 million and Florida next with 14.7 million. The Florida crop is down 3 million from last year. Ohio has 13 million this year compared to 6.9 million in 1954.

Every female just loves to take care of a house—until she gets to be all of six or seven.—Viola News.



Honey Containers	CONTAINER PRICES Glass Jars Queenline Plain
Containers	8 ozper case 24\$1.05 \$.98 1 lbper case 241.35 1.05
60 lb. cans, 5 and 10 lb. pails. Also	2 lbper case 12
5 lb., 3 lb., 2 lb. and 8 oz. glass jars. We can make immediate ship- ment.	4 lb.—per case 6
Complete line of bee supplies. (also used equipment).	21/2 lbper case 12\$1.18 Tin Cans & Pails
We are always in the market for Honey.	60-lb. can—3" screw top—bulk
We will buy your beeswax or trade for supplies.	60-lb. cans—3" screw top—per case 24 \$17.00 5-lb. pails—no bails—per case 50\$ 6.35 5-lb. pails—with bails—per case 50\$ 7.15 10-lb. pails—with bails—per case 50\$10.50
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COUNTY FRUIT GROWER ASSOCIATION MEETINGS

For more than 25 years most of the County Fruit Grower Associations below have been holding regular annual meetings. The programs have always been good as indicated by the constant and often increasing attendance. Most of the Association members bring their wives, who put up a pot luck luncheon, making it an enjoyable day. Meetings start at 10:00 a.m. with a noon luncheon and also an afternoon program.

Tuesday, February 7th: Rock County Fruit Growers Association at the Janesville Y.M.C.A.

Tuesday, February 14th: Racine County Fruit Growers Association at the School of Agriculture, Rochester.

Wednesday, February 15th: Waukesha County Fruit Growers Association at Waukesha, Y.M.C.A. Building.

Thursday, February 16th: Milwaukee County F.G.A. at Greenfield Town Hall.

Tuesday, February 28th: Washington County F.G.A. at Wis. Electric Power Building, West Bend.

Wednesday, February 29th: Ozaukee County F.G.A. at Mequon, Town Hall.

Tuesday, March 1st: Manitowoc County F.G.A. at Lincoln Park Field House.

Friday, March 2: Sheboygan County F.G.A. at City Hall, Plymouth.

Tuesday, March 6th: Calumet County F.G.A.

Wednesday, March 7th: Shawano County F.G.A. at the Community Hall.

Thursday, March 8th: Outagamie County F.G.A. at the Community Hall, Black Creek.

Monday, March 19th: Jefferson County F.G.A. at City Hall, Ft. Atkinson.

The ladder of success is full of splinters, but you won't notice them unless you start to slide down.—Enterprise Herald.

Graduation is the ceremony which marks the end of college study and the beginning of education.

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Do We Need An Apple Institute?

By Ben W. Drew, Westford, Mass.

The development of voluntary apple promotional organizations is as American as apple pie. In a sense, we can classify even the state apple commissions as voluntary, since they have been sponsored, and largely developed by and for apple growers and their sales agents.

Prosperity During The Twenties

In New York and New England, the apple growers had enjoyed prosperity during the twenties with their relatively new McIntosh variety, and with early nearby markets. The Appalachian belt was happy, processing, and exporting enough to keep prices at a profitable level. Another traditional deal was the exporting of Maine Baldwins, from every state in New England. The fruits of the Pacific coast went in ships to many lands.

The blow that hit us with the depression had many edges. The export market shrank, national crops were large, and citrus was competing more strongly than before with increased production, and potent advertising campaigns. The eastern cities became the prime targets for shippers from all the distressed areas of the country.

The Apple Institute Is Born

In the mid-thirties, the New York and New England Apple Institute was born. As in most such cases, the devoted men who started this organization were totally inexperienced in promotion, but their determination spurred on by the proverbial sheriff at the door, carried them through those first few years of trial and error, faced always with financial worries, unpaid pledges, and with only a handful of converts carrying the financial load. There were times when employees went unpaid, and advertising agencies sought the personal notes of the officers to back the initial promotional efforts.

Accomplishments On A Small Budget

With the end of wartime regulations, came a period of awakening to the responsibilities of a free market. It was inevitable that we had staff difficulties

and changes culminating in employing Monte Marvin as manager. Here was a man with broad promotional experience mostly in citrus, but he was thorough familiar with the technique of stretching a grower's dollar, through the service to food page editors and the like, to ge. a maximum coverage from our pitifully small advertising budget. Most of our money was being spent for our staff of three. The development of our apple kitchen was the result of Monte Marvin's experience and ability to give the food page editors attractive material which they could use. Two New York girls skilled in this sort of thing, were retained to develop and exploit, by articles and photographs of interesting and practical apple recipes, the service which we could offer to the many food editors, both in the newspaper, and the radio medium. We paid them a retainer and Monte made many suggestions regarding what we needed to promote, and supplied them with the necessary apples and supplies.

Food Page Publicity

As you probably know this food page publicity has been supported first by a group of Eastern regionals, and now it is part of the National Apple Institute's program, in which we all share the small cost. However, as good as this promotion was, and regardless of the total amount of practically free publicity which it brought to apples, it was neither well **understood, nor appreciated by many of our growers.** In other words, it did not increase our membership.

The Field Men

The work of our type of field men is worthy of a paragraph. Before the war and after, these two or three men had devoted most of their time during our marketing season to dealer service work. They called on markets and talked with the produce managers about apples. Sometime they had merchandising aids, such as display cards and the like, but most of the time they spent listening to beefs about how lousy the local apples were, and how badly they were graded, and packed. Occasionally they could help a manager with his display, but generally, a check-back showed this work to be of no lasting benefit.

Another use to which our field men were put, was to set up apple displays at fairs and to assist in various types of promotions of one sort or another. For one winter our staff was augmented by a capable woman, who called on restaurant chefs and school lunch cafeterias. This was a successful deal, and much favorable reaction resulted, but we found it impossible to replace this particular woman, and since she was an extra employee, this idea was not continued for long.

Our staff, during the time that we employed field men, would have to mirk time from the end of marketing season, until there were indications of a new crop so that they could then begin their membership calls. This proved to be a costly way of bringing in members.

There are many miles to cover in New England and Eastern New York, between orchards, and ten calls per day were too often the limit in this work. It seemed to cost us more to solicit membership from the smaller growers, than we were receiving in return. Our bigger supporters usually answered the mail appeals. However, with only about 25% of all our apples being pledged at this time, we hoped that our field men could explain the value of the Institute and sell the need for its support. We were employing good capable men, better adapted to dealer service work, than they were talking to farmers. Small growers' reaction to these well dressed "salesmen" was often negative.

To Be Continued.

The utmost tragedy in the world, in the minds of small boys, is that the home team lost.—Zion-Benton News.

APPLES IN CONSUMER BAGS By D. H. Dewey, Michigan State University

Prepackaged fresh produce receiving wide acceptance by retailers and consumers includes apples of 3 to 5 pound lots in film bags. Michigan State University Special Bulletin 396 entitled "Prepackaging Apples in Film Bags" is a guide to growers and handlers interested in bagging apples. This bulletin, written by J. H. Levin and H. P. Gaston, describes methods, equipment, space requirements, and management of bagging enterprises. It is based on a study of bagging methods of 16 separate packers who packaged approximately 90 percent of the apples bagged in Michigan during the 1953-54 season. The writers studied actual operations which varied from simple hand-filling of bags with apples from a grading or sorting table, to complex machine-filling procedures where labor requirements were at a minimum.

Their analysis shows that most apple bagging operations can be increased in efficiency by mechanical aids, better arrangement of equipment, and a continuous supply of fruit to the bagging stations. Filling the bags by hand seems satisfactory where less than 50,000 bags are packed annually. Bagging aids such as filling chutes, are desirable for packing 50,000 to 100,000 bags per year; whereas, still larger operations require some type of automatic equipment for filling the consumer film bags.

Increased efficiency has enabled packers to prepackage apples in film bags holding 3, 4 and 5 pounds of apples at a cost of less than 1 cent per bag for labor and equipment.

(Editors Note: Dr. Dewey talked at the Joint Fruit Growers meeting at LaCrosse on this subject. We suggest interested growers write for the bulletin to Michigan State University, Dept. of Horticulture, East Lansing, Mich.)

Children, like canoes, are more easily controlled if paddled from the rear. —Walworth Times.

A Growers Forum Results From

Our 1955 Spray Program

HOW WE SPRAYED IN 1955 By Dawson Hauser, Bayfield

We had a scab carry over from 1954 so used a Dinitro dormant and ground cover spray early in the season.

Used Orthocide and Crag 341, with Orthocide as our main program as a fungicide. Mercury was used in combination at bloom time when scab threatened.

D.D.T. and lead were alternated for the most part although D.D.T. was used during such times as burning was feared. The last sprays were applied 30 days prior to harvest.

Application of all sprays were made by John Bean Speedette, pulled by tractor and having own power to run the pump and air blast. Eleven to 14 sprays were applied spaced 7 to 10 days apart. All the work was done by one man. Seventy acres in all, including Dawson, John and Jim Hauser's and the Bolliger orchard.

The crop was free from mite, worms, maggot and scab. The size and color of our crop was the best ever and I hope that I never feel that sulphur is needed in our spray program again.

OUR SPRAY PROGRAM FOR 1955 & HOW IT WORKED By Arnold Nieman, Cedarburg

We at Nieman Orchards use 2 Hardie Mist Concentrate Sprayer, for all our spraying. The spray tanks hold 330 gal. of solution and by using a 3X concentration we prepare a mix of 10 times the recommended strength for dilute spraying less 1/10 to compensate for gain in deposit by elimination of drip.

We started our spray program on April 12, using 7½ qts. Crag, plus 2½ pts. Tag. On April 21 we used 7¾ qts. Crag and 2½ pts. Coromerc liquid. This spray was followed by heavy rain on April 23-24. April 29 we used 7½ qts. Crag, Puritized 2½ pts. and Lead Arsenate 27 lbs. The full bloom spray was put on May 7th usin 15 qts. of Crag. On May 16 we used Ortho cide 9 lbs., Coromerc liquid $2\frac{1}{2}$ pts. an Lead Arsenate 27 lbs. May 23 we use 1 Crag, 6 qts., Phix 1 lb. and DDT 18 lbs. On May 31 we used Crag 12 qts., DDT 18 lbs. We applied this as we did our other sprays at the rate of 2x6/10 gal. per tree, which would equal nearly 8 gal. of dilute spray.

During some rainy weather on June 8 we applied 15 lbs. of Captan and 18 lbs. of DDT. June 16, Crag 9 qts. and DDT 18 lbs. were applied. June 27 we noticed some Red Mite on Red Delicious N. W. Greening and Kendal so we applied Crag 9 qts. DDT 18 lbs. and Aramite 14 lbs.

On July 9 a spray of 9 lbs. Captan and 14 lbs. of Rothane were applied for we were finding young Red Banded leaf rollers. July 21 we applied Captan 9 lbs., Lead Arsenate 27 lbs. Aug 3, Crag 8 qts. and DDT 18 lbs. Weather very hot and humid. Red Mites under control.

Our last spray of the season was applied on Aug. 19, Crag 8 qts. DDT 18 lbs. In the older part of the orchard where some R. B. leaf roller still remained we used Crag 8 qts. Rothane 15 lbs.

Results: No scab, no worms, very little R. B. leaf roller injury.

From Arthur Bassett Jr., Baraboo

Our spray program started with a ground treatment of Elgetol followed by the dormant tree spray Elgetol 318. This was followed by the ½ strength Mercury and ½ strength Captan with three sprays before bloom and one after bloom for scab control. The balance of the season we used Captan, 2 lb. to 100 gal., excepting in late July and early August when we used 1 lb. to 100 gal.

We added lead arsenate to pink and pre-pink sprays as the only insecticide

(Continued on page 137)

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Variety Tests

Polyethylene Liners For Apple Storage

BY M. N. DANA Department of Horticulture, U. W.

Certain varieties of apples shrivel badly when stored for long periods in conventional boxes or baskets. Varieties such as Golden Delicious and Secor have excellent storage properties other than their tendency to wilt and become unattractive. The development of new storage techniques to overcome shrivelling would increase the value of these varieties for late winter sale.

The studies reported here were conducted in several grower storages. The varieties Golden Delicious, McIntosh, Golden Russet, Delicious, Stayman, and Cortland were each stored at one or more locations.

Polyethylene turkey freezer bags were used for the lined box samples. These bags hold 12 pounds of apples conveniently. The film used to make these bags was not sufficiently heavy for commercial apple storage but served well for experimental study. Perforated bags had 100 paper punch perforations distributed evenly over the area. Control samples were stored in wooden crates without the use of conventional paper liners or covers.

Golden Delicious in either common or refrigerated storage shrivelled and lost weight when stored in unlined boxes. Over a 16 week period in refrigerated storage, the Golden Delicious in unlined boxes decreased 11.8 percent in weight as opposed to 4.1 percent for apples in perforated bags and 0.7 percent for apples in sealed bags.

The Cortland and McIntosh varieties in unlined boxes lost relatively little weight, 6.5% and 6.3%, while the same varieties in sealed polyethylene bags lost 2.7 and 6.8% over a 20 week period.

In general, the data for the December 20 sampling date show that apples in sealed polyethylene bags were more firm than those in unlined boxes. Golden Delicious, Stayman, Red Delicious and



Golden Delicious at left are shriveled as is usual when in storage. Right, results when in a polyethylene bag.

Cortland apples were much firmer in the bags than in unlined boxes. Golden Russet indicated the reverse situation. Mc-Intosh was not appreciably more firm in the bags than it was in unlined boxes. The differences by the February 24 sampling date were not great. As the fruit becomes more mature the pressure tester does not differentiate differences in firmness of the apple. Golden Delicious and Golden Russet in unlined boxes, were badly shrivelled at this date, the flesh became tough and spongy.

Unlined boxes of Golden Delicious in common and refrigerated storage and Golden Russet in refrigerated storage were markedly shrivelled by December 20. They were considered to be unmarketable when examined on February 24. Samples of these two varieties in polyethylene bags remained firm, turgid, and crisp and presented a good market appearance.

Staymans and Red Delicious in unlined boxes had not shrivelled appreciably during the 7 week storage period. Mc-Intosh and Cortland did not shrivel in unlined boxes when stored for a period of 20 weeks.

When examined after the 20 week storage period it was found that the Cortland variety in sealed polyethylene had developed a great deal of storage scald. More than 50% of the fruit surface was scalded which made the samples unmarketable. None of the other varieties showed such injury.

The results reported here showed that polyethylene bag storage was desirable for those varieties that shrivel in refrigerated or common storage. It was most effective on varieties that keep well and are thus ordinarily stored for a long period. The studies conducted by the author and other workers have demonstrated the value of this method commercial, long term storage of Golden Delicious, Golden Russet, and Secor. Short term storage in low humidity conditions was successfully done with Stayman and Red Delicious. In a good refrigerated storage the varieties McIntosh and Cortland were not improved by bag storage. The Cortland variety scalded badly in the sealed polyethylene bag.

Polyethylene storage of other varieties may be useful for consumers who wish to keep small quantities of fruit for relatively short periods in a dry storage room.

HOW WE SPRAYED

(Continued from page 134)

before bloom besides the dormant tree sprays. The petal fall spray was the strongest insecticide we used. We added arsenate of lead 3 lbs., D.D.T. 2 lbs., also dieldrin for plum curculio control. We used arsenate of lead in our cover sprays with aramite added on occasion to control red mites. D.D.T. was used in last cover spray when red mites were no longer a problem. Our cover sprays were applied approximately at ten day intervals. We applied no more sprays after August 10th because of dryness of season and lack of rain for fear of too much spray residue on apples at picking time. We had very good scab and insect control on everything except some codling moth injury.

From William Connell, Menomonie

In 1955 we applied 12 sprays. Used Crag and Mercury at half strength thru the calyx. The two in combination gave excellent control, which incidentally has been the past history as well, since 1952.

After calyx we used Crag on ½ of the

orchard and Orthocide on the remainder; both controlled fungus equally well. For insecticides we used DDT, lead and DDD the DDD was used for control of Leaf Roller in the first cover with good results. No codling moth stings or worms, very few apple maggot present. All in all a very satisfactory experience in control.

I believe that the control of fungus throughout the area that I visited this past year was vastly improved, whether its the newer chemicals or the newer sprayers or a new man on the sprayer that caused the improvement is difficult to determine.

I think we are all becoming more conscious of the necessity of doing a real good job of spraying.

COST OF PRODUCING A BUSHEL OF APPLES Washington State College Studies Production Costs

Cooperating with the Washington State Apple Commission, Washington State College studied the cost of producing apples in 1953.

The average cost, based on a yield of 511 packed boxes per acre was \$711.96 per acre.

Cost per packed box was \$1.40 per box. These costs were not greatly out of line with figures obtained in previous years on the basis of 514 packed boxes per acre. This was, in 1950, \$1.18 per box; in 1951 it was \$1.62 per box and in 1952, \$1.39 per box.

The cost items included interest on orchard investment, machinery and equipment; labor, materials, service and harvesting cost, such as picking, supervision, etc. Picking costs were listed at 19c per box. The total interest and depreciation came to 33c per box. This did not include the cost of the box.

Beware of the motorist who plasters his windows with travel stickers. He's more interested in letting folks know where he's been than in seeing where he's going.—Phillips Bee.



Wisconsin Berry and Vegetable Growers Ass'n.

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The Annual Meeting

The annual meeting of the Wisconsin Berry and Vegetable Growers Association held at Fond du Lac on November 9 was well attended and the program wis excellent.

At the busines meeting Mr. E. L. White, secretary-treasurer, reported 68 active members and a balance in the treasury of \$188.15.

New directors were elected: Mrs. Gerald Hipp, Janesville; Miss Freda Schroeder, Loyal and Mr. Chris Olson, Berlin. Officers were elected as shown at the top of this page. Members emp.: sized that the quality of the program deserved a larger attendance and suggested every member invite neighboring growers to attend the spring meeting. which will be held either the week of March 19 or March 26. Watch this page for details.

The Program

The panel discussion by four members of the staff of the Department of Horticulture, U.W. was especially good. Their papers will be published in early issues.

Mr. Buster Lea of Alma Center talked on his experiences in growing and marketing strawberries. He has found that irrigation pays on lighter soils but on some of his heavy soils at some distance from a water supply it has not paid excepting in frost protection. For mulch he

(Continued on page 140)



Officers and directors Wisconsin Berry and Vegetable Growers Association, meeting in Ft. Atkinson, Nov. 9. Seated, from left: Miss Freda Schroeder, Loyal; Elmer Whitby, 1st vice president, Chilton; E. A. Rosenberg, president, Clintonville; E. L. White, secretary-treasurer, Ft. Atkinson; Virgil Fieldhouse, Dodgeville, 2nd Vice president.

Standing; Mrs. Gerald Hipp, Janesville; Chris Olson, Berlin; Harry Barlament, Green Bay; F. W. Van Lare, Oconomowoc; Floyd Burchell, De Pere.

In Jhe Berry Patch

With George Klingbeil



WISCONSIN STRAWBERRY INDUSTRY

Wisconsin's strawberry industry is expanding rapidly probably due to several factors:

- 1. The need for a high value cash crop.
- 2. The availability of improved plant stock.
- 3. The availability of proven varieties.
- 4. More knowledge on the use of fertilizer and water by varieties.
- 5. Greater use of chemicals for weed control.

Any cash crop must have a ready market. In Wisconsin these are several market outlets:

- The shipping market, which depends on a volume of production in a concentrated area. Examples of these are the Alma Center area in Jackson County and the Bayfield area in Bayfield County.
- City or urban markets that are used by market gardeners. Such markets are located in most all centers of population.
- 3. On the farm, markets that are developed around roadside markets and "pick-it-yourself" plans which are increasing in popularity around population centers.

Improved Plant Stock

Improved plant stock is available of many of the commonly grown varieties. Improved plant stock generally means plants grown from substantially virusfree stock. Plants of several varieties certified as grown from virus-free foundation stock will be available from Wisconsin sources in 1957. To my knowledge there are no virus-free plants grown in Wisconsin at the present time. There

January, 1956

are, however, plants available that have been propagated from what were once reasonably virus-free plants. Such plants cannot be certified as being virus-free but are generally an improvement over standard plants.

Varieties

Through a statewide variety testing program it has been determined that some varieties perform better than others and in most tests virus-free plants showed their ability to outyield standard plants. The **Sparkle**, **Catskill**, and **Wisconsin 537** varieties performed well in most areas. **Wisconsin 261** and **Premier** yield fairly well. Such varieties as **Fairfax**, **Vermillion**, **Dunlap**, **Wisconsin 214**, **Robinson**, and **Empire** have been generally low in production. **Beaver** does well in most northern areas but below average in southern areas.

Catskill, Sparkle, and Beaver respond well to high fertility and supplimental irrigation. **Premier** has the ability to tolerate dry weather better than most varieties. Improved **Dunlap** plants produce runners and foliage profusely. Runner plants have tended to become too crowded and have probably interfered with yields. When "virus-free" plants of any variety are used it is suggested to

STRAWBERRY PLANTS FOR 1956

Select your strawberry stock for this spring from the fine selection of plants we have to offer. Good cultural practices plus a regular dusting program have produced for us the strongest, best rooted, vigorous planting stock of each variety. Write now for price list while stocks are completed. — HY-LAND GARDENS, BAILEY'S HARBOR, WISCONSIN. allow more space between plants. Thirty inches between plants in the row appears to be a satisfactory spacing.

Most successful commercial growers use chemicals for weed control as a part of their regular management practice. **Crag and 2,4-D** are the chemicals used. Best results can be expected with Crag on new plantings. A combination of 2,4-D and Crag has given good results on renovated plantings. Detailed information can be obtained from Wisconsin Special Circular 38, Chemical Weed Control for Fruit Growers.

The Berry and Vegetable Growers' Meeting (Continued from page 138)

likes marsh hay because it is clean. He puts on a heavy cover and finds it very worth while. Sandy berries are not saleable. The mulch makes the patch look better, even for patch picking. It was brought out by Mr. Gerald Hipp of Janesville that there is a machine available for applying mulch. It will put on from 100 to 150 bales of hay or straw per hour. It operates better with straw than with long grass and the price is about \$750 in Michigan. Mr. Lea found that farmers go into berries when dairy and hog raising is not profitable, but tend to go out of berry growing when prices drop and

STRAWBERRY PLANTS

We are now mailing our advanced listing of plants available next Spring. Have a good supply of healthy plants in spite of hot weather. Our selection includes "virus free" plants of Premier, Catskill, Sparkle, Robinson, Armore, Senator Dunlap, Tennessee Beauty, Bellmar, Blakemore, Empire, Vermilion, Plentiful, Pocahontas, Paymaster and Jumbo. Lots of No. 2-14 and both kinds of No. 2-61. Our supply of Sharon is large but it will be all ordered close to this early date. No more Esteem until Fall of 1956.

Fieldhouse Fruit Farm, Dodgeville, Wisconsin. Home of Quality Since 1885. labor is scarce. He expects a peak in production in 1958 if the cycle continues He has watched the cycle of small and large crop production for a mumber of years.

Chemical Weed Control

Dr. L. G. Holm said that the use of 4 lbs. of Crag per acre two weeks after planting strawberries controls weeds for from 4-5 weeks and can then be repeated The use of 2,4D will interfere with runner production but has not reduced yields.

The variety Sparkle gave the highest yield in trials at Sturgeon Bay

AN APPLE SMORGASBORD

In the November issue of Virginia Fruit, by the Virginia State Horticultural Society, Staunton, Va., (John F. Watson, Editor) we find an interesting account of an Apple Smorgasbord given by the Virginia Apple Commission to persons who helped promote and merchandise Virginia apples during the past four harvesting seasons.

We have never had the pleasure of esting a meal where all courses contained apples. However, everyone of the 11 courses served had apples as an ingredient. States John Watson: "On the menu were tuna apple salad, Smithfield ham with apple juice glaze, chicken apple salad, Waldorf apple salad de luxe, cranberry apple relish, apple potato salad, apple sauce, French apple pie, spiced crabapples, apple strudel, apple fritters, apple muffins with crunch topping, apple cider, and fresh Virginia apples."





Wisconsin Nurserymen's Ass'n.

Pres. _____John Gartman, Fond du Lac Vice Pres. _____Vincent Frantel, Kenosha Sec. Treas. ____Thomas S. Pinney, Sturgeon Bay Editor _____Gordon Suthers, Platteville

OFFICERS

DIRECTORS: M. A. Haller, Oshkosh; Leland Jens, Wisconsin Rapids; Kenneth Altorfer, Madison; K. W. Greaves, Milwaukee; Robert Gieringer, Milwaukee; Ralph Petranek, Milwaukee.

Nuserymen Hold Successful Convention

The meeting of the Wisconsin Nurserymen's Association held in Milwaukee, November 30-December 1-2, was well attended and the program of interest and value to the industry.

New officers were elected as shown at the heading of this page, with Robert H. Gieringer and Ralph Petranek as new directors.

The nursery short course held on the first day and conducted by the Dept. of Horticulture, U.W., was very well attended and the program excellent. We hope to have some of the papers given in early issues.

There was considerable discussion on "our new license Law", lead by Ken Greaves and Walter Krahn. The new law is designed to assure consumers of a better quality of nursery stock and eliminate some of the bad practices observed during recent years, such as unloading imported dried out rose plants in truck sales directly to consumers.

Prof. Donald Watson of Michigan State College stated that Horticulture has grown to "majestic proportions" in this country and is making an enormous contribution to the economic, social and spiritual life of the nation. The industry has great potentials, especially in Wisconsin. We are low in the per capita production of nursery stock—only \$1.82 per person is grown at the wholesale level in this state, compared to more than \$7.00 per capita in Iowa.

Mr. Ken Greaves suggested colored pictures and full description of nursery stock be published by a pool of wholesalers and furnished to retailers in the same way the Holland Bulb Co. and rose growers do. Plans for a new tag for retail sales were discussed. Mr. Don Groth, Milwaukee was made chairman of a committee to plan the "Plant Wisconsin" program, which is a part of the Plant America program.

It was proposed to set new standards for the nursery industry to assure consumers of better quality. We are not producing enough nursery stock in this state to meet the demands and are importing a great deal from other states.

THE NATION'S LARGEST WHITE PINE

By Theo. Kouba

Interesting indeed was the information in the October issue of Wisconsin Horticulture magazine about the sixteen foot long white pine log on display in Mildred Park at Solon Springs. We trust that this log has been properly treated with 'an insecticide so that beetles will do no damage to either bark or wood.

Readers also will be interested in a large living white pine growing two miles west and two miles north of Newald in Forest County. This giant tree measures about six feet in diameter at stump height, approximately 19 feet in circumference. It has been designated by the American Forestry Association as the largest standing white pine (**Pinus strobus L.**) in the United States. Its age is estimated as 400 years and it contains approximately 8,000 board feet of lumber. This tree is mute evidence of the great white pine forests that used to be.

King white pine was the name applied to trees such as this one by the early lumbermen to emphasize the special qualities of their wood. White pine wood,

The Nation's Largest White Pine Tree

(Continued from page 141)

quite probably, has been used in a greater variety of ways than the wood of any other native tree species. The lumber in many homes built of white pine about 100 years ago remains in good condition.

Our Present Stand

At present Wisconsin has almost 1.000 .-000 acres of white pine forest, mostly of reproduction or sapling size. Not all of this acreage is adequately stocked, however. Fortunately, white pine produces seed in good quantity, and, as a consequence, increases occur not only in the number of new trees in a stand but in the size of the forests as well. Forest regeneration, however, is only the initial phase of forest restoration. Protection of the young trees from various enemies, including the blister rust disease, must follow. With proper forest protection established, new pine areas can develop and the older ones can grow into sawlog timber. Such a condition will help to alleviate the recognized shortage of white pine lumber in this state. At present, most of the needed lumber is shipped here from the west.

Blister Rust

It is generally known that all trees are subject to attack by destructive pests and plant diseases. The white pine is no exception to this rule. The most serious disease of white pine, blister rust, was accidentally brought to this country from Europe during the early part of this century.

Before the introduction of blister rust into this country, currant and gooseberry plants and white pine trees were on friendly terms. Today this condition is changed, for wherever these bushes grow near white pines there is the danger that the trees will become infected with blister rust because currant and gooseberry plants spread the disease to white pines. Blister rust, however, cannot spread from a diseased tree directly to a healthy one.

Control

But blister rust can be controlled. It

can be controlled merely by destroying the wild and cultivated currant and gooseberry bushes within 900 feet of a white pine stand. The cultivated European black currant is so susceptible to infection and such an important agent in the long distance spread and establishment of the disease that it should not be grown in localities having white pine. This currant is not a native plant. It seldom escapes from cultivation; consequently, it can be found without great effort and eradicated.

When protecting a pine stand from blister rust, scattered bushes in the woods or along fence rows may be uprooted by hand, but care must be taken to get out all roots to prevent sprouting. Where they are numerous and difficult to remove, they may be destroyed with herbicides.

White pine planting stock free from blister rust is assured only when grown under conditions free from currant and gooseberry bushes. It is for this reason that owners of nurseries growing white pines establish and maintain a 1500-foot zone around their nurseries free from these bushes. This assures the distribution of disease-free white pine from producer to consumer. The nurserymen are protected against selling diseased planting stock to their customers and the purchasers are protected against receiving infected trees that ultimately would die from this disease.

The blister rust control program in Wisconsin is conducted jointly by the Wisconsin State Department of Agriculture and the United States Forest Service in cooperation with the Wisconsin Conservation Department, counties and private white pine owners.



Wisconsin Horticulture

Antibiotics For Fire Blight Control

Articles published during the past few months in fruit growers magazines indicate that some fruit growers have had trouble in checking fire blight with antibiotics. On a visit to the William Louis orchard, Richland Center in July, Mr. Louis showed plots sprayed with agrimycin, which had as much or more fire blight than check plots not sprayed.

In a recent Newsletter by the Minnesota Fruit Growers Association, an article taken from the Newsletter of the Kansas Horticultural Society stated, "Blight is very much in evidence in orchards treated with antibiotics. While not as disastrous in most orchards as has been experienced in some years, many growers are skeptical that results justify the expensive cost of application. Check plots with less blight than sprayed areas cause one to wonder if the commercial chemicals sold for this purpose are fortified for maximum protection and high percentage of control, which we were led to expect and certainly must receive if this expensive procedure is to be adopted as practice. In reality the results seem as unpredictable as blight itself was before control measures were used."

Has Good Results

At our Orchard Tour and Machinery Demonstration at the Hasslinger Orchard, Nashotah, Mr. Robert Sacia, orchardist at Galesville, told us that he had excellent results by using agrimycin on 12 acres of fruit. Mr. Sacia used a 4X concentrate spray in his regular schedule and did not want to change it so, also used it for fire blight control. He used 2 sprays of 50 ppm during bloom and 1 spray with 75 ppm during late bloom, almost at petal fall, on Wealthy, Jonathan and several other varieties. However, the 4X concentrate would make this 200 ppm and 300 ppm. Mr. Sacia reports that there are only a few limbs showing a trace of fireblight-or in other words, he thinks that he obtained 99% control. A check plot, unsprayed, of Wealthy started to get blight about the time of the first cover spray and is now really brown and in bad condition. He said that fire blight has not bothered his large planting of Delicious.

The conclusion is that we must learn what causes these differences in results.

Junior: "Dad, did you go to Sunday School when you were a little boy?"

Dad: I sure did. I never missed a Sunday."

Junior: "See, Mom? It won't do me any good, either."



A Rabbit Trap May Save Plants
m the Editor's Desk

OUR COVER PICTURE

This month our cover picture shows North America's largest Northern White Pine Tree, located in Forest County.

The tree is described in an article in another section of this issue. Several suggestions for a name for the tree have been made. We would like to give our suggestion: Paul Bunyan's Cane or Paul Bunyan's Walking Stick. At any rate I think we're all proud to know that Wisconsin has the largest White Pine Tree in North America.—Photo by Wisconsin Conservation Dept., Madison.

OUR ANNUAL CONVENTION

The annual convention of the Wisconsin State Horticultural Society held at the Retlaw Hotel, Fond du Lac on November 15-16, was very well attended and the program was excellent.

The Women's Auxiliary held a very interesting program with arrangements and apple cookery exhibits.

Exhibitors who won prizes were Mrs. Arthur Bassett, Jr., Baraboo on apple sauce squares and a flower centerpiece. Mrs. William Basse, Muskego on Roman apple cake. Mrs. Philip Dell, Waldo on apple bread, applesauce brownies, and arrangements of a train and "Johnny Apple Seed", a Christmas wreath and a fruit basket. Mrs. Emil Beyer, Malone on Chocolate chip cake. Mrs. John McIlquham, Chippewa Falls, on two different applesauce cookies and applesauce fruit cake. Mrs. E. L. White, Ft. Atkinson on applesauce cookies. Mrs. Marshall Hall on applesauce brownies. Mrs. Willard Wagner, Cleveland on Old Fashioned applesauce cake. Miss Bessie Pease, Oshkosh on flower arrangement of a Horn of Plenty.

Auxiliary Officers Elected

The Auxiliary elected the following officers for the coming year. President, Mrs. Arthur Bassett, Jr., Baraboo. Vicepresident, Mrs. Dawson Hauser, Bayfield. Secretary-treasurer, Mrs. Armin Frenz of Cedarburg. We wish to express our thanks to Mrs Marshall Hall, Casco, past Auxiliary president, for her leadership and untiring efforts to make the program successfu during the past two years. We also express our gratitude to Mr. Marshall Hall, retiring president of the State Horticultural Society for his helpfulness, diplomacy and efforts to make the work of the Society successful during his two years as president and two years as vice-president.

New Officers Elected

Officers of the Society elected were: for president, Mr. Arthur Bassett, Jr., Baraboo; vice-president, Mr. Dawson Hauser, Bayfield; E. L. Chambers, Madison, treasurer and H. J. Rahmlow, Madison, secretary for the 28th consecutive year.

Elected on the Board of Directors for three years: E. A. Erickson of Casco, James Schultz of Lake Mills and Harvey Smith of Kenosha.

Certificates of honorary recognition for outstanding services to horticulture were given to Mr. William Connell of Menomonie and Mr. Arno Meyer of Waldo by president Marshall Hall following the banquet. Their biographies were given in the November issue of Wisconsin Horticulture.

Some of the papers presented on the program will be found in this issue and others will be published in early numbers.



Wisconsin Horticulture

THE CONVENTION FRUIT SHOW

The fruit show held in connection with the annual convention of the Society on Nov. 15-16 was again an interesting feature. We appreciate the help of Prof. Malcolm Dana and Prof. George Klingbeil for staging and judging the show.

Mr. William Connell of Menomonie won the grand championship award on his basket of Delicious, winning a 50 lb. drum of Captan by the Stauffer Chemical Co., W. H. Bigelow, Omaha. He also exhibited a cardboard box of Delicious, receiving a gallon of Paraflow by Stauffer.

Mr. Albert Ten Eyck, Brodhead, showed the half bushel container of best quality apples: Jonathan in a hexogonal box, winning a carton of Kolofog by the Niagara Chemical Co., Mr. R. H. Hawkins, Waupaca. Others who won a gallon can of Paraflow by the Stauffer Chemical Co., on a container of apples were: Mrs. Joy Grimm, Nashotah on Jonathan; Walter Schultz, Lake Mills, on a polyethylene lined basket of Russets and Albert Ten Eyck on a cardboard box of Jonathan.

Grand Champion Plates

Miss Lenore Zinn of Hartford won the grand championship ribbon on her plate of Cortland, winning a 5 gallon pail of Crag Fruit Fungicide 341, by W. H. Barber Co., Chicago, Ill., Mr. M. Shepherd.

Reserve grand championship went to Herbert Hasslinger of Nashotah on a plate of McIntosh. He won a carton of 42 pounds of Kolo Carbamate from Niagara Chemical Co., Mr. R. H. Hawkins, Waupaca.

Winning 6 bags of Ovotran Wettable Insecticide from the Dow Chemical Co., Mr. W. C. Kenyon, Chicago, Ill., on first prizes were: on Fireside and Wealthy, John McIlquham, Chippewa Falls and on Prairie Spy and N. W. Greening, Emil Beyer, Malone.

Winning first prizes of a 10 pound bag of Orthocide 50W by California Spray Chemical Corp., Victor G. Ruh, Janesville were: on McIntosh and Jonathan, Herbert Hasslinger of Nashotah; Red Delicious and Golden Delicious, Emil Beyer, Malone; Cortland, Miss Lenore Zinn, Hartford.

First prize plates of Macoun and Haral-

son were shown by John McIlquham, Chippewa Falls and Secor by Emil Beyer, Malone.

Other prize winners on fruit exhibits were: Dawson Hauser, Bayfield; Philip Dell, Waldo; J. M. Pick, West Bend; George Premo, Richland Center; A. T. Hipke, New Holstein; Marvin Kosanke, Ripon and Arno Meyer, Waldo.

MEETING OF FLORICULTURISTS

You are invited to attend a meeting for florists, "flat" growers, estate gardeners, park personnel and all commercial floriculturists on Thursday, February 2, 1956, during Farm and Home Week.

Prof. Louis Berninger of the Dept. of Horticulture, tells us the meeting will start at 9:00 a.m. with a visit to exhibits at the Stock Pavilion. Then meetings at the new Greenhouse Range. From 10:00 to 11:00 a.m. a report and observations on Floriculture Research.

The afternoon meeting will be in the Auditorium of the Bacteriology Building with talks at 1:30 on Cut Flowers by Prof. John Seeley of Pennsylvania State University; Spring Disease Problems by Prof. Earl Wade; the Floriculture Industry in Wisconsin by Louis M. Berninger: Pot Plants for Greater Profits by W. W. Grimmer, Holton & Hunkel, Milwaukee and Bedding Plant Operations by Prof. Seeley.

Sounds like a most interesting program.

Many a person with tired feet concludes that a reception is just a highsounding name for an ordinary party after the chairs have been removed.—Dorchester Clarion.





WISCONSIN GLADIOLUS SOCIETY

OFFICERS

_Ralph Burdick, Edgerton Pres. Vice-Pres. -Pres. Two Rivers Mrs. Joseph Rezek, cretary _____Man. R. 2, Manitowoc

asurer ____Dr. R. A. Kast 315 Washington St., Wausau . Kasten. Treasurer

DIRECTORS: Fox River Valley Chapter: Carl Knoll and S. F. Darling, Appleton. Madison: Ed Lins, Spring Green; Theo. Woods, Madison. Manitowoc: Joseph Rezek and Gil Thompson, Manitowoc. Marathon County: R. H. Juers and Mark Splaine, Wausau. Sheboygan: Paul Beer, Port Washington; Walter Axel, Sheboygan. Twin City: Jerry Merchart, Marinette; Arthur Kottke, Oconto. At Large: Walter Bell, Appleton; Ralph Burdick, Edgerton; H. A. Kasten, Wausau; Al Schmidt, Two Rivers; Leland Shaw, Milton and Gordon Shepeck, Green Bay.

PRESIDENTS MESSAGE

Best wishes of the season to all State gladiolus growers. May the New Year bring better growing conditions and top bloom for our best effort of 1956.

The Central International Gladiolus Show.

Please remember this will require the united efforts of all of us to make it a success. Those who cannot contribute personal effort-remember the bulb auction at the Spring meeting and be generous with bids and bulb contributions.

Those of you who plan to attend the show and would like to help with it, let your executive committee know as soon as possible.

Schedule your plantings to bring full bloom during show week. Let's make this the best and largest show in the history of the Central International. -Ralph Burdick, President.

HOW THE BOARD OF DIRECTORS IS ELECTED

At the annual meeting of the Wisconsin Gladiolus Society held in Oshkosh on April 12, 1953, the following amendment to the Constitution was adopted.

"The Board of Directors shall consist of two members to be elected annually by each affiliated chapter of the Wisconsin Gladiolus Society and six members at large to be nominated and elected from the floor at the annual fall meeting of the Society. Each member at large shall be elected for a period of two years, three to be elected each year. An affiliated chapter shall have at least ten or more members in the State Society."

The following motion defined how a chapter may be eligible for board membership:

"A chapter to be entitled to members (Continued on page 148)



Officers and Directors, Wisconsin Gladiolus Society met in Appleton, November 6. Seated, from left: Dr. R. H. Juers, Wausau; Mark Splaine, Wausau; Paul Beer, Port Washington; Al Schmidt, Two Rivers, vice-president; Ralph Burdick, Edgerton, president; Mrs. Joseph Rezek, Manitowoc, secretary; Dr. H. A. Kasten, Wausau, treasurer; Gil Thompson, Manitowoc.

Standing: Carl Knoll, Appleton; Dr. S. F. Darling, Appleton; Gordon Shepeck, Green Bay; Leland Shaw, Milton; Art Kottke, Oconto; Joseph Rezek, Manitowoc and Walter Axel, Sheboygan.

Two Glorious All-America Gladiolus

Two glorious new glads, first ever to be introduced as All- America Gladiolus Selections, bring the most popular of all bulb flowers into the All-America garden family.

Royal Stewart is the outstanding lightly ruffled clear light red of royal richness.

And, the exquisitely ruffled snowy white **Appleblossom** with its deeply pink flushed margin brings a new conception of beauty to gladiolus.

Both winners are vigorous growers even to five feet high and can open eight to twelve five-inch flowers at a time. These exhibition spikes and flowers are easy for everyone to grow in any garden soil, north and south from coast to coast.

Almost as important is the fact that this is believed to be the first time that important gladiolus are being introduced at a popular price. Usually a meritorious new glad is offered at \$5 to \$25 per bulb or corm.

Several attempts have been made during past fifteen years to start competitive trials for the testing and screening of new glads. However, some three years ago, a large group of leading gladiolus growers and hybridizers met in Cleveland, Ohio to formally start a non-profit organization to fairly and thoroughly test and score the more promising new prospects. Instead of the three or four independent testing stations of the recent past, some thirty dependable judges in whom they had confidence were chosen to represent all sections of the United States and southern Canada. These judges would grow and score the new prospects according to their behavior in each of these different trial locations.

You may now look forward to new All-American gladiolus leaders from year to year. Forty eight promising gladiolus seedlings were entered for testing in 1955 and from our observations of them through last summer the judges will have a tough job choosing from among the top five or six future All-Americas. Appleblossom is an early midseason bloomer, classed as 460 by the North American Gladiolus Show Classification. It is of the utmost delicacy of coloring, the predominating hue being snowy white with a faint touch of cream in the throat and an exquisite flush or corona of cool rose pink at the edges of the petals.

Royal Stewart also is an early midseason bloomer, classed as 450 by the North American Gladiolus Council Show Classification. It is truly remarkable and has been widely acclaimed for its consistently fine performances under the extensive test program throughout the United States and across Canada. The lightly ruffled florets reach five inches in diameter and are of fine texture and good substance.

As with Appleblossom, look for large size bulbs only of Royal Stewart in A.A. G.S. individual transparent polyethylene bags for your own protection.

Royal Stewart resulted from a cross of the popular Red Charm and an unnamed seedling by Ralph Pommert of Pacific, Washington.

Appleblossom resulted from a cross of Beautys Blush and Rose Charm by Ralph Baerman and Cal Fischer of St. Charles, Minnesota.

MARATHON COUNTY CHAPTER NEWS

At the annual meeting and binquet of the Marathon County Gladiolus Society on November 8th, Mr. Archie Spatz was elected president for the coming year, Mr. Gordon Meland vice-president, Mrs. Mark Splaine, secretary and Charles Porath, treasurer.

Mr. Ed Howland and Julius Birr were elected directors for three years. Other directors are, Dr. R. H. Juers, Charles Porath, Mark Splaine and Dr. H. A. Kasten.

Dr. Juers and Mark Splaine, directors of the Wisconsin State Gladiolus Society gave a report of the State meeting held at Appleton, November 6th.

The main topic of discussion was on future plans. We will hold our local glad shows in conjunction with the Marathon County Fair, if and when a booth or building is available.

Banquet tables were decorated with beautiful arrangements of mums, bittersweet and greens created by Mrs. Nina Drumm and Mrs. James Ellingson. Beautiful placement cards were made by Mrs. E. D. Kraemer. Mrs. H. A. Kasten was supervisor of the banquet and committee.

Colored slides of local gladiolus gardens were shown by Mark Splaine.—By A. W. Schulz, Wausau.

How the Board Is Elected (Continued from page 146)

on the Board of Directors shall affiliate all of its active members with the State Society, excepting that out of state members or associate members of a chapter need not be included. Dues for the chapter shall be collected by the chapter treasurer and submitted to the State Society treasurer."

Chapter Participation In Show Profits

At this meeting a motion was also passed that "At any state show 65% of the net profits shall remain with the local chapter and 35% shall go to the State Society. In the event of a deficit the local chapter shall assume 65% of the loss and the State Society 35%."



The First All American Gladiolus Selections

are now ready. ROYAL STEWART, bright, cheery, clear red. Tall easy growing. Many open florets. You'll love it! APPLE BLOSSOM. Beautiful pale pink, deeper at the edges. Extra tall and fine. Two wonderful new glads. Wisconsin flower lovers should feel proud that we have one of the All American Glad trial gardens. Introductory prices, choice, large bulbs \$1.00 each. Send for Catalogue.

Cosmopolitan Glad Gardens

231 W. Wisconsin Ave., Milwaukee 3, Wisconsin.



Garden Club News

GARDEN CLUB OF WISCONSIN

OFFICERS s.____Mrs. A. J. Wiesender, 217 Park St., Berlin

Vice Pres.___Mrs. C .H. Brimmer Wausau

Wausau Trens.....Mrs. John Kiesling, Sr., Route 1, Ft. Atkinson Sec...Mrs. H. Buerosse, Milwaukee efferson: Mrs. John Kiesling, Sr., paca. Milwaukee Region: Mrs. Ray EXECUTIVE BOARD: Blackhawk Region: Mrs. Ed Streich, Jefferson; Mrs. John Kiesling, Sr. Central Region: Mrs. C. H. Brimmer; Mrs. C. H. Braman, Waupaca. Milwaukee Region: Mrs. Ray Juckow, Milwaukee; Mrs. H. B. Buerosse. Winnebagoland Region: Mrs. Carl Reik, Chilton; Mrs. Ray J. Wiessender. Parlimentarian—Mrs. Roy H. Sewell, 7341 N. 76th St., Milwaukee. Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

GREETINGS FROM THE PRESIDENT

Greetings and my best wishes to all Garden Club of Wisconsin members. May you all experience a happy and profitable new year.

We have been growing steadily and have accomplished much to be proud of. I am sure we will continue the good work. Before we erase last year's programs from the slate let us look again at some of these outstanding projects. For instance, the Flower Arrangement and Design School, held in Oshkosh last August, with the nationally famous Carl Starker as the arrangement demonstrator. We learned much that day, not only from Mr. Starker's splendid work, but ulso from the exceptional flower arrangements contributed by club members. The committees in charge did a splendid bit of work also! We hope to have more of these programs.

Pres

Then the Convention of the Garden Club of Wisconsin, held at the Baptist Colony, Green Lake. What a beautiful place for a garden club convention. Surely we are all looking forward with enthusiasm to the 1956 convention which will be there again in September, 11-12.

And the Regional meetings, with their instructive programs, enthusiastic audiences, and fine luncheons, certainly were a credit to their garden clubs. And speak-



At the Board of Directors meeting, Garden Club of Wisconsin, Fond du Lac, Nov. 7. Seated from left, Mrs. R. H. Sewell, Parlimentarian; Mrs. John Kiesling, Ft. Atkinson, Treasurer; Mrs. H. B. Buerosse, Milwaukee, Secretary; Mrs. A. J. Wiesender, Berlin, President; Mrs. Harold Poyer, Ft. Atkinson, past President.

Standing: Mrs. Allen Ley, Rome, past-Secretary; Mrs. Charles Bierman, Wauwa-tosa, past-Treasurer; Mrs. Carl Peik, Chilton; Mrs. Ray Luckow, Milwaukee; Mrs. Ed. Streich, Jefferson.

January, 1956

ing of garden clubs, those of you who examined the garden club programs at the convention, know what detailed and informative work is being accomplished. Don't forget to send in accounts of your meetings to Horticulture. And our hats off to last year's State Committees. They have earned a big credit mark for their accomplishments. This year's committees are already on the job. The program committee is compiling a list of speakers, slides, etc., with charges, to be sent to each garden club as a program aid, the membership committee is working on the organization of two new clubs.

I was very happy, as your new president, to attend the meeting of the Board of Directors of the State Horticulture Society held at the Retlaw Hotel, Fond du Lac, November 16. I feel that we are indeed privileged to be affiliated with so important an organization. The Society has made your President a permanent member of the Board. — Mrs. A. J. Wiesender, President.

BOARD OF DIRECTORS MEETING, GARDEN CLUB OF WISCONSIN

The Board of Directors of the Garden Club of Wisconsin met in Fond du Lac on November 7 to elect officers and appoint committees. The officiers are listed at the top of the garden club news page and the list of committee members will be published in our directory in the February issue.

Mrs. Charles Bierman, past treasurer, reported that the income from the Carl Starker lecture was \$326.80 and expenditures \$161.75. There is a balance of \$355.34.

Receipts from registration, etc. at the annual convention were \$42.75 and expenses \$30.75. Balance on hand on November 1 was \$370.19. This indicates excellent progress during 1955.

The Board will meet again on Monday, April 12 to plan for next summers projects.

An ideal small town is one where everybody speaks to everyone else, not about them.—West Salem Journal.

CHILTON GARDEN CLUB NEWS

We organized our club on April 6, 1954 and now have a membership of 14. In the past year we have had some very interesting programs. Mr. Oscar Schaubs gave a talk on gladiolus; Mr. M. J. Bankert gave us information on the use of insecticides. Mr. Norbert Thuerwachter spoke on flower planting around the house at our June meeting. In July Mr. W. C. Burgdorf told us about his years of experience with bees. We revised the premium list on flowers for our county fair. Our County Agent, Mr. Orrin Meyer, showed a movie 500,000 to 1, on insects, how they feed and develop. Mrs. Henry Dorn of New Holstein told us about growing and care of African Violets. Mr. Elmer Whitby spoke on vegetable varieties for earliness, color and flavor, also a short discussion on strawberries. In May Mrs. Alphonse Keuler gave us a lot of information on weed killers and how to use them. We were hosts to the spring meeting of the Winnebagoland Region at Hotel Chilton. Mrs. Todd talked to us in Sept. and would like to see us adopt a certain flower and promote its growth throughout Chilton. In October Mrs. A. J. Wiesender of Berlin showed slides on a trip to Greece and Bavaria with special emphasis on plants, flowers and trees; a very interesting program. In November we studied arrangements of dried materials with Mrs. Alphonse Keuler and Mrs. Oscar Tollefson. Slides on the Tournament of Roses were shown.

In trying to get better acquainted we've had as guests New Holstein and Kiel members at our last two meetings. We wish to thank all who have helped make our meetings successful.—By Mrs. Elmer Whitby, Chilton, Secretary.

NEW ZINNIA-ICE CREAM

"Ice Cream" Zinnia is a well-described name for it. The color is midway between rich vanilla and New York ice cream. This color is valuable as a "blender" to harmonize clashing reds, purples, oranges and pinks. It does not destroy the brilliancy of contrasts like pure white does. Seed available for 1956.

Why We Should

Grow The Astilbes

By Mrs. Robert Holly, Waupaca

Just why the Astilbe, attractive shrublike plants are not more generally grown, I am at a lose to understand. Most nurseries list at least a few varieties and their beauty and adaptability should make them real favorites. So it is quite surprising to visit garden after garden and find no Astilbes growing therein. They are members of the saxifarge family.

The plant as a whole is most attractive, having many lobed deeply cut leaves with toothed edges, but without the shininess so many of our plants show; in fact, Astilbe is a Greek word meaning "not shining", but that certainly does not detract from the plant.

The bloom is beautiful, usually growing into a spike of feathery fluffiness. They range in color from pure white and cream thru all the pink shades to red and a few are sort of rose purple. Some sport blue stamens on pink flowers, others have pink ones on white or cream. The special simplicifolia and its progeny give us a more drooping flower stalk, but still feathery and lovely.

It's possibilities for flower arrangement, either alone or in combination with others is limited and should be used much more than it is.

Both Japan and China have given us species and it is from these that we Americans have developed so many beautiful types. Recently, I was surprised to learn that there is a native specie growing in one of our more southern states.

In height they average from six inches to six feet. They like both sun and shade, seem to prefer more of the latter; want plenty of water, don't seem to be too fussy about soil, tho mine do best in a spot with plenty of humus and good drainage. They can be transplanted in either spring or fall. I prefer fall, for most of them bloom in mid summer, but the smallest family, a real dwarf, waits until all of the others are thru blooming and then puts on a show of its own. This is chinensis pumilla, the plant itself lies on the ground, almost recumbent, and shoots up many spikes of bloom in a sort of rosy purple shade, to a height from six inches to a foot. This variety ends the season for Astilbes.

They do not seem to be susceptible to disease, but I find that they are occasionally attacked by the red spider.

Now doesn't this sound like an interesting perennial, easily propogated? When you lift them to transplant you will find they divide very easily.

Among the good whites I might mention, Deutchland, Avalanche, White Elf, White Chinensis and a new one, Orrlicht.

The first good red was Fanal, and it is still a top notcher. Fever, a deep firey red, Vesiuvius and Red Sentinel. The pinks range in color from the very pale to the deepest rose and include Rhineland, Peachblossom, Salland, Margaret Von Rectheren, Davidi and Erika. America is a pale pink lavender, early and lovely. There are several creamy whites also.

There are many more but this is a good list to choose from, and I do hope you will try some this coming season. I am very certain you will enjoy making their acquaintance, if you haven't already done so.

26TH CHICAGO FLOWER SHOW MARCH 9TH THRU 18TH

The Garden Club of Illinois will present its 26th Flower Show at the new Prudential Mid American Building. The theme will be "Our Illinois", Heart of Mid America.



Dried Material

Needs Arranging Too!

By Mrs. G. L. Lincoln, Madison

The importance of good mechanical aids in holding material exactly where you place it is most graphically shown in the two illustrations this month.

Each container is the same size and shape; contains exactly the same dried material in the same colors and numbers of sprays. One container is light, the other dark, and the poor results in the light container is not from lack of trying, but from a lack of mechanical support. Ten minutes sufficed to put together the arrangement in the dark container, and an hour slipped by in frustration and annoyance for the light container.

All tall, opaque containers should be filled with inch mesh chicken wire, which



should be left in after use. In this example, the containers are about six inches high and four inches across, and contain a piece of chicken wire about three inches wide and 30 inches long (five times the height of the container).

In the dark container, the wire was left in, but compressed a bit, and a piece of styrofoam about 2 inches thick cut to fit under the lip of the container, and on top of the chicken wire. The styrofoam does not quite cover the entire top, leav-



The Arrangement (?) on the left contains the same material as the one on the right.

ing a small space vacant near the back where the heaviest branches can be put directly into the chicken wire itself.

Material Used

Material used in both containers is 8 sprays of fertile fern fronds in dark brown for the highest placements, 10 small orangy yellow strawflowers and 6 dark red ones of the same size, 3 large yellow straw flowers, and brown pine cones. These seed bearing mechanisms from one type of fern grow at least as far north as Iola, for they were a gift to me from a generous person who lived near there. Pine cones can be found most anywhere, and straw flowers are common in florists in the fall. Do ask him to order the small ones as well as the large, for the change in size adds much to an arrangement. Cleaned in a dry cleaning fluid, and kept in a dry, dark box, they may be used for more than one year.

Both large and small strawflowers in the dark container had the bare wire stems wound with brown floral tape before arranging. Covering the wires make them seem more natural, and more important, keep the stems from twisting round and round when arranged. Arrange the three highest fertile fern fonds in your hand, add about five or six of the top yellow small straw flowers, scotch tape all together, and place as a unit in the chicken wire at the back of the container.

Cut stems of remaining five fertile fern fonds to a sharp point, and place singly in the styrofoam at a slant, making sure no two tips are at the same level, and allowing variations of distance in the voids between.

For the lowest placement, cluster four small straw flowers in the hand, scotch tape together, set into styrofoam, and bend to a deep downward sweep, using lightest and smallest flowers for the highest and lowest placements in the arrangement.

Each of the four cones used at the focal point has a No. 20 wire looped around the segments at the base, and twisted into a stem. Fasten all four wires together with wire or scotch tape, and push down into styrofoam. Add dark red strawflowers next, and set three large yellow strawflowers in place singly last of all, covering wire with floral tape so it will not twist when placed in foam.

There is a diminishing point at the top of the arrangement; the line at the mouth of the container has been broken by pine cones, the curved line of the large straw flowers sweeps up and down into small straw flowers, the arrangement is more than 1½ times the height of the container and base, both of which "are dark enough in color to give visual stability to the whole composition.

When Every Stem Goes To The Bottom

The arrangement in the lighter container is a good example of what can happen with no mechanics to hold anything in place. At least four times as much material would be needed so it could "hold each other up". Because every stem goes to the bottom of the container, a shorter arrangement results from the same stem length. Without support the pine cones droop too far forward, and overbalance the container, which had to be weighted down to hold it in place. The pale yellow container is too light for the heavy pine cones, and would need a heavy brown base to give it sufficient usual stability for the material used.

NEW PLASTIC GREENHOUSE

A plastic greenhouse that can be put up quickly and stored flat when not in use has been developed by Russell Reinforced Plastics Corp. of Lindenhurst, New York. It is 12 feet long and 11 feet wide. and several of the units can be attached together to form a longer building. Flat plastic sheets molded from glass fibers and Vibrin polyster plastic produced by the Naugatuck Chemical division, United States Rubber Co., are used. The sheets won't shatter, warp or rust; and they let in about 60 per cent of the light but cut out much of the sun's heat. The sheets also diffuse light, spreading it evenly throughout the greenhouse. They are curved over a bolted aluminum frame. and fastened to the frame with self-tapping screws.

For Your Garden Club Program

FLOWER FILMS IN COLOR AND SOUND AVAILABLE

Six free flower films are now available from FILMS OF THE NATIONS, SPONSORED FILM DIVISION, 62 West 45th St., New York 36, N.Y. These gorgeous films are available to garden clubs planing to hold large meetings of 50 or more persons. They would be especially adapted to regional and state meetings.

MODERN CHRYSANTHEMUMS FOR FALL BEAUTY. 2 reels, 20 minutes, color, sound. Sponsor: Jackson & Perkins Company. This film shows in beautiful photography fall scenes and chrysanthemums. Apart from the acres upon acres of chrysanthemum fields in full bloom it depicts perfect close-up shots of each variety. Then it goes on to explain where chrysanthemums should be planted around the home for perfect results.

ALL AMERICA ROSES. 1½ reels, 13 minutes, color, sound. Sponsor: All America Rose Selections. The AARS label on a rosebush is the equivalent to an Oscar in Motion Picture production. Here is the interesting story of rosegrowers all over the United States competing in the coveted AARS award for the best roses obtainable. Rosarians in 22 testgardens check the roses over a two year period and report their findings to a National Jury. A wonderful film showing close-up shots of a majority of AARS winners, and garden scenes.

NATIONS UNITED FOR SPRING BEAUTY. 2 reels, 20 minutes, color, sound. Sponsor: Associated Bulb Growers of Holland. Here is an unusual film which will be of great interest to all flower lovers. The story deals almost exclusively with inspection and research.

MODERN ROSES ON PARADE. 3 reels, 30 minutes, color, sound. Sponsor: Jackson & Perkins Company. This is an up-to-date version of THE STORY OF MODERN ROSES which was released 3 years ago. Many scenes have been replaced and 20 new Rose Varieties, added in the last three years, are shown in the new edition. The World's largest Rose Growers present in this beautiful picture the research, the testing in the fields and greenhouses in Newark, N.Y. It shows the creation of a new rose from an idea in the hybridizer's mind to the first new plants. The famous 17 acre J & P Rose Garden with 2,000,000 roses in bloom is featured.

SPRINGTIME IN HOLLAND. 21 minutes, 2 reels, color, sound. Sponsor: Associated Bulb Growers of Holland. Holland's magic carpet: the tulip, hyacinth and daffodil fields in bird's eye view. Hybridizing new varieties; gorgeous close-up shots of bulb flowers. The colorful floats and parade when the flowers are at their best.

BIRDS WHICH REMAIN ALL WINTER

By Mrs. R. A. Walker, Madison

It is a pleasure to learn to identify the birds in our yards and gardens. Some will remain the year round. Others drop in only for a few days. Still others come in the spring, remain to raise their families, and then depart in the autumn.

Erect feeding stations and keep food constantly on hand. Build pools and bird baths. Plant trees and shrubs for shelter and provide attractive and tasty berries for food. Protect birds, their nests, eggs and their young from squirrels, cats and over-eager children.

Resident Birds

Red-tailed Hawk White Breasted Nuthatch Herring Gull Screech Owl Cardinal Long-eared Owl Ring - necked Hairy Woodpecker Pheasant Blue Jay Barn Owl (rare) **Tufted Titmouse** Barred Owl Red-bellied Wood-(rare) English Sparrow pecker **Bob-White** Horned Lark **Ring-billed** Gull Black-capped Horned Owl Chickadee Short-eared Owl Starling **Downy Woodpecker** Slate-colored Junco Crow

Wisconsin Horticulture

Care of Potted Plants

By the Department of Horticulture, U. W.

You don't need to throw out potted plants after they stop blooming. With proper care many flowering plants can be made to bloom year after year. Plants like the rose and Easter lily make attractive permanent additions to your garden. Other plants like the poinsettia and azalea can be placed outdoors during the summer months and brought indoors again in the fall.

It is fun to care for plants and watch them go through a complete cycle to bloom again next year.

Indoor Flowering Bulbs

Tulips, daffodils, hyacinths and other bulbous plants may be kept and planted in the garden in the Spring. However, it often takes two to three years for bulbs to come back into bloom after they have been "forced" for indoor use.

While indoors, keep your plants in active growth. Remove the old flowers after blooming to prevent seeds from forming. Place the plants in a cool, sunny room and don't let the soil get dry. The vigor of bulbs is reduced if they lose their leaves too soon.

When the soil can be worked for planting, transplant the bulbs to the garden. Select a warm, sunny location withwell-drained soil. Plant the bulbs at a depth equal to two or three times their diameter.

Poinsettias

Poinsettias do best in a sunny location away from heat outlets and drafts. They need a uniformly moist soil at all times and a night temperature of 65 to 70 degrees.

Begin feeding your plants a complete fertilizer (10-10-10) three weeks after receiving them in your home. Apply this to the soil at the rate of one teaspoon per gallon of water. Repeat this every three weeks until the plants lose their flowers (bracts).

When the bracts drop, gradually reduce the supply of water. Then move the plant to a cool location (not more than 60 degrees) such as a casement window or ledge. Water then only enough (about every 10 days) to prevent the stems from shriveling or cracking.

After the garden soil warms up in late May, move your plants outdoors. Cut the stems back to 3 to 5 inches from the soil. Repot the plant using a soil containing at least 25 per cent organic matter (compost, well-rotted manure, or peat). Add a teaspoonful of superphosphate (0-20-0) to the soil mixture for every 6 inch pot. Sink the pot in a sunny location with well-drained soil. Give the pot a turn every two weeks to break off roots growing through the drainage hole.

Beginning October 1, poinsettias need complete darkness every day from 5 p.m. to 8 a.m. Put a cardboard box over the plants to provide this necessary "short day". Continue this until the flowers begin to show color in late November. Many people do not provide the required "short day" periods and 60 degree night temperature at this time. As a result, their poinsettias don't bloom during the Christmas season.

Cyclamen

Cyclamen need a cool, sunny location with a 50 degrees night temperature. Leaves will turn yellow and the buds will dry up if night temperatures are too high, the soil too dry, or if there is not enough light.

When the plant stops flowering, reduce the amount of water gradually and then keep the plants dry until June. During this time, store the potted corms in a cool place (basement). In June, re-pot the corms in fresh soil containing 25 per cent organic matter. Be careful in potting to keep half the corm above the soil surface. This helps prevent the corm from rotting.

Place the plants outdoors two to three weeks later in a partially shaded location. Sink the pot into the ground up to the rim. Every two weeks, give the pot a turn.



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Report From Our Beekeepers

From Joe Mills, Ripon:

We tried fumagillin for the first time last spring on a large scale. The results, we feel, are worth the expenditure. Fumagillin fed colonies built up very nicely and were in excellent shape at the start of the flow.

We plan to examine all of our colonies next spring early in April, a few yards in March.

We observed evidence of nosema in several of our yards just prior to the start of the flow last June. None of the yards were fed fumagillin.

The first inspection for foulbrood is made immediately after unpacking of colonies. Any yards showing up with diseases are again inspected just prior to removal of supers. Colonies are destroyed, combs burned and equipment scorched.

We thought Henry Piechowski's Wisconsin Honey Queen was wonderful for the promotion of honey. Certainly it must have centered the attention of the public on honey. I'm not sure that an annual selection of a new honey queen each year would help much altho I am of the opinion that the State Association should continue to promote Wisconsin honey at every opportunity. The cooperation of the Department of Agriculture's Promotion Bureau should be sought.

Spray Poisoning: We're becoming increasingly concerned about the effects of insecticides applied to pea fields in our territory. We have been noting over a period of years that our poorest producing yards are in areas of heavy pea acreage. We have been giving up these poor producing locations one by one for better locations.

From Marcus Osborne, Beloit:

Ordinarily, we reverse colonies as general procedure but during the season of 1955 we tried to manage two yards without reversing and considerable swarming developed in those yards, with a reduction in honey production.

We will start checking our colonies the latter part of January or early February for food supply.

We observed very little nosema in 1955. Our packages were fed Fumidil. In 1956 we will spray all colonies with sulfa and Fumidil.

If we were to find evidence that AFB was in the vacinity of one of our yards and some of our colonies had contracted it, we would destroy those colonies that had AFB and spray each colony in that yard three times with sulfa as a preventive. We find the **spray method superior** to feeding sulfa syrup, particularly in cases where there is a possibility of having the entire yard become infected.

HONEY WANTED

WANTED honey in all grades. Highest prices paid. Schultz Honey Farms, Ripon, Wisconsin.

FOR SALE

19 colonies of Bees and all the necessary equipment. Call Madison, Cedar 3-3253 or Black Earth 91, or write to Lloyd Meister, 209 S. Midvale Blvd., Madison, Wis. We need a short course on beekeeping sponsored by the University of Wisconsin along with the rest of the farm short courses, with classes for beginners as well as for more experienced beekeepers, teaching latest beekeeping trends and labor saving devices. We also need a daily market report published in the papers along with the rest of the produce market reports. Unity among beekeepers of the county, state and nation is of primary importance.

From Cornelius Meyer, Appleton

Weather permitting, we will begin to check our bees for stores late in February or early in March, as we find an occasional colony running short at that time.

We did not have nearly as much nosema this past season as in 1954, but did have 2 of our 14 yards quite heavily infected. Most infection was noted in **May and early June**, preventing good build up. We believe moisture in the hive has much to do with this condition, so in addition to the upper augur hole we are raising the inner covers ¹/₄ inch on one end to allow better escape of moisture.

Any diseased colonies found should be destroyed by burning and the rest given a feeding of sulpha syrup as a prevention.

THE HONEY MARKET AND CONDITION OF OVERWINTERING BEES

The semi-monthly honey report of the USDA indicated in late November that "bees are going into winter in average or above condition in most sections of the country." Some sections of the country however, report that "colonies are either short of feed or populations". This includes Michigan and Wisconsin.

"Plant conditions are poor at this time over most of the central part of the country including the Dakotas, Minnesota, part of Wisconsin, Iowa and several other states.



The demand for extracted honey is reported as good in all areas and the demand is in excess of supplies in some sections. Export demand is reported good with large quantities sold abroad and to Canada. The market was firm and showing a stronger tendency. The demand for beeswax continues active and the market is firm.

Out of state buyers have been active in Wisconsin and many report that larger producers are sold out.

NECTAR YIELDS OF SOUTHERN FORAGE PLANTS STUDIED BY USDA

Some of the secrets underlying the fluctuations in nectar-gathering by honey bees—which to a large degree are responsible for the financial ups and downs of beekeepers—are being revealed by U.S. Department of Agriculture research.

Department bee specialist Everett Oertel, working at Louisiana State University, Baton Rouge, found that an average white-clover head (or flower) yields slightly more than 8 microliters (about 8 millionths of a quart) of nectar. A raceme of Hubam variety sweet clover (the unit of tiny flowers arranged along a common stem) averaged less than one-tenth as much nectar, or about 0.6 microliters. Hairy vetch yielded an average of 6 microliters per raceme.

Yet, despite these figures favoring white clover, Dr. Oertel pointed out that a given area of sweet clover, because of its greater abundance of flowers, would generally produce more nectar than a similar area planted to white clover.

Considering only two variable factors --number of blooms and amount of nectar per bloom—the scientist estimated that an average acre of flowering white clover would yield from one-fourth to nearly 1-½ quarts of nectar in a day; sweet clover, from 2-½ to 5 quarts.

Another significant fact, pointed up by Dr. Oertel's study, concerned the possibility of developing higher-yielding nectar sources. For example, nectar obtained from four selections of white clover varied from as little as 4.2 to as much as 10.9 microliters per head.

HOW THE HONEY QUEEN ADVERTISED HONEY LAST YEAR

The Wisconsin State Beekeepers Association voted Miss Carol Lehman, of Waushara Co., the first Wisconsin State Honey Queen.

From Mrs. Henry Pieshowski we have received a partial list of some of her appearances, showing what can be accomplished for honey promotion in this way.

She lead the 4-H Parade at the Waushara County Fair. Presented a cake baked with honey to Governor Kohler on Governor's Day at the State Fair, over radio station WLS. Appeared on the Hot Shot TV program on WTMJ-TV. Appeared on WKOW, Madison. Was introduced by Alice in Dairyland to the public at the State Fair. Had lunch with Governor Kohler at State Fair Dormitory Cafeteria. Gave a 45 minute TV demonstration on Breta Griem's program WTMJ-TV. Demonstrated baking with honey. Talked to Menomonie Chamber of Commerce and was dinner guest. Lead Dunn County Dairy Parade. Participated in all Dunn County Dairy Day activities. Was introduced during football game at Stout Institute. A special all school convocation was held in her honor. Pictures and articles appeared in Menomonie and Eau Claire papers. Picture was taken by Wausau Herald during Beekeepers convention. Her picture appeared on WBAY-TV, Green Bay on the news broadcast, October 31.

The hand that lifts the cup that cheers, should not be used to shift the gears.— Greenville Advocate.





60 lb. eans, 5 and 10 lb. pails. Also 5 lb., 3 lb., 2 lb. and 8 oz. glass jars. We can make immediate shipment.

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Write for complete price list.



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Our 1956 price list will soon be ready—Write for it.





Library College of Agriculture Madison, Wisconsin



COUNTY FRUIT GROWER ASSOCIATION MEETINGS

Tuesday, February 28th: Washington County F.G.A. at Wis. Electric Power Building, West Bend.

Wednesday, February 29th: Ozaukee County F.G.A. at Mequon, Town Hall.

Tuesday, March 1st: Manitowoc County F.G.A. at Lincoln Park Field House.

Friday, March 2: Sheboygan County F.G.A. at City Hall, Plymouth.

Tuesday, March 6th: Calumet County F.G.A. at City Hall, Chilton.

Wednesday, March 7th: Shawano County F.G.A. at the Community Hall.

Thursday, March 8th: Outagamie County F.G.A. at the Community Hall, Black Creek.

Monday, March 19th: Jefferson County F.G.A. at Community Hall, Ft. Atkinson.



WISCONSIN HORTICULTURE

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Powerful Niagara Liqui-Duster applies dusts or sprays concentrates from either or both sides.

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February, 1956

Our Spray Program For Better Fruit

HOW WE SPRAYED IN 1955 By R. L. Marken, Kenosha

We sprayed 14 times, not counting the harvest spray; 4 times before bloom, once in bloom and 9 times after bloom. Pre-bloom sprays were 5 to 7 days apart and after bloom 10 days apart. We use a concentrate sprayer. Pre-bloom sprays were 4X and 5X and after bloom 3X. We use Crag, Captan and Mercury for fungicides and DDT, arsenate, Rothane and Malathion for insecticides. We used Mercury 3 times. Rothane twice for Red Band leaf roller, DDT from 1st cover to July when we substituted arsenate in 2 sprays for maggot. Malathion was used once in spring for Rosy aphis and latter part of June for aphis and red mites. We had the cleanest crop we ever had and liked the materials very much. We will use more of the same next year.

Observations: This particular region had the heaviest crop of apples I have ever seen. And some came through in pretty good shape with very little spraying. But it still pays to spray.

SPRAY PROGRAM FOR 1955 At The Rosa Orchards, Gays Mills By Bigelow Lourie

In our orchard at Gays Mills this year we sprayed 13 and 14 times: roughly once each week in May and June and once every two weeks in July and August. We applied dilute sprays on all except one block of trees, and we used an old Bean Speedsprayer for the old trees and a Hardie Air Prince Sprayer for the trees that are just coming into a commercial bearing.

In our fungicide program we applied Mercury (granular form) at full strength in all sprays through the Oalyx, and in addition we applied half-strength Wettable Sulfur in one block, half-strength Ferbam in another block, and halfstrength Captan in a third block. In our cover sprays we dropped the Mercury and used Wettable Sulfur, Ferbam, and Captan at the recommended strengths in the blocks that we had established earlier. And then at the end of the season we substituted Crag 341 for both Ferbam and Wettable Sulfur in our final spray.

We would describe our Fungicide Program as adequate but not completely satisfactory. We produced a crop with 14 high scab-free percentage, with an unmeasured amount of assistance from the hot, dry weather; but in the fall we noted an uncomfortable number of scab lesions on the leaves of some of our McIntosh and Cortland trees. Next year we intend to use these same five fungicides but we are not going to use Ferbum before Calyx and we are not going to use Captan after Calyx (unless there is a substantial drop in the price of Captan.)

In our insecticide program we used Lead Arsenate and Dieldrin in our Calyx Spray with a second application of Dieldrin in our Dudley Block six days later, and these sprays apparently gave us excellent control of Plum Curculio. In our cover sprays we had resolved to use Lead Arsenate and DDT alternately throughout the season. Unfortunately the cold, wet days during the last 10 days in May made us change our minds in favor of two consecutive Lead sprays because we thought the Lead would be more persistent throughout the rainy periods. As a result our first DDT applications were on May 30th and this was too late because Dr. Fluke pin-pointed the first codling moth flight in our area just about the 20th of May. The net result was poor moth control. And this failure to greatly reduce the first brood of codling moth. when coupled with a decision to omit a late July application of Methoxychlor on our Dudley Block because of the stillimpending Miller Bill, gave us a real Dudley problem. In our final Dudley

picking our codling moth culls were running as high as 25 percent.

But this program of Dieldrin and Arsenate of Lead with limited applications of DDT did (have some compensations because we did not have to spray to control aphids, red-banded leafrollers, or mites. Apparently the mites were held in check by the large population of Lacy Wings in the orchard because we did not find any of the mite-bronzing that we have noted in other years.

Next year we are going to try to control the codling moths with more accurate timing of our DDT sprays. In order to do this we are going to install a lighted bait trap and devote some time to it. And in addition we are going to stock some of the more potent insecticides and miticides on our shelves.

OUR 1955 SPRAY PROGRAM By D. M. Hall, Casco

We did the best job of spraying our orchard this past year than ever before. The fruit came through with the finest finish, free from scab, stings and moth damage.

In our ground spray using ½ gallon of Elgetol to 100 gallons of water; applied at the rate of 600 gallons per acre was put on between April 20-30.

April 25 we sprayed the trees with Elgetol using 1 gallon of Elgetol to 100 gallons of water.

May 2 we put on Orthol-D Soluble Oil at the rate of 2 gallons of oil per 100 gallons of water. These two sprays did a fine job in holding down aphis, case bearer, red mite and fruit leaf roller.

Orthocide 50 wettable was the fungicide used throughout the year at 2 pounds per 100 gallons.

During the stages to petal fall we used 3 pounds of lead per 100 gallons of water in one spray only—but applied tag in two sprays.

At Petal Fall we again used tag on our Macs only. The season was very favorable for Scab.

Following Petal Fall we stayed on a weekly basis of spraying through July 29th. During this period we applied Dieldren, lead, DDT, DDD, and Ortho tran. We alternated Lead and DDT.

Mid August we put on a heavy application of orthocide in the tops of our Macs and Red Delicious. If any pin scab was in the making, this spray stopped it.

The spray materials cost over \$100.00 per acre, but the results made it possible to move our apples at a premium during a year when most markets were depressed.

Our 1956 program will follow very closely to the one used this past year.

DWARF TREES

Dwarf trees have commercial possibilities but they require special treatment. At Vineland Station, Ontario, Malling 9 stocks giving trees about 8 to 10 feet high, have been planted for 17 years. The trees are trained to 4 wires, the trees 12 feet apart, in rows 10 feet apart. The accumulated yield of these trees (McIntosh variety), over the 17 years was 2,329 bushels, and yield from comparable standard trees was 646 bushels total during that time. All work in caring for these trees was done from the ground, even to harvesting the crops. — From Maryland Fruit Growers Newsletter

KROEKER'S HARDY PIE CHERRY

A sour Cherry adapted to more rugged weather conditions. Tested for 25 years in western Minnesota. High in quality, fruit large and good producer. Tree semi-dwarf and produces early.

Send for more detailed information and prices.

> KROEKER'S NURSERY Butterfield, Minnesota

"In The Shade of the Old Apple Tree"

By Arthur K. Bassett, Jr., Baraboo

With much hesitation on my part and insistence on the part of the editor, I have agreed to write a few lines about pruning "the old apple tree".

It would seem appropriate to mention some of the things which we are doing in our orchard, rather than to suggest what some other grower should do.

Those Long Ladders

About twenty years ago the older trees in our orchard became so tall that we could no longer pick the apples with eight-foot step ladders and fourteen foot straight ladders which was the equipment we had used for many years. Result: We bought some sixteen-foot ladders; about two years later some eighteen-foot ladders and two years after that still longer ones; this time twenty-foot ones.

Our McIntosh trees seemed to be on their way to the moon. It was time to lower them. At first we cut out many five to seven foot shoots in each tree so as to "hold the line" with twentyfoot ladders. This, of course, resulted in the usual heavy growth of suckers in the tops and the trees were soon taller than ever.

By this time we were harvesting the 1942 crop. Our country was at war and a large powder plant was under construction in our back yard. The high ladder pickers, "Jack and the Bean Stalk type", were no longer available. This was the last straw! No more tall trees for us! Tall trees are hard to prune, hard to pick and hard to spray. There were lots of bushels to the acre to be sure, but too much fruit with poor size and color in the bottom portion of the trees.

We Cut Back Large Limbs

For two winters we did nothing but saw big limbs and are still sawing. One, two or three large limbs in each tree are cut back to horizontal limbs whenever possible, reducing the height of most trees twelve to fifteen feet. Some trees which were almost thirty feet high, we are no v able to pick with eight-foot step ladde s alone. Now, only a few trees in the who e orchard require a twenty-foot straight ladder.

This type of pruning does result .n many suckers, but they are usually confined to the area where the large cuts were made. The next season, we cut out the longer suckers which might soon become too high again and leave several of the smaller ones.

We Top Work On Hibernal

Many trees in our orchard are varieties which are no longer popular. These, we are cutting close to the ground and replacing with new varieties. Most of our new planting now is **Hibernal which** we **like the best for Red and Golden Delicious for top working**. We are, also, top working these trees (Hibernal) to Mc-Intosh, Cortland, Macoun and some other varieties.

As these young trees grow up, we try to prune out the limbs with the sharp angles, leaving only one leader and limbs at right angles and not too close together. This gives a strong framework that will support a crop with few broken limbs and without propping. As these younger trees come into bearing, we try to make some small open spaces every five or six feet around the tree. This makes a place to set a step ladder, makes picking faster and easier, and of course, most of all, improves color on the bottom portion of the trees. We no longer give the young tree a chance to reach for the sky, but keep them within bounds of the eight-foot step ladder.

Snip Pruning

We have given Dr. Robert's "snip treatment" to a few of our Delicious, Duchess, Greening and Wealthy trees. This type of pruning takes considerable time, but does make the old tree young in a hurry Surely, "the old apple tree" is more than something for the poets to write about.

THE APPLE OF YOUR EYE...

You'll have apples like this → with CRAG Glyodin. It's rated f<u>irst</u> for scab control in experiment station tests!



HERE'S PROOF ...

The results of agricultural experiment stations in the 20 leading apple growing states show CRAG Glyodin is rated first the greatest number of times in scab control. Published results of The American Phytopathological Society showed CRAG Glyodin as first in scab control the greatest number of times, when compared to six other leading fungicides. And, for seven years thousands of growers have proven the effectiveness of CRAG Glyodin in their orchards.

Plan on using the CRAG Glyodin Program now. Use it all season for highest profits.



Glyodin in early sprays gives you lasting protection even through long spring rains. When you're in doubt about the weather or think you've missed an infection period, you can add mercury for back action.

When you use CRAG Glyodin you'll have the *best* apples at lowest cost. You'll also get the best finish and color, higher yields, summer disease control, plus suppression of red mites.

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Successful Apple Promotion

By Ben Drew, Westford, Mass. (Continued from January)

Editors Note:

In our January issue Mr. Drew underlined the history of the New York—New England Apple Institute and need for Apple promotion. In this article, taken from his paper presented at our annual convention in November, he tells about the final decisions made by the Board of Directors which led to success.

Need For Promotion

We decided that much of our promotion about our wonderful McIntosh apples could not be supported by the fruit itself, by the time the public saw it. We realized that the supermarket, self-service store, had magnified our difficulties as far as selling McIntosh was concerned. And so we took, I firmly believe, the right turn at this time. We were trying to present a quality product that would live up to our promotional output. We had proven that we could stimulate large apple sales when we had hurricane apples, or other distress merchandise, when the "chains" boosted our McIntosh as a good buy, slightly damaged, maybe, but still a good buy. But our efforts to boost the sale of packing shed-pressed, warehouse-delivered with a bang, backroom-mellowed, customer-mangled Mc-Intosh-were running into trouble.

Our grower support had fallen off in the late forties to just about enough cash to pay our staff, and to support our apple kitchen food editor, with help from our surplus cash. By 1950, we were faced with a large surplus crop, a declining market, and dwindling grower support. It was evident that we would have to justify our existence, or go out of business. We had to "put up or shut up." Just when growers needed a strong Institute most, they did not support it, because they "could not see what it did for them".

It Was Time To Promote Apples

The time for action was at hand-action that could break loose the consumer demand-action that might tangibly deronstrate to our growers that their i stitute was a vital and effective instriment for selling apples. It was agreed to spend our surplus-to shoot the works, to present a radio advertising campaign which would blanket our markets for a few weeks-all that money could buy. It was decided to keep our manager, but dispense with the field men, and put everything we had into our new approach, Along with merchandising apples, we told the trade what we were doing, and this helped to get them to put on drives. Anyway, it worked-our grower support has improved ever since. And this, without the membership calls that our field men used to make every summer. We have gone from 1 and 2 to 3c per bu. and as our kitty increases, I am confident that our grower support will follow, because we can now be far more effective and in a way that our members can see and hear, on radio, on TV and in the newspapers for longer periods than were ever before possible.

Support For National Institute

Along with this increased grower support, our packaging has improved-our quality has been continually bettered, and we have sold larger crops at a profit, which might have ruined us a few years before. During recent years, we have supported the N.A.I. in its health and dental research projects, and in the making of a dental film. We have supported the N.A.I. national promotional program even tho we feel that we have not yet reached our own growth, and must expand and improve our regional efforts, if we are to hold our members' support to the end that we will have a bigger and better organization, which will be able to grow with the hopes for a National Program of a size and scope to make every apple grower in the U.S. proud and secure in his chosen way of life.



At last, here's an early mite spray so efficient that a single application gives control far into the summer-reduces the need for mid-summer spraying! A product of General Chemical research, Orchard Brand GENITE EM-923 is effective on such crops as apples, peaches, pears, plums and prunes.

Some unusual features of General's GENITE EM-923:



- Gives outstanding control of European red mite and clover (almond) mite with single application.
- Will not harm useful insects, foliage or fruit; virtually non-toxic to bees.
- ✓ So effective, control results often extend into the following year.
- Special pre-fruit formation control eliminates residue problem of late season sprays.

PROVED! All these advantages have been thoroughly proved in Experimental Station orchards in 28 states and three Canadian provinces. Used by commercial growers in California for years.

GOES FAR! Just $1\frac{1}{2}$ pints make 100 gallons of full-strength solution. Recommended use is any time from dormant spray to petal-fall spray. Compatible with most pre-fruit formation spray materials: generally, no separate miticide spraying is necessary.



Get the Right Product for Every Pest Problem . . . Get Orchard Brand, America's Foremost Line of Insecticides, Fungicides, Weed Killers

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How We Prune The Orchard

By Arno Meyer, Waldo

The fruit grower takes great pride in producing a crop of clean, well colored, good size fruit. Apparently the fun of raising them will be about all some growers will realize out of the nice crop of the past season.

Pruning

Now is the pruning season, which is the important practice that determines the color and size of your fruit. This season has proved the real value of size and color. If apples are small or green you can't give them away. Customers want the best fruit.

To do a good job of pruning, keep in mind the condition of the wood from which you picked the small or green fruit at harvest and learn to recognize this growth in the dormant season and remove it to reduce the bearing area and reduce the shading of adjoining wood. Loaded branches will sag, shade lower branches and smother the low hanging fruit which is the handiest to pick. Eliminate this wood. Let the lower branches have the light.

Those Tall Trees

Remember how you had to climb up and up to bring down and down the fine large well colored fruit from the tops. Removing large centrally located branches can really open the center of the older trees and bring down the best producing area of the tree. This reduces the competition for light which causes the growth upward.

Snip Pruning

Our results with snip pruning has been very satisfying in producing large well colored fruit in such varieties as Golden Delicious and Wealthies. Too, this system has produced annual bearing.

Those Young Trees

Young trees we prune lightly, only to space the branches and eliminate narrow crotches. Allowing long terminal growth will develop a large tree with slender branches that will bend and spread with the first crop and give you a large spreading tree early. If any heading back must be done, always cut back to in established branch.

We try to practice what we preach but it requires lots of effort on the part of sons Fritz and Bill. A nice crop of apples next year should make happier apple growers.

BORON DEFICIENCY OF FRUITS A SERIOUS PROBLEM

Boron deficiency of fruits is described as a very serious problem in Washington State by Dr. Nels R. Benson of the Washington Experiment Station in Better Fruit magazine. Dr. Benson states that "boron deficiency can occur so precipitously and cause such devastation of a crop" that it is well for orchardists in deficient areas to take heed of the symptoms.

Less than 10 parts per million in either fruit or foliage may be regarded as an inadequacy. Apple trees, especially Delicious may show dead, necrotic areas in the bark, a condition usually referred to as "measles". Pear trees exhibit rough, scaly bark, but not the distinct measles exhibited in apple bark. The most common symptoms are cork or dry pithy tissue in the fruit or scaly skin on aplpes or pears. Fruits showing these symptoms usually crack as the fruit continues to grow. Delicious apples are often offshape or flattened but Delicious does not produce cork spots as readily as other varieties; misshapen fruits ripen early; preharvest drop is severe.

While applications of borax to the soil is the usual way of over coming the trouble, on non-irrigated and dry soils a spray on the foliage of Polybor or Boro is recommended. Applications are made annually at a rate of 5 to 10 pounds per acre in a mature orchard. For dilute spray this is $\frac{1}{2}$ to 1 lb. per 100 gallons of spray, depending upon how many gallons are used per acre.



IRRIGATION EQUIPMENT

Irrigation plans should be made now. We have had four years experience irrigating our own apples, strawberries and melons and have learned a few things not found in books. Let us plan your system and give you a figure on the cost. Albert A. Ten Eyck, Pine Bluff, Fruit Farm, Brodhead, Wis. Hardy Minnesota Apples, Plums and Cherries

KROEKER'S PIE CHERRY

New and Tested for Hardiness

\$2.30 each 3-5 ft.

New 1956 CIRCUS Florabunda Rose @ \$2.50

Sub-Zero Roses @ \$1.75. 3 colors @ \$5.00

6 Choice Colored Hardy Phlox @ \$1.95

10 Delphinium, Gold Medal Hybrids @ \$1.95

50 Gladiolus in 10 Choice Varieties, only \$3.50

BARGAIN CATALOG FREE

SWEDBERG NURSERY Battle Lake, Minnesota



February, 1956

February in the Orchard and Berry Patch

With George Klingbeil



This time of the year, when things are slack in the orchard, is the usual time to reconsider what happened in the orchard last year and to make plans for the coming season. Many of us look through the nursery catalogs wondering whether to order and plant a few more trees. It may be wise to look at this subject more closely. In Wisconsin the greatest returns to growers have come from orchards located near population centers; where people are within driving distance to the orchard and can make "on the farm" purchases, or where sales can be made from roadside markets. Expanding an orchard in such areas seems highly practical.

In the established commerical orchard areas many growers can: (1) Improve management of the existing plantings. (2) Remove undesirable, low paying varieties, (3) Review the fertilizer program to determine if the most plant food is being obtained for the money, (4) Study their own situation to determine where production costs can be reduced. Many growers can easily justify enlarging their orchards but should consider a few points. Select new varieties to fit into the picking and marketing sequence of existing varieties; consider varieties that have the greatest consumer appeal; and varieties that are dependable annual bearers. Hardy stocks are gaining more and more favor among growers. Quite a number of growers are successfully producing non hardy varieties on hardy understocks. The Hibernal variety tapworked at 3 or 4 years of age is satisfactory.

Equipment and Materials

At the present time it looks like fruit growers will have no trouble obtaining pest control chemicals, fertilizer, and new equipment in 1956. Supplies of some materials are such that it may pay growers to shop around to obtain a good buy. There may be shortages of some tree fruit stock and also some varieties of small fruit. Order early but make certain to obtain good stock from a reputable source.

PRUNING BUSH FRUITS

RED RASPBERRIES. Keep rows narrow. Leave 3 or 4 of the sturdiest canes per one foot of row. Remove and burn all other canes. Remove tips not to exceed one-fourth the total length of the cane. Do not summer tip red raspberries.

PURPLE RASPBERRIES. Rows— Leave three or four of the sturdiest canes per one foot of row. Cut side branches back to about 24 inches. Remove and burn all other canes. Summer tip new shoots in summer when 30 inches tall.

Hills — Leave four to six of the sturdiest canes per hill and then treat the same as when grown in rows.

BLACK RASPBERRIES. This fruit is generally grown in hills. Allow no more than four sturdy canes to remain per hill. Cut all side branches back to 12 inches. Remove and burn all other canes. Summer tip new shoots when they reach a height of 24 inches.

Idleness—that condition which is most enjoyed when there's plenty of work to do.—Wisconsin Implement Dealer

Grandmother never thought she would live to see the time when her daughters would get sunburned on the places they do now.—DePere Journal-Democrat.



Wisconsin Berry and Vegetable Growers Ass'n.

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STRAWBERRY VARIETY TRAILS Report of 1955 yields of strawberries at the Peninsula Branch Experiment Station. Sturgeon Bay.

By Frank Gilbert, Superintendent

Note: Yields are based on 5445 plants per acre and 1¼ lbs. of berries per quart.

Variety	Qts. Per Acre
Sparkle (Virus Free)	
Wis. 6-2	
Wis. 537	
Wis. 214	
Catskill (Virus Free)	
Robinson (Virus Free)	
Essex	
Fairfax (Virus Free)	
Vermillion (V.F.)	
Thomas	
Premier (V.F.)	
Sioux	
Wis. 261	
Lindalicious	
Erie	
Midland (V.F.)	
Eden	
Empire	

Editors Note: This report is of special value to Door County strawberry growers who have soil similar to those at the Peninsula Branch Experiment Station. Results might vary considerably in different parts of the state and on different types of soils. .

PREMIER STRAWBERRY DOES WELL AT JANESVILLE

Our main planting of strawberries is of Premier, which consistently does best for us and were very good in 1955. This was undoubtedly due to the fact that they wintered so well with plenty of moisture in the fall and a good cover applied early.

We have small plantings of a few other

varieties and will continue to try them out.

As far as we know the strawberry acreage has not been increasing in our area. The strawberry plants looked very good when they were covered last fall.-By Gerald Hipp, Janesville, Wisconsin.

FAVORITE VARIETIES AT BARABOO **By Albert Kruse**

Varieties which did best for us last Wis. No. 2-14, No. 5-37 year were and Catskill. All varieties produced a very large crop.

We will continue with a number of other varieties for another year.

We have not heard of much increase in strawberry acreage around Baraboo.

Our strawberry plants looked very good when we covered them last fall.

GROWING STRAWBERRIES AT ELMWOOD

By Stanley Hall, Elmwood, Wis.

All standard varieties of strawberries did very well the past season. We fruited about 2 acres of Beaver, Premier, Catskill, Robinson, Grand Champion and a few Dunlap. There was no trace of winter or frost injury and every berry was perfect and of large size. All were sold locally at a good price.

For commercial planting we would stick with Beaver, Premier, and Catskill with a few Robinson and Grand Champion for local sales. The latter has always been a consistently high producer with us. Fruit is of rather poor quality but very attractive and sells readily.

The acreage is low in this area and there is no indication of any increase at present. Perhaps this is due to the amount of labor required for this crop. Those who farm are so burdened with work that they can't find time to grow strawberries or feel that more effort is required a day to grow berries. Spraying has become a necessity in our locality.

Our plants were covered early and looked good.

We have completed a new storage for nursery stock and a sales room will be added when weather permits. Also a lath house for potted stock is part of the overall plan.

STRAWBERRY VARIETIES AT GREEN BAY By Harry Barlament, Green Bay

Like most growers we had a wonderful strawberry crop last year, with Catskill and Sparkle outstanding. Sparkle was the leader for production and Catskill for quality and size. Lindalicious should be included as they were of excellent quality, good production and pickers liked working with them.

Virus-free Premier have been dropped after a two year trial; soft, poor quality berries.

Will cut down on Thomas as soon as we can find a good bite berry to replace them. The reason: pickers pull out the stems when picking, leaving the hollow center. Have had wonderful crops from this variety—they always winter well.

There are some new growers in our area but not enough to over produce strawberries.

Our berry plants, went into winter in excellent condition. Started covering November 8th.

WHAT VARIETY IS BEST By H. H. Pederson, Warrens

Being a grower of berry plants this is a question I am asked quite frequently. We grow most all leading varieties and have good luck with most. When it comes to which variety is best for a fruit crop, we do not hesitate to say for **our locality**, which is west central Wisconsin and at one time the largest producer of berries, it is the old original **Beaver** and **Robinson**. A few growers prefer the Premier; such is the case in the Alma Center district; it is solid Premier, with a few growers favoring the Catskill. It tall tepends on which variety does the best in your locality.

The acreage of strawberries is on the decrease in our district due mainly to the fact that pickers are hard to get unless imported and this is not practical unless your acreage is large.

"Pick Your Own Berries"

On our fruit farm we have increased our acreage, as we find that the new fad of "pick your own berries" will take care of quite a large acreage. Some growers don't like it; they claim a lot of damage is done to vines and berries.

Personally I like it. I have found that the majority of people are nice and with a little explaining of how we like to have the picking done we get along just fine.

Our berry field went into the winter in fine shape. We mulch early, before the first heavy frost; generally start the last week in October, so we are finished by November 10. We have always had good ' luck with this program.

NEW DAMPING-OFF FUNGUS CONTROL

A new chemical, a true liquid mercury, promises to stop one of the worst diseases found in home gardens and commercial greenhouses. **Panodrench** — a ready-to-use form, cyano — (Methylmercuri) guanadine—his proved a highly effective control for the damping-off fungus which causes heavy losses in new seedlings.

From reports of tests all over the country, Panodrench works on all types of soils, without injury to the seedlings. Tests at Vaughan's Garden Research in Western Springs, Ill., included over 75 different kinds of flower seeds from Alyssum to Zinnias. In no case did any sign of injury show up. Treated flats showed solid stands of seedlings with no truce of disease. Untreated flats lost from 50% to 100% of the seedlings from damping-off.

Panodrench is easy to use because it is a true liquid and does not have to be dissolved before mixing. It is merely added to water and poured over the soil to be treated.

Growing Better Vegetables

By John Schoenemann

New Variety Lists Available

Our 1956 recommended vegetable variety lists for home gardens and commercial growers are now available. You may obtain these lists from your county agricultural extension office, or by writing to the Bulletin Mailing Room, University of Wisconsin, Madison 6, Wisconsin.

With the new 1956 vegetable seed catalogs arriving in the mail now you may want to check these recommended variety lists carefully and get your seed orders in early to insure getting your selection.

Hybrid Onion Seed

Reports indicate that approximately 50 percent of Wisconsin's 1956 onion acreage will be planted with hybrid seed. Some growers will be planting hybrid seed exclusively. This acreage probably would be larger if more seed were available of the recommended hybrids Epoch, Aristocrat, Elite, Encore, and Abundance. However, nearly all of the seed available for 1956 of these hybrids has already been sold. Wisconsin growers who cannot obtain seed of the desired hybrids will do best by filling out their acreage with such proven varieties as Autumn Spice, Downing's Yellow Globe, and Early Yellow Globe depending upon their specific requirements.

Seedsmen anticipate a much more abundant supply of hybrid onion seed for 1957 planting.

New Badger Ballhead Cabbage

The USDA and the University of Wisonsin have announced the cooperative elease of a new yellows resistant cabage variety named **Badger Ballhead**.

Badger Ballhead was selected from a pross between Wisconsin Ballhead and



Wisconsin Hollander. It has high resistance to yellows disease and relatively high resistance to cabbage mosaic. Badger Ballhead produces smaller heads and has a bluer color compared to Improved Wisconsin Ballhead. It is similar to Improved Wisconsin Ballhead in length of growing season. It shows high desirability in respect to a market garden and fresh market type of cabbage variety. Seed is now available to cabbage growers.

New Control for Damping-off

Some research work recently carried out by Michigan State University scientists has shown that one of several antibiotics will effectively control dampingoff on seedlings of beets, peppers and tomatoes. Either, streptomycin, agrimycin or actidione can be used. One quart of a solution, made up of 1/2 gram of the antibiotic in 2½ gallons of water, poured over the surface of the soil in a standard greenhouse flat, 24 hours before seeding, prevented damping-off. These research workers, however, warn against using stronger solutions of these materials and use on other kinds of crops not yet tested.

Vegetable Grower Meetings

Two special commercial vegetable grower meetings are again scheduled for southeastern Wisconsin. One of these meetings will be held at the Milwaukee County Agricultural Agent's office Wednesday, February 22, and the other in Racine on Thursday, February 23. The place for this last meeting was not arranged at time of printing this article so call the county extension office for information on the meeting place. These are both day-long meetings.

NEW CARROT WINS 1956 ALL-AMERICA

Gold Pak carrot, beautiful long, streamlined model, leads the vegetable garden world for 1956.

With short tops of finely divided foliage for garnishing, longest slenderized roots of rich orange color, inside and out, give us tempting uppetizers, whole or sliced.

One consideration should be given in planting Gold Pak or any long carrot. It needs a mellow soil, relatively free of stones, to grow straight down. In sandy, loamy or muck soils, it grows beautifully. Stiff clay or stony ground doesn't allow straight and smooth growth, so short rooted carrots should be planted there. Other roots crops, as radishes, beets and turnips, would be chosen similarly for light or heavy soils.

Gold Pak carrot wis bred for popular demand, long and tapering, without shoulders for easier pulling, rich golden orange coloring from thin outer skin through the coreless center, fine grained and with crisp flesh.

HONEY BEES INCREASE YIELDS, VIABILITY OF CARROT SEED

Value of honey bees, as pollinators, in increasing the yield and viability of carrot seed has been established through cooperative research by the U.S. Department of Agriculture and the Utah Agricultural Experiment Station.

Red Core Chantenay carrots, caged with honey bees, yielded seed at the rate of 771 pounds per acre—of which 740 pounds on the average was viable seed. Uncaged carrots—visited by more than 250 different species in insects, including bees— yielded at the rate of 601 pounds of seed per acre. An average of only 566 pounds of this seed was viable.

When all insects were excluded from flowering carrots, seed yield was reduced to only 100 pounds per acre and seed viability was reduced about 300 percent —proving that self-fertilization cannot be depended upon for economic yields of viable seed.

GROWING CUCUMBERS FOR PICKLING

Circular No. 503 entitled Growing Cicumbers for Pickling by John A. Shoenemann and O. B. Combs of the Department of Horticulture has just been released and may be obtained by writing the Maling Room, College of Agriculture, University of Wisconsin, Madison 6, W s. The bulletin covers a wide range of topics such as Select and Prepare Your Land; You May Have To Apply Lime; Prepare The Soil Early; Best Varieties; Proper Fertilization Pays Off, etc.

Under the title of You May Have To Apply Lime, the bulletin states: "Cucumbers grow well in soils ranging from pH 5.5 to 7.0 and will do fairly well at a pH as low as 5.0. The best pH for cucumbers is 6.0 to 6.5. A good soil-improving crop for land with a pH under 5.8 is alsike clover. At a pH of 5.8 or above, red clover is better. When the soil pH is above 6.2, alfalfa can be used in rotation with cucumbers."

Under the separate subject of fertilization the bulletin states: "Shortage of nitrogen can result in cucumbers which are pointed at the blossom end. Low potassium often causes cucumbers to be small at the stem end. Both of these types are culls. Sufficient phosphorus is also needed for good plant growth and especially for full flower development.

It will pay to use commercial fertilizer even when you apply manure."



Wisconsin Horticulture

The Berry Plant Market

STRAWBERRY PLANTS

Now is the time to book your plant needs for spring. Be safe, not sorry. Pederson's plants can't be beat. Ask the grower who has bought from us. The old original Beaver, an outstanding producer, Robinson, Premier, Catskill, Dunlap, Wis. No. 537, No. 241, No. 261. Write: H. H. Pederson Fruit & Plant Farm, Warren, Wisconsin.

STRAWBERRY PLANTS FOR SALE

Premier—Wis No. 5-37, No. 2-14 and No. 2-61. Robinson; Catskill. Also Sparkle and Catskill from virus free foundation stock. Durham everbearing red raspberries. All Plants freshly dug.

Al Kruse Nursery, 615 Effinger Road, Baraboo, Wis.

PARISH PERFECT STRAWBERRY

U. S. Patent 1422

Order your plants now for this strictly new and different strawberry: The Parish Perfect is a June bearing plant that produces all red, coreless berries on erect fruit stems, thus holding the berries off the ground. The berries are rich in flavor and excellent for freezing.

You will want to plant a bed of these quality producing plants.

Spring prices — \$10.00 per 100 plants, postpaid; \$5.50 per 50; \$3.25 per 25. Less than 25 plants 15c each.

Licensed Grower.

Suthers Moundview Nursery, Platteville, Wisconsin.

STRAWBERRY PLANTS FOR 1956

Select your strawberry stock for this spring from the fine selection of plants we have to offer. Good cultural practices plus a regular dusting program have produced for us the strongest, best rooted, vigorous planting stock of each variety. Write now for price list while stocks are completed. — HY-LAND GARDENS BAILEY'S HARBOR, WISCONSIN.

STRAWBERRY PLANTS FOR SALE

Beaver, Premier, Catskill, Robinson, Dunlap, Sharon, Wis. No. 537 Strawberry plants. Freshly dug, properly trimmed and packed. Prices: 25 @ \$1.00; 50 @ \$1.65; 100 @ \$2.85; 200 @ \$5.50; 500 @ \$10.00. No. 1 Raspberry Plants

o. 1 Raspberry Plants

12	Plants	25	Plants	100 Plants
Latham	\$1.35		\$2.65	\$11.00
Durham	1.50		3.00	12.00
Minn. No. 321	2.00		3.75	14.00
Logan Black	1.25		2.25	9.00
Cumberland	1.25		2.25	9.00
Sodus Purple	1.50		3.00	12.00
Martha Wash	ington			
Asparagus	Roots		1.00	2.75

1 yr. No. 1 Canada Red Rhubarb; Valentine, 4 @ \$1.50, 2 @ \$1.85. Prepaid.

Fruit trees and plants of all kinds. Ornamental shrubs and evergreens.

HALL NURSERIES, ELMWOOD, WIS-CONSIN.

A farmer was driving past the county farm with his manure spreader. He stopped to talk with one of the inmates. This one had been told of the odd behavior of outside people. He asked the farmer what he was doing. The farmer said he was going to put manure on his strawberries. The inmate went away muttering, convinced outside people were crazy, as he always put sugar and cream on his strawberries.—Sent by O. Redlich, Ft. Atkinson.

Hardie Irrigation Equipment Represented by ERIC FRANKE

Route 5 (County Trunk "U") Sturgeon Bay, Wisconsin Now offering complete repair service for Rainbird & Skinner Sprinkler heads.

Frequently have good used systems available

February, 1956



Wisconsin Nurserymen's Ass'n. DIRECTORS: M. A. Haller, Oshkosh: Leland Jens, Wisconsin Rapids; Kenneth Altorfer, Madison K. W. Greaves, Milwaukee; Robert Gieringer, Milwaukee; Ralph Petranek, Milwaukee.

Plant Wisconsin

By Don Groth, Milwaukee

PLANT WISCONSIN—It is hoped these two words will in the near future, be a byword of every individual or group in the state of Wisconsin interested in conserving and improving the natural wealth and beauty of the state through the proper planting of trees, shrubs, and evergreens.

The readers of Wisconsin Horticulture and other nursery trade or garden magazines are undoubtedly aware of the "Plant America" program and the inspiration it has brought to many people who previously were not acquainted with plant materials and their care. The "Plant Wisconsin" program is to be an integral part of the nationwide "Plant America" program.

The general objectives of the program will be based on:

CONSERVATION of the land, our most precious heritage. An awareness of the need to conserve our land is badly needed by the general public for the benefit of present and future generations.

BEAUTIFICATION of homes, churches schools, industrial plants, roads and highways. Much can be done through proper planning and planting. This work will result in raising the moral standards of everyone living in or traveling through Wisconsin.

EDUCATION is the theme. The program must be carried out with purely educational motives in mind. Through the participating organizations it will be possible to supply necessary materials and personnel to the school, church, industry or individual who finds a need for it.

Each community or group would be able to institute concentrated requirements in its own area. A few examples would be: Improve roadside planting; planting of public buildings, churches, homes; screening railroad right of ways and storage yards; establishment of public gurdens; erosion control and many others.

OFFICERS

Fond du Lac

ice Pres. _. Kenosha

Treas. ____T Sturgeon Bay John Gartman

Vincent Frante!

Thomas S. Pinney

Statewide projects should be launched which would be a combined effort of all participating groups in the state, actively becoming a part of "Plant Wisconsin".

Will you as a member of an active social group, horticulturist, garden club member, landscape or nurseryman carry this message to your organization? Your help is essential in organizing a "Plant Wisconsin" program and we hope you will encourage your group to actively participate and assist in successfully carrying out this effort.

The Wisconsin Nurserymen's Association has set up the following committee to help with the "Plant Wisconsin" program. Any information you desire may be obtained from.—

Don Groth, 3012 West Arthur Avenue, Milwaukee 15, Wisconsin.

John Orton, 12217 Watertown Plank Rd. Wauwatosa 13, Wisconsin.

Warren Brown, Hartland, Wisconsin.



Wisconsin Horticulture

ENDRIN FOR MOUSE CONTROL

The insecticide Endrin has shown promise in each of three years by 100 percent elimination of mice from sprayed plots according to Frank Horsfall, Jr. of the Horticultural Dept., Virginia Polytechnic Institute, in an article in Horticultural News, published by the New Jersey State Horticultural Society..

He states that endrin has many characteristics which fit it admirably for the role of a ground rodenticide.

To apply the spray, a horizontal boom was moved along the tree row at 18 inches above the ground. The boom is attuched by a trailer hitch to the left end of the front bumper of a truck. Hand guns, however, are suggested to cover steep areas or hillside orchards. Endrin at the rate of 2 lbs. per acre or about 11 lbs. of the recommended dilution per tree was found to give control.

The sprays were applied Nov. 12-18, 1953 and again on Nov. 26-29, 1954. Mice were completely controlled where the material was applied correctly.

It was found that dieldrin did not control mice in this experiment.

A DESIRABLE TREE FOR STREET AND HOME GROUNDS

Difficult growing conditions offer few obstacles to the long lived Thornless Honey Locust, which still claims top rating on our list of tree recommendations. Combining structural beauty and delicacy of folinge with ease of culture, a satisfactory growth rate and immunity to pests, it not only qualifies as a creditable substitute for the American Elm, but as first class ornamental in its own right. Feathery compound foliage admitting filtered sunlight permits the maintenance of a perfect lawn in its shade, and its distinctive flat topped contour harmonizes well contemporary with architecture. The Morine Locust, a desirable patented selection, is an even cleaner tree, being both thornless and podless. Its habit is more uniformly vase shaped also, and its darker green foliage persistent in the fall. Both transplant easily.-From Morton Aboretum

DON'T LIME UNLESS YOU NEED IT

In humid areas of the United States, that is, where the rain fall exceeds 30 inches, muny soils are acid in reaction. Practically the whole eastern third of the country as well as the Pacific North west have areas of acid soils, and applications of limestone should be used to correct those which are excessively acid.

Many gardeners have the idea that they must lime their soil every yearjust as they apply plant food every year. Annual liming, however, is not only a a waste of money, but it actually may be harmful because soi's so treated can become too alkaline. Farmers seldom lime their soil more than once every four or five years for growing legumes. This is a good schedule for gardeners if you know your soil is acid. If you want to check your soil occasionally for acidity, you can purchase acidity testing kits at very small cost, or have it tested by vour local school Agriculture Department or County Agents office.

City gardens which have been watered with hard water for many years are likely to be alkaline. There are areas of lighter soils in central and northern Wisconsin which are quite facid. However, it must be remembered in growing flowers and vegetables that most kinds prefer a neutral (ph7) or slightly acid soil.

FILM ON MERION BLUEGRASS AVAILABLE

"Merion Bluegrass—Its Discovery and Development" is the title of a 16 mm. kodachrome, 12 minute sound film, produced by the Merion Bluegrass Association.

The film is now available to us from right here in Wisconsin. It is free except for return postage. Write the Turf Research Foundation, 208 S. LuSalle St. Chicago 4, Illinois, or Mr. Foster Taylor, Taylor Grass Co., 7024 W. Wells St., Wauwatosa 13, Wis.

It has now been learned that the turn of the century was made by a woman driver.

February, 1956
m the Editor's Desk

OUR COVER PICTURE

This month we show on our cover the petunia "FIRE DANCE" which is the All-America winner for 1956.

Fire Dance is an F-1 Hybrid and was awarded the bronze medal of All-America Selections. It is a petunia of the giant single fringe type, of beautiful salmon red with golden yellow in its throat. Flowers are $3\frac{1}{2}$ to 4 inches across and are produced in the abundance usual with the F-1 Hybrids. The plants are uniformly dwarf, base branching and of semi-compact habit. They often have a spread of 20 to 24 inches.

There is a rumor that seed of this new petunia is scarce and one report is that the supply is already exhausted. However, if you can get seed or plants from your grower, try this new petunia.

The photo was sent to us by All-America Selections, W. Ray Hastings, Chm., Harrisburg, Pa.

HORTICULTURAL SHORT COURSE UNIVERSITY OF MINNESOTA MARCH 22-23

The University of Minnesota, Department of Horticulture will feature a 2 day short course in the Horticultural Building, University Farm, March 22-23.

The forenoon session on March 22 will be on Vegetable Growing. The afternoon session on Home Fruit Growing.

The session on March 23 will be on Ornamental Horticulture, with a talk by Dr. Charles Walkof, Experiment Station at Morden, Manitoba on Ornamental Horticulture in Europe.

Wisconsin horticulturists are invited to attend.

Write to C. Gustav Hard, Institute of Agriculture, U. of Minn., St. Paul, Minn. for a copy of the program.

There is nothing wrong with the younger generation that the older generation didn't outgrow.

IS THE DEADLY NIGHTSHADE DEADLY

The Solanum or Bitter Nightshade (Solanum Dulcamara) has the common name of Deadly Nightshade and so of course the impression has gone out that it is deadly poisonous.

Mr. Alfred Hottes, in his book A Little Book of Climbing Plants states: "Some claim these berries to be very poisonous, but as they are common and delightful in appearance, they surely must have been enten by someone who would have gotten their name in the newspaper for martyrdom."

The latest information we have on this question is that the Nightshade, which grows throughout the middle west, has "fruits not dangerously poisonous, but will cause nausea if unripe".

To this group of plants the Solanum belong both the tomato and the potato. Most of our members are fumiliar with this attractive vine which has purple flowers in large clusters, followed by bright red berries. It grows wild in many gardens. Both flowers and fruits are found upon the plant at one time.

Newhall, in the Vines of Northeastern America, gives the derivation of the name Bittersweet, remarking that "the rind of the stems of this plant is said to have a taste first bitter, then sweet."

Take an ordinary party and remove the chairs and you have a reception.

The bonds of matrimony aren't worth much unless the interest is kept up.



Wisconsin Horticulture

YOUR TRIAL GARDEN OF NEW VARIETIES

Every garden lover likes to grow some new varieties in his garden each year just for the pure joy of seeing what they are like and to find out if they are superior to the older kinds. It's fun to show these new varieties to our neighbors and garden club members. Usually they add charm and distinction to our gardens. Here are some that we would recommend for the coming season.

CELOSIA TOREADOR. The bronze medal winner, All America Selections 1955. Large velvety combs of lustrous bright red. Excellent as a bedding plant and for cuttings. One large flower will make a bouquet.

ZINNIA-ICE CREAM. This is the first giant pure cream zinnia. It has distinctive cactus blooms up to 5 inches and more in diameter. The color is deep enough to be interesting, yet delicate.

PETUNIA FIRE DANCE. This is the 1956 All-America winner and described further in this magazine, and shown on the cover.

CLEOME. Both the varieties Pink Queen and Helen Campbell are wonderful as background plants for the border. Pink Queen has large heads of a refreshing true pink. Helen Campbell has large pure white flowers on tall vigorous stems.

CELOSIA GOLDEN FLEECE. A pure gold with tremendous plumes for both the garden and cuttings. It is of the plumosa type.

MARIGOLD-GLITTERS. This was the All-America bronze medal winner of 1951 and is still one of the best. Has large clear yellow double chrysanthemum flowered blooms on erect plants.

MARIGOLD RUSTY RED. This variety has large fully double flowers 2 inches and more across, of a rich rusty red, delicately edged with golden yellow. Grows to about $1\frac{1}{2}$ feet in height. It makes excellent arrangements and bouquets. At flower shows during the past several years it has been an outstanding show flower.

PETUNIA PRIMA DONNA. The bronze medal, All-America winner of 1955. An F-1 Hybrid with bright rose-pink flowers of large size.

Other good PETUNIAS. These varieties are all of excellent color and quality. Select them according to the color needs of your garden.

LINDA. (An improved silver medal). The color is a rich salmon-pink.

APACHE. Has bright red rose flowers. COMANCHE. Has deep scarlet red flowers.

PALEFACE. (Bronze medal All-America Winner). Has pure white flowers of good size and substance.

ZINNIA PEPPERMINT STICK. Many of our gardeners have tried this variety and feel it has a place in the garden and as cut flowers. It is a new development in the striped type. Flowers of medium size. There is a wide variation in color among the flowers.

CALENDULA. These flowers are easy to grow from seed, which can be planted in the garden as late as July 1st for fall bloom. There are several new varieties of interest, such as ORANGE QUILLS, with mid-orange flowers, 3½ inches across. Then there are good varieties of the PACIFIC strain which bloom well at high temperatures during the summer.





WISCONSIN GLADIOLUS SOCIETY

OFFICERS

Pres. ____Ralph Burdick, Edgerton Vice-Pres. _____Al Schmidt, Two Rivers Secretary _____Mrs. Joseph Rezek, R. 2, Manitowc

reasurer _____Dr. R. A. Kasten, 315 Washington St., Wausau

DIRECTORS: Fox River Valley Chapter: Carl Knoll and S. F. Darling, Appleton. Madison: Ed Lins, Spring Green; Theo. Woods, Madison. Manitowoc: Joseph Rezek and Gil Thompson, Manitowoc. Marathon County: R. H. Juers and Mark Splaine, Wausau. Sheboygan: Paul Beer, Port Washington; Walter Axel, Sheboygan. Twin City: Jerry Merchart, Marinette; Arthur Kottke, Oconto. At Large: Walter Bell, Appleton; Ralph Burdick, Edgerton; H. A. Kasten, Wausau; Al Schmidt, Two Rivers; Leland Shaw, Milton and Gordon Shepeck, Green Bay.

ANNUAL SPRING MEETING WISCONSIN GLADIOLUS SOCIETY HOTEL APPLETON 127 N. APPLETON ST.,

AFFLEION SI

APPLETON

Sunday, March 11, 1956

- 10:00 a.m. Meeting of the Board of Directors.
- 12:00 m. Luncheon in Main Dining Room (\$2.00)
- 1:30 p.m. Program and business meeting. Plans for the Central International Show at Madison will be discussed.
- 2:30 p.m. Special Bulb Auction.

Send requests for luncheon reservations to Mrs. Carl Knoll, 137 S. Lee St., Appleton before March 5th.

The Bulb Auction

Proceeds from the bulb auction will go to pay expenses of the Central International Gladiolus Show to be held at the University Field House, Madison on August 15-16. The auction committee: Mr. Ted Woods, Madison, Chairman: Mr. John Flad, Madison and Mr. Leland Shaw, Milton.

The committee requests that you send your bulb donations to Mr. Leland Shaw, Box 804, Milton. Admission to the Central International Show will be free due to its being held in a University building; therefore, all expenses must be paid from Society revenues, so help by sending in your bulbs and attend the auction. Better yet, bring your bulbs to the meeting.

CARE OF GLADIOLUS BULBLETS

By Dave Puerner, Milwaukee

Here's a little trick I employ in cleaning bulblets. When the quantity is large, they are washed, but in mid-winter, indoors this is not a pleasant task. Besides, I do not like to wet the bulblets at this time of the year.

Small quantities of bulblets are rubbed over a screen and if the soil is not too dry, this will clean out much of the soil. But some stones, hard pieces of soil and decayed vegetation is still left. The vegetative material is removed by fan; then I take the bulblets and place them at one end of a corrugated box, 2" high, 14" x 20" This box is then tilted to permit the bulblets to roll to the opposite end, constantly brushing back the soil and stones. Some bulblets are very round and roll easily and clean 100% in this manner. Others do not roll as easily, but the method is still very practical and time saving. Try it.

I also use these boxes for storage of bulbs, the small batches; obtain them from grocery stores. They are used for shipping tomatoes and are very practical. The bulbs are placed in the boxes, dusted with DDT, shaken well, the name marked on one end, and stacked on shelves in the storage room (fruit cellar).

Bulb Treatment

I haven't treated my bulbs for disease for the past three years and feel that I obtain better results. I do dust them after cleaning, usually with 5% DDT, and occasionally add chlordane. I have discovered that DDD dust waterproofs the bulblets and thus prevents germination, quite seriously some years. It probably

Alimony is a system whereby, when two people make a mistake, one of them keeps paying for it.

would be best to soak the bulblets, or wish them, before planting. I also have been treating bulblets in hot water, for disease prevention, for several years, with excellent results. I have soaked them in hot water 120 degrees, although their tolerance is 132 degrees. After soaking in hot water, they should be chilled again to break their dormancy. Bulblets can then be kept moist until they germinate and then planted. In this way they will be up through the soil quickly, before the weeds germinate.

GLADIOLUS SCAB CONTROL By J. L. Forsberg, Illinois

Bacterial scab has become one of the most troublesome gladiolus diseases in Illinois.

Although it ordinarily does not reduce the ability of the plant to produce flowers, the disease results in serious losses to commercial growers because of reduced sale value of scabby corms. Corm treatments with various mercury compounds have been used most commonly to control bacterial scab. In some instances the corm treatments have reduced the amount of scab; in other instances the results of corm treatments have been very disappointing.

A new lead on the control of bacterial scab was obtained unexpectedly in 1953 in one series of tests on control of Fusurium rot and in another experiment on control of white grubs.

It was found that aldrin placed in the furrows at planting time gave good control of white grubs. (See ISFA Bul. 153). Corms free from white grub damage were also free from scab, while many of the corms damaged by grubs also had scab lesions.

Soil Insects Spread Scab

It has not been established definitely that soil insects are in any way related to the incidence of bacterial scab of gladiolus. The results obtained by Young and those obtained by the writer in 1953, however, indicate that soil insects are instrumental in spreading the scab organism.

The uldrin emulsion contained 2 pounds aldrin compound 118 equivalent per gallon; the lindane emulsion contained 20% gama benzene hexachloride; the heptachlor emulsion contained 2 pounds actual heptachlor per gallon. Du Pont I & D Seed Protectant contained 56% thiram from Arasan SF-X plus 14% g:ma benzene hexachloride from lindane.

Forms and amount of insecticides used as soil treatments were as follows: aldrin, 20% granular, 5 grams per 100 feet of row; lindane, 25% wettable powder, 4 grams per 10 feet of row; heptachlor, 2½% dust, 40 grams per 10 feet of row. (In order to facilitate uniform application of the insecticides to the soil, the amount of chemical needed to treat 10 feet of row was mixed with enough dry soil to fill a 4 ounce jar. This soil insecticide mixture was poured in the furrow immediately before the corms were set.)

All corm treatments were made immediately before planting.

Discussion and Conclusions

Results obtained in this experiment demonstrate that bacterial scab can be reduced greatly by use of insecticides. These results help to confirm the supposition that the bacterial scab organism is spread by soil insects. The kind of insects that may be involved is unknown. White grubs are quite common in many of the gladiolus fields in Kankakee County. Soils heavily infested with white grubs neurly always produce scabby corms. This observation does not, however, prove that white grubs are the chief means of spreading scab. Soil samples taken from the gladiolus test plots last summer were carrying populations of undetermined species of nematodes. It is not inconceivable that nematodes instead of insects might be the agents responsible for spreading scub.

All of the materials used as pre-planting treatments gave some degree of Fusarium control. Of the commercially available preparations, Emmi emulsion was the most satisfactory material used. Results obtained from use of DuPont Liquid Seed Disinfectant 364 indicate that this material might be satisfactory. Emmi wettable powder was not as effective as Emmi in the emulsion form.

Recommendations

Based on results of these experiments,

the following recommendations are suggested: (1) Treat the corms in a solution of 1 pint Emmi in 50 gallons of water for 15 minutes immediately before planting. If a dry material is desired corms should be dusted with Arasan.

(2) Apply aldrin or heptachlor at the rate of 3 pounds pure chemical per acre in the furrow when planting.—From Illinois State Florist's Association Bulletin

MANITOWOC COUNTY GLADIOLUS SOCIETY NEWS

New officers elected at our November meeting for 1956 are: President, Mr. Joe Rezek, Route 2, Manitowoc. Vice-president, Mr. Wm. Hackmann, Two Rivers. Secretary, Mrs. Ed. Jaskolski, 1020-27th St., Two Rivers. Treasurer, Mrs. Wm. Hackmann, Two Rivers, Club Historian, Mrs. Wm. Hackmann. Publicity, Mrs. Elmer Inman, Two Rivers.

Directors are: George Chizek, Two Rivers; Jack Gates, Two Rivers; Wm. Hackmann.

Directors of the State Society from our chapter are: Joe Rezek and Gil Thompson, Manitowoc.

The Society held a Christmas party in Two Rivers. It began at 6:30 p.m. with a pot luck supper. The tables were beautifully decorated with Christmas decorations. Gifts were distributed to all and it was an evening of fun. After supper we were entertained by a group of square dancers, directed by Mr. and Mrs. Gates. —By Kay Schmidt, Secretary.

NOVELTY GLADIOLUS GREAT GARDEN HOBBY

Even before civilization began, people collected things. Maybe clubs, shaped stones, shells or other useful objects to provide protection, food and shelter. As they became more proficient, some time was available to develop special interests and hobbies. Gardening developed easier and better living, as crude and limited as were the early facilities and garden subjects.

Through the years, there have been collector's items, for museum, home and garden interests. Gardening still provides the greatest of all hobbies for young and old, brim full of interest and satisfaction. A kitchen garden, lawn, colorful flowers and shrubs make a home livable and attractive. Gardeners, however, usually soon favor some particular flowers. Interest develops with their collection of varieties, especially with a kind that grows in any type of garden soil and blooms dependably with little care.

Perhaps this general success with flowers from bulbs, especially gludiolus bulbs, has made glads so universally planted and the most popular of all bulb flowers. Planting early to late flowering varieties or planting at intervals from earliest spring to summer, brings a long succession of gorgeous bloom to the garden and for cutting.

If you don't know what manuged currency is, just listen to relatives when a widow gets her insurance.

Too much temper causes muny a man to speak his mind rather than mind his speech.—Ripon Press.



Garden Club News

GARDEN CLUB OF WISCONSIN EXECUTIVE BOARD: Blackhawk Region: Mrs. Ed Streich, Jefferson; Mrs. John Kiesling, Sr., Central Region: Mrs. C. H. Brimmer; Mrs. C. H. Braman, Waupaca. Milwaukee Region: Mrs. Ab. B. Buerosse. Winnebagoland Region: Mrs. Carl Reik, Chitton; Mrs. A. J. Wiessender, Parlimentarian—Mrs. Roy H. Sewell, 7341 N. 76th St., Milwaukee. Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

OUR PRESIDENT'S MESSAGE

February, the month for flower garden planning is just around the corner, and the important question with many of us flower gardeners is just how to improve our plantings this coming season. Why not apply some of the basic rules to our gardening that we have learned in our lessons on flower arrangement, especially those rules that have to do with scale, balance, and harmony of color, instead of planting haphazardly.

"Our flowers," to quote a certain authority on flower arrangement," will show off to much better advantage than if they were crowded together without any attempt at working out a design." So let us apply some of the principles in our garden planning that are used for arranging flowers in our homes. Let us keep in mind that, "If the arrangement and the background and the surroundings are appropriate to one another, then the decorative effect of each is enhanced."

At a garden club organization meeting in Princeton this week a lively discussion arose over just this subject, following some colored slides I showed to illustrate better flower garden arrangement. Let us keep this plan in mind and start now to evaluate just what we are going to plant in relation to just where it is going to produce the best effect in color harmony, or design.

I plan to collect a better showing of colored garden slides throughout this coming season. Let me know your results with garden planning so that I may record it with a slide for some future program.-Mrs. A. J. Wiesender, President.

Learn from the mistakes of othersyou can't live long enough to make them all yourself.-Colby Phonograph.

FRUSTRATION

By Mrs. Oscar Schaubs. Chilton

Row upon row my corn stands tall, Vegetables are grown for one and all. Pansies, each have a pretty face, Ferns that you'll swear are made of lace.

My marigolds are a riot of hues, My asters are tinted in pinks and blues, The coleus plants form a colorful mass, Next to them stands yellow sassafras.

Berries and shrubs for my feathered friends.

Whose song of thanks just never ends,

The cockscomb nod their gorgeous heads, For-get-me-nots grace the flower beds.

- I can raise all these things in great profusion,
- But my Green Thumb fails me-I'm in confusion,
- I'm sad at heart-for do you know,
- I've failed to make my Garden Club grow.

If you can keep smiling long enough, before long you will have enough to keep smiling about.-Walworth Times.



February, 1956

OFFICERS

rs. A. J. Wiesender, 217 Park St , Berlin Vice Pres. Wausau

C .H. Brimmer

Birds and Flowers

From Our Committee Chairmen

YOU CAN HAVE A BIRD SHOW

I have been wondering how many people have the thrill of watching birds at a feeding station.

The other day I had a luncheon and after the girls were seated our friends, the birds, started putting on a show for us. We had 5 cardinals come (2 males and three females); next the Evening Grosbeaks came and they are such pigs when it comes to eating your seeds. If you have one grosbeak he sits in a tree orbush and calls his friends until you have dozens of grosbeaks. A little later in the spring we have many rose breasted grosbeaks, also the sweet little purple finch.

Everyone loves the chick-a-dee as he takes one seed, leaves for a nearby branch and cracks it. The nut hatch also is a friendly fellow, taking one seed, flying away and returning when it is gone. We buy nothing but sunflower seed and each morning my husband fills the feeding station. We buy our sunflower seeds by the 50 or 100 pounds; you get it so much cheaper. We find you must be regular in keeping your feeding station filled.

The last two months we had 5 partridge come each morning at 6:30 A.M. and again at 5:00 P.M. They fed on the buds of the poplar trees. We also scatter cracked corn for them and they, with the squirrels and rabbits and blue jays, pick up the leavings on the ground. So long as we use sunflower seeds we are not bothered with sparrows too much. Needless to say, after my luncheon three of the girls went right home and ordered feeding stations.—By Mrs. C. H. Brimmer, Bird Chairman, Garden Club of Wisconsin, Wausau, Wis.

"When they take out your appendix they call it appendectomy. What do they call it when they remove a growth from your head?"

"I know that one-a haircut."

CELOSIA TOREADOR

Catalog time again, and right now while you are browsing thru them, be sure to put a big check mark in front of Celosia Toreador. Those of you who do not recognize the name Celosia, will know that of Cockscomb I am certain. This beautiful, new, really red one, was awarded the Bronze Medal, by All America Selections, by 25 judges who based their decision on reports of its doing in 20 or more different localities thru-out the country. It is a rich velvety red, and grows from a foot to 18 inches in height depending on how well it likes its location. Its color is absolutely free from that objectionable purplish or faded red, and as its introducers say, it is almost foolproof. Treat as you would zinnias.

Attention flower arrangers! It is most excellent, either in its original state, or dried. Even one bloom in company with a few other flowers or greens, will make a top notch arrangement and will surely be different.

Have talked to several who grew them this past season, all have nothing but the highest praise for the plants performance. One of our local green houses grew it and are lauding it to the skies. They are already planning on growing a lot more this season and already have had numerous requests for plants, come spring. Seed can either be planted out of doors. where you wish it to grow, or in flats inside and transplanted later. For something new and beautiful and different, something that has been tried and found not difficult, plant Celosia Toreador and rejoice in your results .- By Mrs. Robert L. Holly, Waupaca, Horticultural Chairman.

Man of the hour learned early in life how to get the most out of every minute. --Phillips Bee.

On Wintery Days Arrange This Composition

By Mrs. Garrison Lincoln, Madison

No fresh flowers? Not even any dried material? It's still possible to make an "arrangement" for your living room.

Part of the charm of fresh flowers is that they don't last so long they become boring, so don't let accessories and mantel arrangements used in your home get boring either. Oh, you always keep that antique clock flanked by those brass candlesticks on the mantel? How long is it since you felt a glow of pleasure at the picture they made as you entered the rocm? Lovely as each may be, the same thing seen over and over dulls and disappears from the sight of those who live with them. Give them new life with a new setting, and try something different for the mantel. If you keep your decorative things in a cupboard, and bring them out one by one, how new and exciting they will seem.

Decorative Materials to Collect

Look over your supply of trays-the round, oval or rectangular ones. They are most useful when plain, so turn them with the back out if the front is patterned. Three individual rectangular trays, place side by side with the long dimension up will make a more important sized background if you have no large trays that are suitable. The 21 or 24 inch grooved round metal top of a fiber soap barrel can be enameled with the spray cans of paint now on the market, or the cover of a bushel basket can be fitted with plain colored paper, and the rim painted to match.

Think about the figurines you own, and try combining them so that your composition will be interesting in its



Colorful Composition Without Flowers.

variations of color, texture and form.

The Picture Explained

The round woven truy shown in the picture is a Chinese grain winnowing tray, beige in color and 28 inches tall. Last spring you saw it used as a background for home grown callas. The thick square of wood is butternut, finished natural with floor sealer, and the smooth oak figure has developed brown highlights like the base. The ducks are inexpensive Chinese ones; three are deep turquoise blue, the fourth yellow and brown.

The thick base gives interest by a change of level, raising the figure and one duck above the others. Because the figure is most attractive from the back, it has been so placed, making a natural grouping.

The mantel is a fairly deep turgoise blue (Pittsburg's Stratosphere blue) and the wall behind blends with it (half white and half Stratosphere blue). The brilliant blue of the ducks adds sparkle by its more intense color and shiny texture. The single yellow duck intensifies the blues by contrast, but blends with the natural and brown tones of the tray and base.

Try a new combination of existing material in your own home for a sparkle on a dull winter day.

February, 1956

Plants For Your Garden

SHRUBS THAT WILL ATTRACT BIRDS

Birds can be encouraged to use an area by the proper selection and use of plants. The plants used to lattract should provide three things: food, protective cover and nesting sights.

Prof. G. William Longenecker, Dept. of Horticulture, University of Wisconsin has prepared a bulletin covering Trees, Shrubs and Vines That Will Attract Birds. Write for it to the Mailing Room, College of Agriculture, Madison, Wisconsin.

The following are some of the better shrubs which can be used in the home planting to attract birds as listed in the bulletin.

High Growing Shrubs

Silky Dogwood (Cornus amonum). Eaten by over 80 species of birds.

Cornelian Cherny Dogwood (Cornus mas). Attractive yellow flowers before the foliage.

Gray Dogwood (Cornus racemosa). Easily grown and attractive.

Redosier Dogwood (Cornus stolonifera). Good winter color.

Staghorn Sumac (Rhus typhina). Used by 15 kinds of birds.

Nannyberry Viburnum (Viburnum lentago). Combines well with gray dogwood; liked by Cardinials.

Blackhaw Viburnum (Viburnum prunifolium). Attractive fall color; 28 species of birds.

American Cranberrybush V. (Viburnum trilobum). Attractive in fruit. Fruit liked by Cardinals.

Medium Sized Shrubs

Red Chokeberry (Aronia arbutifolia). Liked by 13 species of birds.

Black Chokeberry (Aronia melanocarpa). Height, 5 to 6 feet; 13 species.

Common Winterberry (Ilex verticillata). Very attractive; liked by 16 species.

Small Shrubs

Indian Currant (Symphoricarpos orbiculatus). Attractive in winter. Full of fruit. Mapleleaf Viburnum (Viburnum acerifolium). Fruits better in shade than most plants.

FAVORITE CHRYSANTHEMUM VARIETIES

By Walter P. Knuth, Milwaukee

At the Milwaukee Region meeting October 25th I invited everyone to visit my garden of mums. About 75 or more came. My garden was in full bloom with over 100 varieties and I also had a flower show in my garage of most of them.

I conducted a poll on the most popular and this is how it turned out. 1st, Gardenia by Grand Mere, bicolor; 2nd, Orchard Oriole by Jackson Perkins, bronze; 3rd, Mohave Gold by Dr. E. J. Kraus, golden bronze; 4th, North Platte by University of Nebraska. bronze spoon; 5th, Spellbinder by Bristols, new yellow; 6th, White Cloud by Lehman, white; 7th, Canary Wonder, light yellow; 8th, Frosty by Grand Mere, low white; 9th, Ballerina by Grand Mere, rose lavender; 10th, Pleasure by Grand Mere, purple.

An outstanding new yellow mum named Tranquility was chosen by our Milwaukee Regional president for corsages which all Regional officers wore at the meeting.

MEN'S GARDEN CLUB OF WOODSTOCK, ILLINOIS JOINS SOCIETY

Through the efforts of Mr. Robert S. Andrews, a charter member and officer of the Men's Garden Club of Woodstock, Illinois and a member of the Wisconsin State Horticultural Society for some time, his club joined the Society in January.

Mr. Andrews wrote that they reviewed Wisconsin Horticulture at one of their annual meetings and the members liked it so much that they voted to join.

We welcome this club to membership and wish them a very successful garden club season in 1956.

Garden Club Reports

ROSHOLT GARDEN CLUB NEWS

Liast year our garden club helped to plant and also finance the shrubbery planting in front of our new school house. We also have some flower beds there which our club takes care of.

Last June we had a flower show which was very successful. At our County Fair, held in Rosholt, our garden club committee takes care of the flower exhibits. This flower show has become one of the most beautiful features of our fair.

Last year our club took a trip and tour through the Hardware Mutual Building at Stevens Point. Mrs. Chester Brandon of Waupaca showed us colored slides of her flower garden and other flowers. Mr. Charles Braman of Waupaca showed slides on birds and flowers. Mrs. Robert Holly, Waupaca, gave us a talk on wild flowers and Mrs. Joyce Matzke, the Portage County Home Agent spoke at our Christmas meeting and showed Christmas decorations. At some of our meetings we have slides and movies.—By Mrs. Norman Rosholt, Rosholt.

WAUSAU FEDERATED GARDEN CLUB NEWS

Meetings from which most of us feel we learn a lot are on questions and answers, with a moderator.

Last June we had a box luncheon and the one bringing the best looking box or basket received a gift.

We like the idea of visiting 4 or 5 gardens in one afternoon and having the owner explain about her flowers. It keeps the gardeners on their toes and they give enjoyment to those who are looking to learn.

Last year we had Sam Campbell, lecturer and author show us some of his pictures. He showed pictures of the wild life which has been tamed around his home on an island in the Eugle River. He was an inspiration to all of us.

For our Christmas meeting we had 27 out of 28 attend. We had a luncheon, followed by an exchange of gifts. In March we have Mrs. Robert Holly of Waupaca coming to tell us about the trees and plants in the Bible. She is an enthusiastic speaker. We are going to have Mr. M. Kyler talk to us on Water Conservation in the spring. Then we plan on a trip to Plum Lake in August with a stop at Minocqua to see their Flower Show. They have a beautiful show each year.

We plan to have a flower show in August. In June we plan on a breakfast and will try to find some garden club games, perhaps some written tests. We are getting slides on the Gardens of Williamsburg for one meeting and in another month will have a flower arrangement demonstration. Our County Park Commissioner gave us a fine talk with slides last year on National Parks and the previous year showed slides on our own Marathon County parks.—By Mrs. C. H. Brimmer, Wausau.

MANITOWOC MEN'S GARDEN CLUB HONORS MEMBERS FOR SERVICES

Two members of the Men's Garden Club of Manitowoc were honored at the annual Christmas party held by the club in December. They were Robert Jones the president and Gilbert Thompson, Garden Clinic chairman. Mr. Jones received the club's gold past president's pin for completing a successful year as president.

Mr. Thompson, known as "Mr. Gardener" by club members received the bronze medal from the Men's Garden Club of America for outstanding community service. It was the second award given in the state of Wisconsin by the Garden Club of America. Mr. Thompson was recognized for his services as former president and director of the Manitowoc County Gladiolus Society; and director of the Wisconsin Gladiolus Society; chairman of the Victory Garden program; co-author of a bulletin on trees and shrubs native to this area and chairman of the Men's Garden Club Garden Clinic and Radio program.

FROM THE LODI GARDEN CLUB

In 1955 we had a very successful flower show in June. Special items of interest were: 100 crab apple trees were planted by members and friends. Films of Wisconsin garden and parks were the basis of discussion at one meeting. Outside speakers were: N. R. Barger, Madison, on Wisconsin Birds; John Jung, Randolph on Growing Perennials; Prof. B. Struckmeyer of the Dept. of Horticulture on Horticulture; Miss Adeline Lyster of De Forest on Christmas Arrangements. We also toured the Game Farm at Poynette and visited several Madison gardens. —By Mrs. W. F. Groves, Secretary

SHEBOYGAN GARDEN CLUB NEWS

We had two special events this past year. A bird breakfast, which is an annual affair, but this year was an outstanding success. Following the breakfast, Dr. D. Lazear showed films on birds and bird life.

Our second event was a flower arrangement school. We mide flower arrangements which were placed on tables along walls leaving the center free for the chairs to seat our club members and guests. At one end we placed tables for the demonstration of corsage making and centerpieces. Mrs. William Holtz and Mrs. Francis Stangel from the Sheboygan Green House gave the lessons. We meet at the Mead Public Library the second Thursday of each month.—By Mrs. Victor Brown, Secretary

MILWAUKEE HORTICULTURAL SOCIETY NEWS

The Milwaukee County Horticultural Society had a very good year in 1955. We doubled our membership. Our most successful meeting was in September on African Violets. We had 128 people present. We showed films on African Violets and Gloxinias from the California Spray-Chemical Corp. After the films we had questions from the audience, answered by an able panel. Judging by the question the problems of African Violets culture were thoroughly covered.—By Mrs. John M. Griffin, Secretary

WHAT DO GARDENERS LIKE TO READ

An article in the Garden Writers Bulletin recently, discussed the findings of an extensive survey of what amateur gardeners like to read. It was conducted by Horticulture magazine (Mussachusetts Horticulture Society). Twenty questions were sent to 10,000 subscribers and more than 3,200 were returned.

The survey showed that gardening was not a hobby of young people in general and that most readers were over 45. This fact is further substantiated by observations at major flower shows around the country. It showed that todky's gardeners are busy people and that they have a keen interest in gardening. They still want to read the basic facts, case histories, personal experiences and opinions. They want to know the how, when, where and what of gardening. Readers do not like ambiguity.

"Whit PH Means in Soils" was a very popular article in the magazine recently and the author explained that you do not have to be a "hydrokineticist" to draw water from a tap.

26TH CHICAGO FLOWER SHOW BY THE GARDEN CLUB OF ILLINOIS PRUDENTIAL BUILDING, MARCH 9-18

"Our Illinois—The Heart of Mid-America" is the title chosen for the Flower Show of the Garden Club of Illinois to be held in the Prudential Building, Randoph at Michigan Ave. March 9 through 18, 1956. It is said this will be the first event ever scheduled for the assembly hall of this new giant of the architectural world—the mid-American home of the Prudential Life Insurance Company. The building is constructed over the Illinois-Central Railroad tracks and is 41 stories high.

According to the show committee, the only word to describe this spring flower show is "Spectacular". Address of the Garden Club of Illinois is The Palmer House, 119 S. State St., Chicago 3.

The 1956 All-America Flowers

Petunias are lagain the world's series flower winners for 1956. Fire Dance is the exciting new Miss America of the flower world.

1955 All-Americas included McKana's Giant columbine or aquilegia, the first perennial selection since before World War II. It has the biggest flowers, finest colors and growth of all columbines. Toreador celosia or cockscomb, with its huge crimson-red heads surmounting two-foot plants, was another 1955 winning introduction. The third was that exquisite pink Prima Donna petunia. Its large ruffled and fringed flowers, in the new hybrid grandiflora type, brought a new conception of beauty to petunias.

Another petunia actually belonged with the 1955 winning novelties but there was not enough seed available for general distribution. So, we are talking about it this year. **Paleface** is its name. It is plainpetaled and in that group or type called hybrid multiflora. Flowers are not quite as large as the grandifloras but these are the most floriferous of all, blanketing the whole mound-shaped plants with bloom.

Fire Dance

But let us get to this new and only winner for 1956. Fire Dance is the most strikingly beautiful of all the grandiflora petunias. Rich salmon-scarlet, the flame red color is enhanced by large flashlight yellow throats. The petals are delicately ruffled and fringed, flowers are over three inches across and freely borne on foot-high plants.

Fire Dance is a first generation or true hybrid, uniform in growth habit and color. Its hybrid vigor makes it far superior in growth and bloom, well worth the difference in cost of seeds over common petunias. Price amounts to little anyway. A packet of seeds will provide up to a hundred plants at a cost of two little twenty-five cent plants if someone else starts them for us.

Fire Dance is a bedding variety, which kind grows about twelve to fifteen inches high. It is useful for many purposes. Plant in clumps, border or ribbon beds, pots, urns and window or porch boxes, foundation plantings and in front of evergreens or other taller plants, in mixed borders and for wide and colorful edging of lawns, walks and drives. Cutflowers for the house are easily and naturally gracefully arranged with their own foliage. Delicate fragrance and allselason blooming combine to make these new hybrid petunias the most desirable of garden flowers.

While Fire Dance grows only about a foot tall, it will reach two feet or more across if space is available. Because of its vigor, plants may be set about eighteen inches apart and still fill a bed solidly by midsummer.

Paleface and Comanche also are bedders, somewhat more compact in growth and loaded with flowers throughout the summer. Individual flowers measure about two and a half inches across and on nice stems for cutting. All of these petunias make long-lasting cutting material, especially adapted for informal arranging.

Petunia seeds are started in pots, pans or flats in the house, hot bed or cold frame about two months or more before time to transplant to their permanent location outdoors. A safe time to set them outdoors is when trees are putting on their new spring leaves. If this is about May 1st, start seeds March 1st.



1956 Garden Club Directory

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- V. Pres.: Mrs. C. H. Brimmer, 3114-7th St., Wausau.
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- Parliamentarian: Mrs. R. H. Sewell, 7341 N. 76th St., Milwaukee.
- Blackhawk Region Mrs. Ed. Streich, Route 2, Jefferson; Mrs. John Kiesling, Sr., Ft. Atkinson.
- Central Region Mrs. C. H. Braman, Route 1, Waupaca; Mrs. C. H. Brimmer, Wausau.
- Milwaukee Region—Mrs. Ray Luckow, 935 S. Apple Tree Lane, Milwaukee; Mrs. H. B. Buerosse, Milwaukee.
- Winnebagoland Region—Mrs. Carl Peik, Box 43, Chilton; Mrs. A. J. Wiesender, Berlin.

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- Conservation-Mrs. J. W. Dooley, 7724 W. Rogers St., West Allis 14.
- Chairman-Mr. E. L. White, Box 147, Ft. Atkinson.
- Horticulture—Mrs. Robert Holly, 902 S. Main St., Waupaca, Chairman; Mr. Harold Poyer, Route 2, Ft. Atkinson.
- Yearbooks—Mrs. Edgar Bergman, Brookfield Wis.

Mrs. Henry Dorn, 1725 Harrison St., New Holstein.

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- Program—Mrs. Harold Poyer, Route 2, Ft. Atkinson, Chairman; Mrs. Charles Bierman, 1847 N. 69th St., Wauwatos 13.
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- Sec.: Mrs. William Becker, Route 2, Jefferson.
- Treas.: Mrs. Gilbert Schlagenhauf, Route 1, Helenville.

Central Region

- Pres.: Mrs. Charles Brimmer, 3114-7th St., Wausau.
- V. Pres.: Mrs. Bessie Herbert, Manawa.
- Sec. Mrs. Marlin Steinbach, Route 1, Clintonville.
- Treas.: Mrs. Oscar Eggebrecht, 624 Birch St., Forest Park, Wausau.

Milwaukee Region

- Pres.: Mrs. H. B. Buerosse, 1131 S. 47th St., Milwaukee 14.
- V. Pres.: Mrs. L. P. Jacobson, 8146 Richmond Ct., Wauwatosa.
- Sec.: Mrs. Fred H. Wrobbel, 8441 S. Hayes Ave., West Allis 14.

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- Sec.: Mrs. Royal Klofanda, 210 Reed St., Chilton.
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- Pres.: Miss Adeline Lyster, Deforest.
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- Sec.: Mrs. H. W Miller, 305 S. 10th Ave., Wausau.

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- Pres.: Mrs. Jeanette Hoehnke, 7801 W. Beloit Rd., West Allis.
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Wisconsin Horticulture



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THE DEMAND FOR HONEY IS GOOD AND THE MARKET IS STRONG

Beekeepers have expressed surprise at the strong demand by the consumer for honey, especially during the Thanksgiving and Christmas seasons. Super markets sell an enormous quantity of honey. The editor has geen trying to estimate the probable consumption of honey in Madison, a city of a little over 100,000 population. A dozen producers and packers are supplying the stores. We don't believe there is any beekeeper in the however large, who produces state, enough honey to supply this one city the year round.

We had a national crop of 243 million lbs. in 1955, which was 26 million lbs. more than the 1954 short crop. Our own Wisconsin crop was 7 million lbs. more than the 1954 crop, and yet we hear that much of the honey is out of the hands of the producer.

Writing in the December issue of Gleanings In Bee Culture Mr. R. B. Willson, New York, Chairman of the Honey Industry Council states, "And the fact is, the world's demand for honey is now exceeding the supply". This is in part due to European recovery. Belgium, Holland and Germany, especially the last, have made substantial economic recovery and take over 85% of our exports of honey. We are also having "good times at home" says Mr. Willson. "Go to the check-out counter of any super market and watch what just ordinary folks buy. Statistics show the wage earners in our great country have more money to spend now than ever before. Honey is sharing in that prosperity." Then there is also the increase in population and continuous honey promotion.

Change In Marketing

With all of this comes a gradual change in the marketing of honey. We hear of one chain of super-markets buying out another chain to consolidate. One observer gives the opinion that in the neur future the buying of food stuffs will be in the hands, nationally, of less than a dozen expert buyers. The larger the supermarket the more difficult it will become for the local beekeeper to sell in his home town. Grocery chains maintain large warehouses and the produce buyers purchase their honey from large packers in order to be assured of a certain grade and advertised brand continuously every day of the year. They can't bother with small quantities of honey from local beekeepers.

At beekeepers meetings we have heard speakers say that it would be best if all producers sold their honey to packers who can do a better job of preparing the honey for market than the small beekeeper. This is now the trend. Large packers, whether private or cooperatively owned, can do a good job of advertising their own brand, which is excellent promotion.

However, the commercial beekeeper with an established trade, who continues to put out a high grade product, has an advantage over the packer—he can cut. corners and reduce cost and will no doubt: keep his outlet if he gives good service.

Honey For Bakeries

Mr. Willson points out one danger spot. The American baker uses a large amount of honey, especially in bread. There is a lot of bread being made with 9c sugar. Honey, even at 15c to the baker, stood up well last year. But honey at 17c or higher, processed and delivered to the bakery is "bound to show some casualties that will be sad news to the honey industry", says Mr. Willson. This will tend to slow down the price advance of honey.

CHECK YOUR COLONIES NOW IF THEY ARE LOW IN STORES

In the January 3, Semi-monthly Honey Report, by the U.S. Department of Agriculture, we find this statement in the report from the state of Illinois. "Reports from Central Illinois indicate around 10% of the colonies in some yards are in need of feeding. A few colonies have already starved and these in yards in which it was thought practicully all colonies had filled the brood chambers last fall." We have talked to beekeepers who winter in three brood chambers and use a system of management in which the colonies store considerable honey in the brood chambers and they state their bees are in excellent condition with more feed available than in some years past.

Beekeepers who winter in one or two brood chambers and had large strong colonies which moved the honey into the extracting supers, and, with a short fall honey flow, failed to store enough to carry them through the winter, muy be in for trouble.

So, check your colonies now to see if they have adequate stores and don't let them starve. It will be the **strongest and the best which will starve first** because by now they have started rearing brood and are using more honey than they did during December and early January.

Will it hurt them in any way to examine them now? The answer is no, as proven by the fact that many of our best beekeepers examine their colonies in February and March and feed those that are short of honey within the winter cluster.

Feeding Syrup Now

Don't try to feed bees in winter by the same method you use in spring or early fall—a container of syrup placed over the brood chamber. The weather will be too cool for them to take the honey down. Place combs of honey right next to the combs of brood if available. If not, then on a calm day, with the sun shining and the temperature above 32 or thereabouts, remove the empty combs on each side of the combs of brood, shake off the bees and fill about 4 of them with warm sugar syrup. Use a sprinkling can and sprinkle the syrup into the cells, allowing the drip to go into the cells, allow or onto the cluster. The syrup should be made of about 1% parts sugar, 1 part of water and heated so it will be hot to the touch when feeding.

Place the combs filled with syrup next to the combs of brood and replace the cover. The warm syrup will heat the brood chamber, the bees will quickly cluster on the combs and starvation will be prevented. Do a good job—feed enough syrup; it will take a good deal from now until there is a honey flow, and it will pay to give them more than they need.

BEEKEEPING NOT PROFITABLE WITHOUT GOOD MANAGEMENT

Surveys have been made from time to time which would indicate that the cost of producing honey was above the commercial price received for it.

Writes Dr. C. L. Farrar in Circular 702 Productive Management of Honeybee Colonies in the Northern States: "In these surveys the colony yield was the basic factor influencing production costs. The cost of producing a pound of honey in apiaries giving low yields was five to nine times the cost in apiaries with high average yields. When it is recognized that most apiaries show average yields only one-third as high as those obtained from the most productive colonies, the beekeeper is challenged to increase the efficiency of his management."

DISTRICT BEEKEEPERS MEETINGS WISCONSIN BEEKEEPERS ASSOCIATION

April 5—7:30 p.m. South Western District meeting at Sparta in the Court House.

April 11—10 a.m. North Central District meeting at Marshfield. Experiment Station Service Center (3 miles S. E. of Marshfield). Luncheon served by church organization.

WHAT'S "NEW" IN BEEKEEPING By Marvin Kosanke, Ripon

The following items were taken from issues of the American Bee Journal of fifty and sixty years ago.

In May, 1906 Mr. Fred Banker of Sleepy Eye, Minnesota wrote: Last winter we had 54 colonies in the cellar and only one was queenless. We had 96 outdoors. All came out nice and strong and in fine shape. We did not have to feed any of them as they had plenty of honey. Those outside were mostly 2½ stories high.

Many of the strongest colonies reared a lot of brood in February when we had a nice spell of weather. So some of the colonies have young bees to work new. (April 16.)

From the December issue, 1906. (From a column by Louis H. Scholl): A Mr. J. K. Hill of Uvalde, Texas at one time lost about 50 colonies one season from

bee-paralysis and says although this disease is very common in the southern portion of the United States, in most cases it does little harm. However, under certain conditions it is very destructive. There is no treatment yet discovered that is an absolute cure, but the best remedy, to his knowledge, is as follows: Tincture of Podophyllin, 3 oz.; sulphuric acid, 1 oz.; honey, 1 gallon; and hot water, 1/2 gallon. Mix and sprinkle the combs, bees and brood with the warm solution thoroughly. Three applications should effect a cure. As the disease is caused from constipation, the podopyhllin acts as a laxative and the acid as a disinfectant.

From the July issue, 1895: A reader writes to Dr. Miller: A Mr. T. Balton says that inverting the brood chamber will prevent swarming for nine days. Will you please tell me why that is the case? Dr. Miller replied that some time ago there was much to be said in favor of



February, 1956

inverting brood chambers, one chief advantage claimed being that a queen cell inverted would be destroyed and thus swarming would be prevented. Gradually, however, it seemed to be granted by all who tried it that the claim could not be upheld and for some time nothing has been heard about it.

From the May issue, 1907; Comment by Editor George W. York: The editor of the Bee Keepers Review is quite enthusiastic about protecting bees in the spring by wrapping the hives with tarred felt. If Mr. N. W. France is correct in saying that a colony protected by tarred paper will have double as much brood as an unprotected one when warm weather comes, it may be well worth while to make trail of such protection. Although the protection should be given immediately when the bees are taken from the cellar there are still some cold days due for many this spring.

Editors Note :Unfortunately, they never thought to check the relationship between the availability of pollen and honey to the amount of brood present. By paying too much attention to keeping the hive warm by outside wrapping they overlooked more important things.

From Newton Boggs, Viroqua

I only had a 150 lb. average of honey this year. It should have been 200. Due to not extracting during the honey flow I did not have enough supers to take care of the flow.

I will start to inspect my bees the first warm days in March.

I noticed nosemua all last spring until the first week in June. I will feed some Fumidil this spring.

Disease (AFB) has not been any problem the last three years. I feed some sulfa to my bees.

I market all of my honey with the Sioux as I have a job teaching. I think most beekeepers should let a good bottler have his honey as they have the facilities for putting up and disposing of honey on a year round basis.

ABOUT BEES From Beekeepers News, England

WOODPECKERS tapping on the hive, with such tiny vibrations, will get an immediate response—just as we would give to anyone knocking on our door.

NASSANOFF CANAL IN ACTION is seen on hiving a swarm—dozens of bees will stand on the alighting board, abdomens pointing away from the entrance, Nassanoff canals fully open and wings going it at full speed blowing the air over their canals and out into the open.

BEES FROM OTHER HIVES will not take part in any action when the Nassanoff canal has been used—scent appears to be a family affair!

I AM NOT FORGETTING—a bee has 6,000 organs for smelling purposes or that it can pick up minute sound vibrations and react accordingly!

SOUND VIBRATIONS can give many meanings but scent has only two-good or bad!

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Used beekeeping equipment in good condition. Covers, bottom boards, hive bodies, shallow supers, comb honey supers, all 10 frame. 1 two frame root reversible extractor, 1 honey tank, 1 uncapping knife. State Inspected. Disease free.

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March, 1956

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Wisconsin Horticulture



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Complete Apple Spray

All Schedules Recommended by the Departments of Entomology, Plant Pathology and Horticulture University of Wisconsin

This spray schedule is designed to provide adequate control of the insect pests and diseases of apples. The indicated amounts of insecticides and fungicides are those recommended for each 100 gallons of spray.

- **DORMANT.** To be applied before bud break. In most commercial operations it is necessary to apply the insecticide to the trees and the fungicide to the ground in separate applications.
 - Insecticides—(prevents build up of European Red Mite. Controls aphids, case-bearers and bud moth.) DN-289 or Elgetol 318, ½ gal, or Elgetol or Krenite, 1 gal.
 - Fungicides—(For apple scab control) Elgetol, Krenite, DN-289 or Elgetol, 318, ½ gal. as ground treatment at 600 gals. per acre.

BEFORE BLOSSOM. Fungicide applications for apple scab control should be started at the delayed dormant stage of tree development and be continued at about 7 day intervals from then until bloom.

Two insecticide applications are needed before blossom for bud moth, casebearers, fruit tree leaf roller and red banded leaf roller and red mite control. The insecticides should be included in the second spray (normally closed cluster) and the third spray (normally open cluster).

- Fungicides—liquid sulfur, 2 gallons or Captan, 1 lb. + Organic mercury, one half strength² or Captan, 2 lbs.
- Insecticides1—lead arsenate, 3 lbs. or DDT 2 lbs. in open cluster; Ovatran ¼ lb. or Genite 1½ pints.
- BLOSSOM. Fungicide applications for apple scab control³ should be continued during bloom if necessary so that the interval between applications is not greater than 7 to 10 days.

Insecticides-NONE

Fungicides—Captan, 1 lb. + Organic mercury, one half strength² or Captan 2 lbs. or Ferbam, 1¹/₂ lbs.

- PETAL FALL. The calyx spray is important from the standpoint of plum curculio and oyster shell scale control. Dieldrin is excellent for plum curculio but it has little or no effect on other pests. It is necessary therefore, to add lead arsenate to the spray containing dieldrin. If oyster shell scale is a problem, DDT should be substituted for lead arsenate. If the scales hatch late it may not be necessary to include the DDT for oyster shell scale control until the first cover spray. A fungicide application for apple scab control is also very important at this time.
 - Insecticides—(for plum curculio, bud moth, codling moth, red banded leaf roller, fruit tree leaf roller, oyster shell scale control)
 - Dieldrin (50%), ½ lb. and lead arsenate, 3 lbs. or DDT (50%), 2 lbs.
 - Fungicides—(for apple scab control) Captan, 1 lb. + organic mercury, one half strength² or Captan, 2 lbs, or Ferbam 1½ lbs.
- COVER SPRAYS. The first cover spray should be applied 10 days after the petal fall spray and additional cover sprays should be applied at approximately 10 day intervals until about 30 days before harvest. With one exception the selection of the insecticides to be used in the cover sprays is not too important. The exception is the possible use of DDT in the first cover spray. If it was not used in the calyx spray and oyster shell scale is a problem, it should be used in the first cover spray. The other materials recommended, DD'I', parathion, lead arsenate are all effective insecticides against the pests encountered at this time of the season.

Schedule For 1956

It is advisable, however, to alternate insecticides (at least two) instead of spraying repeatedly with the same insecticide.

For example, if DDT is used in the first cover spray, use parathion or lead arsenate in the 2nd cover spray. Then go back to DDT in the 3rd cover spray and switch to a different insecticide again in the 4th cover spray. This procedure should be continued because repeated applications of the same insecticide allow the insects to build up resistance to the insecticide being used.

- Insecticides⁴ (for coddling moth, bud moth, red banded leaf roller, apple maggot) DDT (50%), 2 lbs. or parathion (25%), 1½ lbs, or lead arsenate, 3 lbs. (Methoxychlor for apple maggot).
- Fungicides (for apple scab control) Captan, 2 lbs. or Ferbam, 1½ lbs. Wettable sulfur, 5 lbs.

Explanatory Notes

- ¹ Lead arsenate should be used in the closed and open cluster sprays or substitute DDT for lead in the open cluster if fruit tree leaf roller is bad. Ovatran or Genite EM-923 used in the preblossom sprays will help prevent red mite infestations later in season.
- ² There are many different formulations of organic mercury compounds. The one selected should be used at half the manufacturer's recommended amounts for use alone.
- ³ Where fire blight is a problem the use of a streptomycin preparation is suggested. Normally at least three applications are required during the blooming period, starting when 10% of the blossoms are open. Use the streptomycin preparations according to manufacturer's directions.
- The insecticides recommended in the cover sprays should normally control apple maggot and red banded leaf roller. If apple maggot has been a serious problem use methoxychlor in the 4th and 5th cover sprays or consult the Entomology Department Uni-

versity of Wisconsin. If red banded leaf roller is serious add Rhothane to the third and fourth cover sprays at the rate of 2 pounds of 50% Rhothane per 100 gallons of spray.

Mite Build Up—Mite populations may build up during the summer. Spraying with one of the phosphates (EPN or parathion) is usually effective at this time. However, miticides such as Aramite, Dimite, Karathane, or Ovatran are also available. Any of these materials should be used according to the manufacturer's directions.

Precautions-

- 1. Follow the manufacturer's directions for safety when using any of the insecticides and fungicides.
- 2. Do not apply DDT any later than one month prior to harvest on any variety, because of possible residue hazards.
- 3. Do not use EPN or parathion on Mc-Intosh, Cortland or related varieties as they may cause injury. Consult the Entomology Department, University of Wisconsin, if insect problems are serious enough to warrant the use of phosphates on these varieties.

KROEKER'S HARDY PIE CHERRY

A sour Cherry adapted to more rugged weather conditions. Tested for 25 years in western Minnesota. High in quality, fruit large and good producer. Tree semi-dwarf and produces early.

Send for more detailed information and prices.



Cherry Spray Schedule

For 1956

The cherry spray schedule is designed to provide protection against the major insect pests and diseases of sour cherry. The indicated amounts of insecticides and fungicides are those recommended for each 100 gallons of spray.

Dormant. To be applied before bud break. The insecticide and fungicide applications to the trees must be applied separately in the dormant period and with some time interval between them. In many sensons it is not possible to make both applications before bud break, so growers are urged to apply the insecticide first if their main problem is insects or the fungicide first if their main problem is brown rot.

Insecticides (for the control of aphids, bud moth, destructive prune worm and casebearers), DN-289 or Elgetol 318, ¹/₂ gal., or Elgetol or Krenite, 1 gal.

Fungicides (for the control of both European and American brown rot where either of these diseases is serious), Copper sulfate, 4 lbs. + hydrated lime, 4 lbs. + monocalcium arsenite 4 lbs + Dendrol dormant spray oil, 1 quart.

Before Blossom

Insecticides—none1.

Fungicides—none.

Blossom

Insecticides-none.

Fungicides (recommended for use only where brown rot is a problem).

Bordeaux (copper sulfate, 6 lbs. + hydrated lime, 8 lbs.).

After Blossom

The after blossom sprays are recommended for the control of plum curculio, cherry fruit worm, destructive prune worm, bud moth, fruit, tree leaf roller, cherry leaf spot, and brown rot.

Petal Fall

Insecticides—Dieldrin (50%,) ½ lb.2 or lead arsenate, 3 lbs.

Fungicides—Bordeaux (copper sulfate, 6 lbs. + hydrated lime, 8 lbs.) or ferbam, 1½ lbs. 1st Cover (10 days after petal fall)

Insecticides-DDT (50%), 2 lbs.

Fungicides-ferbam, 1½ lbs.

2nd Cover (10 to 14 days later) Insecticides—methoxychlor (50%), 2 lbs. Fungicides—ferbam, 1½ lbs.

3rd Cover (14 days later)

Insecticides-none

Fungicides—ferbam, 1½ lbs. or captan, 2 lbs.

After Harvest (as soon after harvest as possible)

Insecticides - none

Fungicides—ferbam, 1½ lbs. or Bordeaux (copper sulfate, 3 lbs. + hydrated lime, 4 lbs.)

- 1 In some years fruit tree leaf roller has been extremely damaging and total crops in certain orchards have been destroyed. If fruit tree leaf roller is serious, DDT (50%), should be applied about one week after bud break and before blossom.
- 2 Dieldrin should be used in the petal fall spray if plum curculio has been a problem.

PHIX-APPLE SCAB FUNGICIDE

A new material available for use in apple scab control is the organic mercury fungicide, **Phix.** It is relatively new to Wisconsin. An ad in the inside front cover from Chemley Products states how it may be obtained.

Phix has been tested by experiment stations in a number of states and has given outstanding control of apple scab, especially in "after rain" programs, and for eradicating established foliage infection.

Phix is a concentrarted dry formulation of phenylmercuric acetate in soluble form, fully wettable and mixing readily in the spray tank. It is designed only as a spring scab fungicide from the delayed dormant to the first cover spray, as it is an organic mercury material.

Wisconsin Horticultur





CRAG Glyodin gives you real scab protection in heavy rains <u>and</u> the BEST apples at LOWEST COST



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By Snipping Give Old Orchards New Life

By R. H. Roberts, Dept. of Horticulture

Young apple trees bear good sized apples. It's only as a tree gets older and grows less that it begins to produce smaller ones. The reason for this is that apple size is related to the length of new growth. The longer the year's growth on a branch, the larger the resulting apples.

It is present practice with middleage trees to maintain fruit size by pruning out the weak wood which accumulates with age.

When this kind of pruning has been done over a period of years, it results in a tree that has too few good branches not enough "good wood"— for full production.

The problem, then, is how to turn the small weak branches into producing wood.

Snipping seems to be the answer. Instead of cutting the branches out, you simply cut them in half.

This idea was first tried in Wisconsin in 1950, when older over blossoming Golden Delicious trees were "snipped." In the dormant season all weak branches and branched spurs were cut in half.

Snipping invigorates the apple tree. The results are strong early season growth, large leaves, and large blossoms. Although as many as two-thirds of the growing points are cut off, yields are actually improved because of better sets and uniformly larger apples.

Snipping costs more than ordinary pruning. It takes about an hour and a half to snip a 20 year old tree.

At harvest time, investment of time is returned to the growers because picking and handling costs of small apples are avoided.

Because snipping stimulates growth so sharply, about a third more nitrogen fertilizer than usual is needed. Snipping alone will not do the job.

It is also necessary to cut back every weak or small branch. Any that are left will produce small apples. The main effect of snipping is that it gives new life to an old tree. The tree has a growth condition like it had at \leq or 10 years of age.

The year after snipping is done some thinning may be needed.

In the third-year, the amount of dormant season pruning depends upon the number of blossom buds present. With moderate blossoming, give the tree the kind of ordinary thinning you would a younger tree. If there are too many blossom buds, repeat the snipping or practice old style pruning.

If enough fertilizer is available, snipping should also result in blossom buds forming for a good off-year crop.

Spur bearing varieties which are biennial respond to snipping. You should get good results with Dudley, Duchess, Golden Delicious, Grimes Golden, Jonathan. Northwestern Greening, Red Delicious. Wealthy, and Yellow Transparent.

Don't prune McIntosh by the snipping system; it would ruin the fruiting of this variety.—From Circular 468, Agriculture Extension Service, Wisconsin College of Agriculture.

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Complete Line of Orchard Supplies, Apple Graders and Brushers. For large or small growers. **Gordon Rupp** Pumps and Complete Irrigation Systems Write to **HENRY MAHR** 10820 S. 27th St. Milwaukee 7, Wisconsin

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- Superior control before fruit formation reduces residue problem of late season sprays.
- So effective, control results often extend into the following year.
- Will not harm useful insects, virtually non-toxic to bees.

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IRRIGATION EQUIPMENT

Irrigation plans should be made now. We have had four years experience irrigating our own apples, strawberries and melons and have learned a few things not found in books. Let us plan your system and give you a figure on the cost. Albert A. Ten Eyck, Pine Bluff, Fruit Farm, Brodhead, Wis.

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SWEDBERG NURSERY

Battle Lake, Minnesota

SEE This Great New Hardie



The exclusive Hardie 2fan assembly consists of two solid, cast aluminum fans of special design, mounted with opposed blades on a single shaft and scientifically spaced. The Hurricane specially designed fan housing dejivers the tremendous air volume and velocity of the two fans directly to the spray nozzles without friction loss.

It's the new and better way to spray, acclaimed by leading growers from coast to coast. Take one look at a Hardie Hurricane 2-fan Sprayer in action and you know that you are witnessing performance that can-

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NE

There is a Hardie dealer near you. Let him show you this wonderful new unit that brings new speed, efficiency and economy to citrus spraying. Three models to choose from. Built only by

The Hardie Mfg. Co., Hudson, Michigan

HARDIE



INSECTICIDES MITICIDES FUNGICIDES

MICRONIZED[°] for improved control Formulated for Better Fruit Finish

INSECTICIDES

Lead Arsenate Parathion Malathion Micronized® Dieldrin Micronized® DDT Micronized® Rhothane® Micronized® BHC Micronized® Pheno-Lead Methoxychlor

MITICIDES

Aramite Micronized Corotran® (Ovex)

FUNGICIDES

Sulphur Phygon[®] XL Phygon[®]-Sulphur Dust Coromerc[®] Powder or Liquid (Phenyl-Mercury Formulation) Spike[®] (Sulphur Coromerc Formulation) Coromate[®] Ferbam

DORMANT SPRAYS

Dinitro Powder Corodinoc® Paste

Corona Micronized Formulations assure low cost control. Call your nearest Corona distributor for complete details.



MOORESTOWN, N. J. . MILWAUKEE, WIS.

March in the

Orchard and Berry Patch

With George Klingbeil



MOUSE DAMAGED TREES

Mice have again caused a considerable amount of injury to orchards. Inspection of many commercial orchards shows that mice have partially or entirely girdled trees. Some damage has been observed even on large trees. Mouse damage can be expected in any orchard where mouse control practices were not followed. It would be wise to check your orchard immediately to determine if mice have girdled any trees.

If mice have caused injury, about the only practical way to save the damaged tree is to bridge graft over the girdled portions.

Bridge grafting is not a difficult procedure and can be done over a period of several weeks if proper preparation is provided for the task. About the only advance preparation required is to collect good sturdy scion wood and obtain a good grafting compound for sealing or protecting the wood against drying out.

Scion wood may be collected during the dormant period and kept dormant until used. Water sprouts from hardy varieties, about one quarter to three eighths inch in diameter, make the best scions for bridge grafting. They should be stored in a cool place and not be allowed to dry out.

Probably the most popular tree sealing compound is the water soluble asphalt type material which is available at most orchard supply stores.

Bridge grafting is done in early spring about the time trees are starting to grow and may be continued as long as the bark slips readily and dormant scions are available.

If detailed information on bridge graft-

ing is desired see your county agricultural agent or write the Department of Horticulture, Madison 6, Wisconsin, for bulletins on the subject.

Pruning Grapes

Grapes are generally pruned in Wisconsin in the late March or April and should be done before the buds begin to swell. Bleeding from the pruning wounds is not harmful.

Grapes pruned annually and trained to a two wire trellis are pruned as follows:

- Select four one-year-old canes about the size of a lead pencil and originating near the main trunk of the vine. Remove all other vines.
- Allow about ten buds or nodes to remain on each vine. Cut off the remainder of the cane.
- 3. Tie one cane firmly with twine to the trellis wire in each direction from the trunk.

If grape vines have been neglected it is usually helpful to remove as much as possible of the old wood to encourage the growth of new wood nearer the main vine. It is best to have only one main trunk. If it seems practical to establish a new trunk, select a vigorous cane growing from the base of the vine, tie it upright to the trellis and remove all other canes.

Per capita consumption of fruits and fruit juices declined in 1954 to 193 pounds, compared with 225 pounds in 1946, distributed as 53 per cent fresh 24 per cent canned, 16 per cent frozen and 7 per cent dried.—From American Fruit Grower.



AN AIR-TYPE SPRAYER FOR EVERY REQUIREMENT—SEE THE 1956 JOHN BEAN LINE

Whatever your spraying needs, there is a John Bean air-type sprayer designed to fit them exactly. You save time, labor and spray materials, and do the fast thorough job needed during critical spraying periods. John Bean "work-rated" air-type sprayers are engineered for maximum efficiency and economy of operation in any size orchard or grove.

Using the most efficient method of air handling ever developed, your John Bean air-type sprayer assures you of clean fruit and top market prices. Spray concentrate, semi-concentrate, or dilute. Reduce operating costs safely with efficient one-man operation.

Choose your air-type sprayer from nine John Bean models. See it in action. Ask your John Bean dealer for a demonstration. Write today for a free catalog.





Wisconsin Berry and Vegetable Growers Ass'n.

Pres. .__E. A. Rosenber Clintonville

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DIRECTORS: Floyd Burchell, De Pere: Harry Barlament, Green Bay; F. W. Van Lare, Oconomowo; Mrs. Gerald Hipp, Janesville; Chris Olson, Berlin: Mrs. Freda Schroeder, Loyal; H. J. Rahmlo, Madison, Ex-officio.

STRAWBERRY GROWERS MEETING ALMA CENTER, WISCONSIN March 27, 1956

All strawberry growers are invited to attend the Alma Center Strawberry Growers program on March 27th. It will begin at 10:30 a.m.

Topics will include: Insect Outlook for 1956, by H. E. Halliday, Madison. Irrigation and Strawberries, by Prof. H. D. Bruhn, Agricultural Engineering. Nematodes and Strawberries, by Vernon Perry, **U.S. Department of Agriculture.** New Developments in Strawberries, Varieties, Virus Studies, Fertility, by Dr. F. A. Gilbert, Sturgeon Bay. Strawberries-A 4-H Project, by Prof. George C. Klingbeil.

Project, by Prof. George C. Klingbeil. Strawberry disease control, by E. K. Wade; Dept. Plant Path V. W.

Sec. Treas.__E. L. White, Box 14 . Ft. Atkinson

Strawberry Pest Control

Keep the plant rows narrow.

When sprays are used, apply enough to thoroughly wet the foliage. If dusts are used, get the material under the leaves but avoid overdosing.

When to spray:

1. Just as first blossom buds appear in spring. For Spittle bug, plant bugs. red spider and leaf roller.

Use methoxychlor 2 tblsp., 50% wettable powder and malathion 1½ teasp., 50% emulsion plus 3½ tblsp. captan 50% wettable powder or ferbam 3 tblsp. for Leaf spot and fruit rots for 1 gal. water.

2. 10 days after first application use captan 3½ tblsp. or ferbam 3 tblsp. for berry rot and leaf spot per 1 gal. water.

3. 10 days after second application again use captan 3½ tblsp. or ferbam 3 tblsp.

Continued on page 234

ANNUAL SPRING MEETING WISCONSIN BERRY & VEGETABLE GROWERS ASSOCIATION Retlaw Hotel, Fond du Lac

Wednesday, March 21, 1956

- Call to order by President E. A. Rosenberg. Announcements. 10:00 a.m.
- 10:15 a.m. Berry and Vegetable Varieties We Will Grow In 1956, by Harry Barlament. Green Bay.
- 10:45 a.m. Insect Control on Vegetables and Berries, by Prof. Kieth Chapman, Dept. of Entomology, U. W.
- 11:30 a.m. Round Table. Growers will be called on to give their experiences with varieties and cultural methods. Conducted by H. J. Rahmlow, Madison.
- 12:00 m. Luncheon in Hotel Dining Room.
- 1:30 p.m. Business meeting.

2:00 p.m. New Strawberry Selections. Observations On Raspberry Growing, by Dr. R. H. Roberts, Dept. of Horticulture, U. W.

Report from growers. 10 minute discussion of varieties, fertilizers, irrigation. 3:00 p.m. harves:ing, etc. By: Elmer Whitby, Chilton; Gerald Fieldhouse, Dodgeville: Floyd Burchell, De Pere; Gerald Hipp, Janesville; Chris Olson, Berlin; Miss Freda Schroeder, Loyal.

Growing Better Vegetables

By John Schoenemann

VEGETABLE VARIETIES FOR WISCONSIN GARDENS By The Department of Horticulture, U. W.

ASPARAGUS: Mary Washington.

BEANS (BUSH, GREEN): Tendergreen, Processor, Topcrop, Wade, Ranger, Seminole.

BEANS (BUSH, WAX): Brittle or Round Pod Kidney Wax, Pencil Pod Black Wax, Cherokee.

BEANS (POLE, GREEN): Kentucky Wonder.

BEAN (BUSH, LIMA): Henderson Bush*, Fordhook 242, Thorogreen, Clark's Bush.

BEAN (DRY): Michelite*, Great Northern*.

BEETS: Early Wonder, Perfected Detroit, Detroit Dark Red, King Red.

BROCCOLI: De Cicco, Green Sprouting.

CABBAGE: Jersey Queen, Badger Market, Wisconsin Golden Acre, Resistant Detroit, Racine Market, Marion Market, Wisconsin All Seasons, Improved Wisconsin Ballhead, Red Hollander. All varieties are resistant to yellows and listed in order of earliness.

CARROTS (HALF LONG): Nantes or Coreless, Red Cored Chantenay, Royal Chantenay.

CARROTS (LONG): Imperator, Morse's Bunching, Imperida, Gold Spike.

CAULIFLOWER: Early Snowball, Snowdrift, Super Snowball.

CELERY (GOLDEN): Golden Plume, Golden Self-Blanching, Cornell 619.

CELERY (GREEN): Summer Pascal, Emerson Pascal.

CHARD: Large White Ribbed, Fordhook Giant, Rhubarb.

CHINESE CABBAGE: Michihli.



CUCUMBERS (SLICING): Straight Eight, Cubit, Marketer, Niagara (mosaic resistant).

CUCUMBERS (PICKLING): National Pickling, Yorkstate Pickling (mosaic resistant), Wisconsin SR 6 (scab resistant), Wisconsin SMR-9 and Wisconsin SMR-12 (scab and mosaic resistant).

EGGPLANT: Black Beauty.

Kale: Dwarf Green Curled.

KOHLRABI: White Vienna, Purple Vienna.

LETTUCE (LEAF): Black Seeded Simpson, Oakleaf, Salad Bowl.

LETTUCE (BUTTER-HEAD): Bibb (Limestone).

LETTUCE (CRISP-HEAD): Great Lakes, Cornell 456.

MUSKMELONS: Delicious*, Delicious 51, Harvest Queen, Iroquois (the latter three are fusarium resistant).

OKRA: Clemson Spineless.

ONIONS (SETS): White or Yellow.

ONIONS (SEED): Early Yellow Globe*, Brigham Yellow Globe, Brown Beauty (Hybrid).

ONIONS (TRANSPLANTS): Sweet Spanish, Bermuda for late summer and early fall use only.

PARSLEY: Moss Curled.

PARSLEY: Hollow Crown.

PEAS (DWARF): American Wonder, Freezonian, Pride, Little Marvel, Wando.

PEAS (TALL): Alderman.

PEPPERS (MILD): Wisconsin Lakes*, Pennwonder, Vinedale* (medium sized, pointed fruit).

POTATOES (EARLY): Red Warba, Irish Cobbler.

To be Continued
Buy Your Strawberry And

FOR SALE

Strawberry Plants. Robinson and Catskill. Certified and State Inspected. 100 @ \$2.25; 1000 @ \$18.00. Postpaid.

Cash with order.

Milligan Orchards, Bayfield, Wisconsin.

FOR SALE

Several 1000 strawberry plants; Dunlap, Robinson and Arrowhead. Want to sell wholesale.

John Griffin, Route 1, Hales Corners, Wisconsin.

CERTIFIED STRAWBERRY PLANTS

All plants grown under irrigation. Beaver; Wis. No. 537; Dunlap; Premier; Robinson; Thomas: 100 @ \$2.50; 500 @ \$10.00; 1000 @ \$15.00.

Sparkle, virus-free stock, highest in production: 100 @ \$3.00; 500 @ \$12.00; 1000 @ \$18.00.

All plants trimmed and postpaid.

Eric Franke, Route 5, Sturgeon Bay, Wisconsin.

CERTIFIED STRAWBERRY PLANTS

We have the following varieties of plants for sale. Plants listed (****) were grown from stock purchased in Maryland and originally indexed as virus free. All varieties are dusted at regular periods to eliminate aphids, which carry the virus. Plants postpaid.

Catskill ****; Sparkle ****; Empire ****; Thomas; Beaver; 50 @ \$2.00; 100 @ \$3.25; 300 @ \$7.25; 500 @ \$10.00; 1000 @ \$18.00.

Robinson ****; Premier-reg; Premier ****; Dunlap; Wis. No. 214; Wis. No. 261; 50 @ \$1.75; 100 @ \$3.00; 300 @ \$7.00; 500 @\$9.75; 1000 @ \$17.00.

Ambrosia; Nectarine; 50 @ \$1.50; 100 @ \$2.75; 300 @ \$6.75; 500 @ \$9.75; 1000 @ \$16.00.

Gem; Superfection everbearing: 50 @ \$2.75; 100 @ \$4.75; 300 @ \$10.50; 500 @ \$15.25; 1000 @ \$25.00.

Hy-Land Gardens, Bailey's Harbor, Wisconsin.

CERTIFIED STRAWBERRY PLANTS

Strong, Healthy Plants. Fresh dug each day. Wis. No. 2-14; Wis. No. 2-61 Premier; Catskill Wis. No. 537; Sen. Dunlap and Robinsin.

All orders filled promptly. Write for price list.

The Zimmerman Nursery, 1015-2nd Street Baraboo, Wisconsin.

STRAWBERRY PLANTS

Properly cleaned and packed. Freshly dug for each order. Not prepaid.

June bearing Premier: 100 @ \$2.85; 500 @ \$10.00; 1000 @ \$15.00.

Beaver and Robinson: 100 @ \$2.50; 500 @ \$8.50; 1000 @ \$14.00.

Dunlap: 100 @ \$2.50; 500 @ \$8.50; 1000 @ \$13.00.

Everbearing Superfection: 25 @ \$1.10; 50 @ \$2.00; 100 @ \$13.75; 500 @ \$13.50; 1000 @ \$20.00.

Joseph P. Klonecki, East Main St., Arcadia, Wisconsin.

CERTIFIED STRAWBERRY AND RASPBERRY PLANTS

Premier, Wis. No. 537, Catskill, Wis. No. 214, Wis. No. 261 and Empire. Some Catskill from virus free foundation stock. 50 @ \$1.75; 100 @ \$2.75; 250 @ \$5.75; 500 @ \$9.25; 1000 @ \$16.00.

Also Durham everbearing red raspberry plants.

All plants freshly dug.

Al Kruse Nursery, 615 Effinger Road. Baraboo, Wisconsin.

STRAWBERRY PLANTS

We have a large selection of dormant plants held in cold storage until you are ready to plant. Not much limit as to how late these can be successfully planted. Once you have tried these you will never go back to fresh-dug plants. No need to send out of state for "Virus-free" plants —we have them.

Write for free catalog. Fieldhouse Fruit Farm, Dodgeville, Wis. Home of Quality Since 1855.

Raspberry Plants Here

STRAWBERRY PLANTS

Now is the time to book your plant needs for spring. Be safe, not sorry. Pederson's plants can't be beat. Ask the grower who has bought from us. The old original Beaver, an outstanding producer, Robinson, Premier, Catskill, Dunlap, Wis. No. 537, No. 214, No. 261. Write: H. H. Pederson Fruit & Plant Farm, Warren, Wisconsin.

STRAWBERRY PLANTS

Strawberry plants. Beaver: 100 @ \$2.75; 500 @ \$7.50; 1000 @ \$13.00. Premier & Bearmore: 100 @ \$2.00; 500 @ \$8.00; 1000 @ \$15.00. Gem Everbearing: 100 @ \$2.50; 500 @ \$10.00; 1000 @ \$18.00.

Irving H. Bowen, Alma Center.

PARISH PERFECT STRAWBERRY U. S. Patent 1422

Order your plants now for this strictly new and different strawberry. The Parish Perfect is a June bearing plant that produces all red, coreless berries on erect fruit stems, thus holding the berries off the ground. The berries are rich in flavor and excellent for freezing.

You will want to plant a bed of these quality producing plants.

Spring prices — \$10.00 per 100 plants, postpaid; \$5.50 per 50; \$3.25 per 25. Less than 25 plants 15c each.

Licensed Grower.

Suthers Moundview Nursery, Platteville, Wisconsin.

STRAWBERRY PLANTS /FOR 1956

Select your strawberry stock for this pring from the fine selection of plants we have to offer. Good cultural practices plus a regular dusting program have proluced for us the strongest, best rooted, vigorous planting stock of each variety. Write now for price list while stocks are completed. — HY-LAND GARDENS BAILEY'S HARBOR, WISCONSIN.

STRAWBERRY PLANTS FOR SALE

Beaver, Premier, Catskill, Robinson, Dunlap, Sharon, Wis. No. 537 Strawberry plants. Freshly dug, properly trimmed and packed. Prices: 25 @ \$1.00; 50 @ \$1.65; 100 @ \$2.85; 200 @ \$5.50; 500 @ \$10.00. No. 1 Raspberry Plants

12	Plants	25	Plants	100 Plants
Latham	\$1.35		\$2.65	\$11.00
Durham	1.50		3.00	12.00
Minn. No. 321	2.00		3.75	14.00
Logan Black	1.25		2.25	9.00
Cumberland	1.25		2.25	9.00
Sodus Purple	1.50		3.00	12.00
Martha Wash	ington			
Asparagus l	Roots		1.00	2.75

1 yr. No. 1 Canada Red Rhubarb; Valentine, 4 @ \$1.50, 2 @ \$1.85. Prepaid.

Fruit trees and plants of all kinds. Ornamental shrubs and evergreens.

HALL NURSERIES, ELMWOOD, WIS-CONSIN.

CERTIFIED STRAWBERRY PLANTS

Wide selection of vigorous strawberry plants adapted to Wisconsin. Catskill, Dunlap, Empire, Jumbo, Robinson, and Sparkle were grown from stock which was originally indexed as being virus free. Beaver, Wis. No. 537 and Sharon are from regular stock. Also Gem and Superfection everbearing plants. Write for price list.

KAMNETZ STRAWBERRY NURS-ERY, Cumberland, Wisconsin.

For every man who lives to be 85 there are seven women, but by that time, it's too late.

If it were not for the folks you know, you would be a total stranger; therefore, be friendly.

Don't wait to do kindness; tomorrow may be too late.



Wisconsin Nurserymen's Ass'n.

DIRECTORS: M. A. Haller, Oshkosh; Leland Jens, Wisconsin Rapids; Kenneth Altorfer, Madison; K. W. Greaves, Milwaukee; Robert Gieringer, Milwaukee; Ralph Petranek, Milwaukee.

WHAT THE NEW NURSERY LICENSE LAW MEANS TO THE RETAIL BUYER By Ken Greaves, Milwaukee

Almost a year ago the state legislature passed a new law which was sponsored by the Wisconsin Nurserymen's Association and which has some important factors as it effects the buying public. Many of these new elements will be felt for the first time during the coming planting season, and because most people are blissfully unaware of legislation which only indirectly affects them, perhaps a few words about the law and its ramifications would be most appropriate just ahead of the new 1956 spring gardening time.

All persons selling nursery stock in any capacity whatsoever must now be licensed by the state. The buyer would do well to make sure that anyone operating a nursery or garden shop selling nursery stock has a license and has it properly displayed. Such requirements on the part of the public will prevent unscrupulous and fly-by-night operators from establishing themselves temporarily for the express purpose of bilking the public. There is no substitute for such a license. It must be displayed at each and every place of business. This law has by no means been drafted to discourage persons continuing or going into the nursery sales business, but it has taken into consideration the fact that a certain knowledge by personnel and very definite facilities at the place of business are necessary to insure the public receiving live plant material.

Protects Buying Public

Because in the past the un-informed buyer has often been at the mercy of an un-informed dealer or nurseryman, steps have been taken in the new law OFFICERS Pres. _____John Gartman Fond du Lac Vice Pres. _____Vincent Frante

Kenosha Sec. Treas. ____Thomas S. Pinne Sturgeon Bay Editor _____Gordon Suther Platteville

to protect that unsuspecting buyer from the ignorance or carelessness of an unprofessional operator. To accomplish this each item of nursery stock sold at retail by a nurseryman, garden shop operator, landscape gardener, or any other person selling such stock at profit, will bear a tag or label which not only gives the common or botanical name of such stock but also must carry the name and license number of the firm or person selling such stock. It is further necessary that each nurseryman or dealer selling nursery stock in Wisconsin inform his customer of the lack of hardiness of any plant material sold by him. Such information must be indicated on the tag or label attached to the plant which is not generally considered winter hardy in his area.

False Advertising

Because the nursery profession as such is an honorable one and one that requires considerable knowledge and ability, the new law makes it a misdemeanor for any one to represent himself to be a nurseryman when such is not the case. It also becomes unlawful to misrepresent to the public in any way—by advertising or other means—the quality, size or hardiness of any nursery stock sold by him.

In the strengthening of the new nursery license law the Wisconsin nurseryman has attempted to clean up his own house and to protect a rather gullible public from some rather unscrupulous practices that have occurred in the past.

Nursery Inspection

Inspection of nursery stock before its sale by the Department of Entomology to assure its being apparently free from injurious insect pests and plant diseases has in no way been changed. All nursery stock sold in Wisconsin must still be so inspected. Nurserymen or garden shop operators must so certify on all sales or deliveries of stock within the state.

The new law can only be effective if all persons concerned aid in its enforcement. Operators and public alike are urged to insist on conformity to the new law.

HOW TO PLANT CONTAINER GROWN TREES AND SHRUBS

When container-grown plants are received from the nursery, if the tin containers are not already split open for easy planting, take a chisel or snips and slit open two sides of the can. Next grasp the container at the rim and spread it open, being careful not to disturb the soil about the roots of the plant. The third step consists of grasping the soil about the roots firmly with both hands, lifting it gently and placing it in the hole you already have dug to receive it. Never grasp the plant by the stem, advises the American Association of Nurserymen.

Plants in pots may be removed easily by spreading your fingers against the surface soil, the stem of the plant being between your two middle fingers, and then turning the pot upside down and tapping the rim lightly against a firm edge, so the earth will slide out intact. For best results the soil should be moist. Transplant to the permanent location without disturbing the soil about the roots.

For plants in gallon and six inch pots, dig a hole 15x15 inches; in 5 gallon or 9 inch pots, the hole should be about 24x24 inches. Depth of planting is at the same level as planted in the container, unless advised otherwise by your nurseryman.

Place soil evenly about the ball of earth, firm the soil down, and finally, soak the roots thoroughly with water.

LARGE TREES VALUED AS TOURIST ASSETS

Large and colorful street trees are a valuable tourist asset to many cities and towns and any tendency to supplant them with small specimens will result in severe financial losses to the communities, warns the American Association of Nurserymen.

Tourist travel in many sections of the country is dependent upon the splendor of the flowers and foliage of many large trees. Without them in New England, New York and Pennsylvania, for example, tourist travel in the fall months when the foliage is brilliant would be sharply reduced. The same is true of the magnolias and the live oaks of the south, the sweet gums, and other large, colorful trees, as well as many staunch trees of the west and midwest that attract visitors at various seasons of the year.

Large trees impart a feeling of stability and permanence to a town, a variety of growth which attracts tourist dollars to local merchants, and colorful displays which are incomparable.

NEW DAMPING-OFF CONTROL

Several antibiotics have proved effective in preventing losses from dampingoff of seedlings when used at rate of 50-100 ppm, according to E. J. Fuhr, F. C. Strong, and C. E. Wildon of Michigan State University. Streptomycin and actidione used separately or as a mixture proved almost completely effective in control of damping-off under all conditions tried. Agrimycin was also very effective. — From Garden Facts, U.S.D.A. Extension Service Bulletin.

Hardie Irrigation Equipment

Represented by

ERIC FRANKE

Route 5 (County Trunk "U") Sturgeon Bay, Wisconsin Now offering complete repair service for Rainbird & Skinner Sprinkler heads.

Frequently have good used systems available

One tractor-drawn Holland Transplanter to plant one acre strawberries. Can't be told from new. Priced to sell fast.

From the Editor's Desk

OUR COVER PICTURE

The Wisconsin Cherry Pie Baking Champion, Miss Leona Slowinski of R. R. 3, Stevens Point, Wisconsin is shown on our cover this month. Miss Slowinski is a farm girl with considerable house keeping experience and made one of the best pies tasted at the contest in many years.

The National contest in Chicago was won by Annette Hunt, 17, of Indianapolis. It was the 24th annual contest staged by the National Red Cherry Institute.

Last year over 100,000 youngsters competed in the contest. The contestants alone practice baked over 750,000 pies. About 50,000 different articles and stories involving the contest and cherry pie recipes were published in the nations newspapers.

HOW TO KEEP LITTER OFF THE HIGHWAYS

Wisconsin, as well as many other states, has passed a law making it a misdemeanor to throw any rubbish or litter on the highway.

Anyone interested in maintaining the beauty of Wisconsin highways or the landscape can not help but be offended at the tremendous amount of rubbish, tin cans, bottles and garbage one sees along well-cared-for roadsides.

The Wisconsin Legislature has appropriated about \$200,000 annually for the improvement and beautification of our highways. Excellent work is being done.

Trash Cans Needed

"TRASH CANS PLACED EVERY FIVE MILES FOR YOUR CONVENI-ENCE.".

This sign greeted us as we drove along a highway in north central Florida during early January. And sure enough, about every five miles we did come to a small turnout and a trash can. Another sign, a short distance before we reached it, announced that the can was just ahead. Did we use it? Certainly, and I believe, if we had seen anyone throw anything onto the highway, we would have let them know we disapproved in some way.

Perhaps it isn't necessary to have a trash can every five miles. Perhaps 10 or 15 miles would be alright. It would only take a few more minutes to drive that distance. However, we do feel that since it is so easy to throw bottles, cans or paper out of a car window, especially when no inducement such as a trash can is provided, that here lies the solution to the problem.—H.J.R.

GYPSY MOTH—A NEW THREAT TO OUR FOREST

The gypsy moth, a leaf-eating insect, has broken through its New England barrier in such overwhelming force as to threaten the forest resources of 35 states. As a caterpillar the moth can completely strip the leaves from its favorite feeding subjects: oak, poplar, |willow. birch, apple and pear trees, blueberry and cranberry plants..

Until recently this pest has been confined behind a barrier in the New England and eastern New York areas. Now it has broken through and we must all be concerned.

Complete eradication is the answer, according to Mr. Richard P. White of the American Association of Nurserymen. The U.S. Department states that one pound of DDT per acre, when applied evenly as a mist spray from aircraft, provides complete elimination of infestation. Spraying must be done during the months of April and May. An appropriation of one and one-half million dollars is needed. in addition to regular funds to get satisfactory control.

The Congress should be asked to appropriate this amount and everyone concerned with saving our trees should support it.

NEW LAWN GRASSES NOT SUITABLE FOR WISCONSIN

You may have heard about the new magic lawn grasses that stay green and don't need cutting. There are two kinds: Meyer zoysia and Emerald zoysia.

However, they are not suitable for Wisconsin. They require a 90 degree daytime temperature and consistent humidity, according to Michigan State College. They belong in more southern states. The old reliables are best for us—Kentucky bluegrass and the fescues.

KROEKER'S HARDY PIE CHERRY

Developed by Henry Kroeker at Butterfield, Minnesota 25 years ago and tested by him along with all known sour cherry varieties, this cherry has been proved to be entirely hardy in the prairie section of western Minnesota.

The original tree is still producing and with other later planted trees of this variety has outlived all other known sour cherry varieties planted at the same time.

It has been tested in the LaCrescent orchard area of southern Minnesota the past 14 years. It has not missed a crop in that time. The variety is a semi-dwarf. The fruit is a bright red with a darker red when fully ripe.

The flesh is firm and meaty. It makes a delectable pie and preserves. The fruit ripens about July 1 to 4, in southeastern Minnesota. The trees bear early, sometimes the second year after planting and are self pollenizing.

A plant patent has been applied for and a few trees are now available at the Kroeker's Nursery at Butterfield, Minnesota and from other licensed growers. By H. H. Kroeker, Butterfield, Minn.



The time to start arranging to have pleasant memories for your old age is when you are young.

MIXED GLADIOLUS BULBS

Medium to jumbo size; all named varieties—not labeled. 25 @ \$1.00; 50 @ \$1.50; 100 @ \$2.50; plus postage. Ralph Blahnik, R. R. No. 4, Sturgeon Bay, Wisconsin.

TREES-SHRUBS

Raise Them From Seed

\$\$\$\$ for you in Christmas Trees, ornamentals, timber and others. Seeds normally produce seedlings in a few days or weeks. Transplant from garden or seed bed when conditions of soil and weather most favorable. For FREE Planting Guide Write to

Woodlot Seed Co., Norway 26, Michigan

HARDY CARPATHIAN WALNUT TREES

A limited supply of 1 year seedlings for spring delivery at \$2.00 per tree or 6 trees for \$10.00.

N. C. Jacobs & Son., Sturgeon Bay, Wisconsin.



March, 1956



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WISCONSIN GLADIOLUS SOCIETY

DIRECTORS: Fox River Valley Chapter: Carl Knoll and S. F. Darling, Appleton. Madison: Ed Lins Spring Green; Theo. Woods, Madison. Manitowoc: Joseph Rezek and Gil Thompson, Manitowoc Marathon County: R. H. Juers and Mark Splaine, Wausau. Sheboygan: Paul Beer, Port Washington Walter Axel, Sheboygan. Twin City: Jerry Merchart, Marinette: Arthur Kottke, Oconto. At Large Walter Bell, Appleton: Ralph Burdick, Edgerton: H. A. Kasten, Wausau: Al Schmidt, Two Rivers Leland Shaw, Milton and Gordon Shepeck, Green Bay.

PROGRESS REPORT Central International Show August 15-16 Madison, Wis.

The executive committee of the 7th annual Central International Gladiolus Show has held three meetings, all in John Flad's office in Madison. Six of the seven members were present at each of the first two meetings, and all seven attended the third. Also, by invitation of the committee, Dr. James Torrie has met with them three times and Ed Lins and David Puerner once each.

To date the following appointments have been made:

Show Manager-John Flad. Floor Manager-Ralph Burdick. Supervisor of Judges-Harold Durland. Supervisor of Clerks-Leland Snaw. Publicity Chairman-David Puerner. Schedule Chairman-James Torrie. Banquet and Entertainment Chairman -Ted Woods.

Trophies Chairman-S. F. Darling.

Hotel Reservations Chairman — Ted Wisniewski • Bulb Auction Committee Chairman—Ted Woods.

Some early publicity work has been done and far more is planned. Bulbs have been solicited for sale at the auctions in Appleton on March 11 and in Beloit on March 18, the proceeds to go directly to the executive committee. This bulb solicitation, incidentally, is planned as support on a national scale for the solicitation to be conducted within our membership by a state committee.

Preliminary work on the schedule has gone forward, and at the next meeting, March 4, James Torrie will present the schedule for consideration and probable approval. Early problems of the show manager will also be considered.

The committee consists of seven men: S. F. Darling and Al Schmidt representing the Wisconsin Society; John Flad and Ted Woods the Madison Society; Miles Armstrong and Leland Shaw the So. Wis. —No. Ill. Society; and Ralph Burdick. member at large elected by the other six. Leland Shaw is chairman of the committee and Miles Armstrong is secretarytreasurer.—By Leland Shaw, Milton, Wis.

A FEW THOUGHTS ABOUT GLADS By Dave Puerner

It was apparent during the 1955 blooming season that practically all of our flowers were short on bud count. Why should this be? It was always my thought that the new plant, including the flower spike, was present in the mother bulb and that the bud count was therefore alread; established. Discussing this with Paul Savelief, he said that articles regarding this have been published, both pro and con. I am inclined to believe that these things are established in the mother bulb. The year 1954 was a lush growing season and the plants were very self-sufficient as a result. The past summer was just opposite with the result that the plant had to work for a living and I believe that the 1956 blooming season will give us better flowers because of this. Make a note and do your own checking this summer.

The very first year that I grew gladiolus I planted seeds which I received from Dr. Bennett the previous year.

Continued on page 234

Wisconsin Horticulture

Grow Gladiolus From Bulblets

By S. F. Darling, Appleton

Soon glad fans far and wide will begin to plan their spring activities for the coming season. It would be presumptious on my part to pose as an expert in this field, but for other beginners we would like to pass on some of our experiences in growing gladiolus gained the past few years.

When To Plant

When to plant bulblets is the first question to be answered. Bulblets should be planted as early as it is possible to get them in the soil because it takes them a month to germinate under the best conditions and because their germination is promoted by the early spring rains we usually have here in Wisconsin. The past two years in our latitude (Central Wisconsin) our bulblets were planted the first week in April. By the first week in May they were beginning to push through the ground and by the first week in June they almost had reached their maximum degree of germination.

Our average germination last year, including all varieties, was 77%, the maximum being 100% for selected bulblets, the minimum being 40% for field run bulblets. In order to attain such a high degree of germination we found it necessary to peel each bulblet. Of course this method is impractical for large amounts but it is the most certain way to insure germination. To aid germination of bulblets on a large scale soaking in warm water to soften the hull followed by exposure to the hot sun is often recommended. If you desire to try the peeling method it will help to enlist the aid of the other members of the family. Never peel them more than a day before they are to be planted or they will shrivel up and die.

Planting

After the bulblets are prepared they should be planted in the well worked garden soil just like peas in rows, the soil should be tamped, and they should be kept moist. When the little shoots are three or four inches high we have always side dressed them with 5-10-5 garden fertilizer to get them off to a good start. In normal seasons (not like the last one) such plantings will produce many bulblet spikes in late August and September and a crop of bulbs and bulblets at harvest time in October. Our records for the summer of 1954 show that of 2200 bulbs harvested from bulblets that year, 400 were large, 400 were medium, and the balance were small bulbs.

Planting bulblets as a part of gladiolus culture has a two-fold purpose; it enables one to propagate expensive varieties with a small investment and it enables one to produce young healthy bulbs to replace old worn out bulbs of desirable varieties one wants to keep. Some otherwise excellent varieties split and produce short spikes from bulbs more than a year or two old from bulblets.

Records Are Interesting

We are a firm believer in keeping records of bulb and bulblet plantings. Such records include time of planting, number planted, number germinating, counted at intervals of ten days from emergence of the first shoot, and finally the number and size of bulbs harvested. Such records are a source of considerable interest and pleasure in the winter months after the past season is just a memory. They are also an invaluable aid in planning the next season's activities. It is interesting to examine the records to see which bulblets germinate first, which start out slow but eventually reach a higher degree of germination than others that come up quickly, which produce bulblet spikes, and which varieties produce the largest and healthiest bulbs. Bulb and bulblet records such as these kept over a period of years enable one accurately to appraise the true worth of a variety from a performance point of view.

Here are the data on a few varieties that we have grown, picked at random

from our records. In 1954 we planted 10 bulblets of Harrisburger. That fall we harvested 7 large and 2 small bulbs, a yield of 90%. In addition we harvested 400 bulblets. This past season we planted 100 peeled bulblets and 100 unpeeled bulblets of this same variety. Since these bulblets were planted in April they got off to a good start in spite of the hot weather that came later. The peeled bulblets gave 75 bulbs last fall most of which were small because of the hot weather. The unpeeled bulblets yielded only 40 bulbs and these were small because the unpeeled bulblets took longer to germinate and were more adversely affected by the hot weather. We now have 9 large, 26 medium and 97 small bulbs of Harrisburger to plant this season as well as 34 pint of bulblets. A similar record with the variety Rosita over a period of two years starting with 20 bulblets in 1954 has now yielded 35 large, 45 medium, and 122 small bulbs as well as 1/2 pint of bulblets. 81 bulblets of the miniature Bo-Peep this past hot season yielded 29 large, 22 medium, and 24 small bulbs as well as 700 bulblets. The miniatures got a head start on the hot weather and therefore were not as adversely affected.

One final word about bulblet culture. They must be cultivated well and watered in periods of drought to get the best results. They should be sprayed or dusted regularly with DDT or Chlordane just like the bulb plantings to avoid thrip.

MARATHON COUNTY CHAPTER NEWS

Plans for holding the 1956 show of the Marathon County Chapter of the Wisconsin Gladiolus Society in conjunction with the Wisconsin Valley Fair next August at Marathon Park, Wausau, were discussed at the chapters meeting held February 5th. The show is to be held in the judging Pavilion on the two closing days of the fair.

Mark Spaline, Dr. Juers, Mrs. Ed. Kramer, Gordon Melang, J. C. Plumb and Archie Spatz appointed on the general show committee.

The following were appointed on com-Continued on page 234

THE MILWAUKEE COUNTY AFRICAN VIOLET SOCIETY announces its

Fifth Annual Show and Tea

"SPRING FESTIVAL OF VIOLETS"

Sunday, April 15,—10 A.M. to 9 P.M. at Whitefish Bay Woman's Club—600 E. Henry Clay.

Ample parking space—Sale of plants and supplies.

Educational information—Admission 50 cents.

Benefit Underprivileged Children.

AFRICAN VIOLETS

African Violets — 10 leaves of good blooming newer varieties, including my own new outstanding hybrids, plus 1 leaf Pink Fringette and 1 leaf double pink—All for \$3.00. Postpaid.

Top grade, healthy stock. Write for list. I sell plants at the house.

Mrs. Frank Sperka, Route 2, Crivitz, Wisconsin.



Garden Club News

GARDEN CLUB OF WISCONSIN EXECUTIVE BOARD: Blackhawk Region: Mrs. Ed Streich, Sec.__Mrs. John Kiesling, Sr., Central Region: Mrs. C. H. Brimmer; Mrs. C. H. Braman, Waupaca. Milwaukee egion: Mrs. Ray Luckow, Milwaukee ; Mrs. H. B. Buerosse. Winnebagoland Region: Mrs. Carl Peik, Chilton: Mrs. A. J. Wiessender. Parlimentarian.__Mrs. Roy H. Sewell, 7341 N. 76th St., Milwaukee. Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

PRESIDENTS MESSAGE

The favorite of all flower garden designs, for the average amateur gardener, seems to be the border, especially where space is limited. Whether this border be long and narrow; curved or irregular; at the back of the house; framing a side lawn or flanking a driveway, it should be designed with careful consideration, just as the shape and size of a flower container must bear a strict relationship to the flowers used.

In planning a border that frames a lawn it is best to choose first the tall growing flowers to be grouped along the back. Both perennials and annuals are effective, the annuals in our Wisconsin climate taking over in so many instances, when the perennials are cut back after their first bloom

For color combination try the earlier yellow hemerocallis with blue delphinium, or, if you need white in your design, try white cleome with madonna or regal lilies and the tall digitalis. As for yellow and gold, what can be more dependable and just the thing for that tall effect we want at the back of the border than those wonderful new tall marigolds and late blooming hemerocallis, and for accent, the varieties of deep or light yellow gladiolus.

It is so much easier to plan a harmony of color in the border if the tall flowers at the back are chosen with the overall color scheme in mind. There are so many varieties of flowers to choose from, creating a border design should be fun. - Arlisle Wiesender.

FOR YOUR GARDEN CLUB CALENDAR

September 11-12, 1956. Annual Convention Garden Club of Wisconsin at the Baptist Colony, Green Lake.

OFFICERS

8......Mrs. A. J. Wiesender, 217 Park St., Berlin Pres.....Mrs. C .H. Brimmer Wiesender, Pres Vice Pres.___ Wausau

SPRING MEETING **CENTRAL REGION** GARDEN CLUB OF WISCONSIN Clintonville, Wednesday, April 4 First Methodist Church, Corner 13th and N. Clinton St.

9:30-10.00 a.m. Registration.

10:00 a.m. Colored movie, Springtime In Holland, by Bulb Growers of Holland.

10:30 a.m. Call to order by Mrs. C. H. Brimmer, Wausau, Regional president. Introduction of guests. Announcements.

New Plants and Plans for Your 1956 Gardens; with colored slides. Hints for spring garden work, by H. J. Rahmlow, Madison.

11.00 a.m. Arrangement of plants for your garden. Led by Mrs. A. J. Wiesender, Berlin, president, Garden Club of Wisconsin.

11:45 a.m. How To Make Beautiful Roses Out of Grapefruit Peel, by Mrs. Peter Portman, Wausau.

12:15 p.m. Luncheon. Served by church ladies. Please send reservations to Mrs. Marlin Steinbach, Route 1, Box 84, Clintonville.

1:30 p.m. Business meeting. Reports of committees.

2:00 p.m. Geometric Design for Flower Arrangement, by Mrs. R. H. Sewell, Milwaukee.

Demonstration with pattern as backgrounds.

SEND IN YOUR YEAR BOOKS

The committee in charge of the Garden Club Yearbook contest requests that your yearbooks be sent in before June 1, 1956, in order that there will be plenty of time for judging before the convention in September.

Send your yearbooks to Mrs. Edgar H. Bergmann, 17840 W. Capitol Dr., Brookfield, Wisconsin.

Spring Pointers For Foundation Planting

By Harold Poyer, Ft. Atkinson

One of the most common errors in foundation planting, is the planting of the shrub or evergreen too close to the foundation of the building.

The plant is unable to develop properly. Shrubbery will tend to lean out from the building and evergreens will grow against the building and will die out on the building side.

Know the nature of the material you plan to use. Know the spread and the height of the shrub or evergreen, and plant it one half that distance from the foundation.

If you plant material that will grow too tall, you will soon find it has covered the windows and blotted out the interesting line of the building.

Also, in planting tall material on either side of the entrance of a ranch—type home you will break the nice horizontal line of the building dividing the home into two parts.

Plant Tall Materials on Outside Corners

Much better to plant the tall material on the outside corners of the home, keeping the good horizontal line.

Plant material should act as a frame for your building as a picture frame to a painting.

Many times there is too much nursery stock planted in a foundation planting. This tends to make the building appear to be resting on the planting.

It is better to leave "breaks" in the planting to expose the ground and some of the foundation to show the stability of the building. The shrubbery will tie the building to the ground making a very nice appearance.

It is necessary to know the plant material which will do best in different exposures.

Plants that will grow well in the shade, do best on the north side of the building,



and those that require sun, the south. east, or west.

In choosing plant material for the foundation planting, choose shrubs that have good form and texture during the entire summer. This is better than using shrubs that flower beautifully for a short time, and then do not have strong form and texture to maintain the value of the planting.

It is wise to plant shrubs or evergreens in a foundation planting that are slow in reaching their full growth. This gives a longer lasting planting, and is interesting to see the development. Material which reaches its full growth in a hurry soon has to be replaced.

SPRING MEETING BLACKHAWK REGION GARDEN CLUB OF WISCONSIN

Jefferson, Monday, Apirl 16, Elementary School

6:30 p.m. Potluck Luncheon. Bring a dish.

7:30 p.m. Skit: "The Road To Reno Is Strewn With Gladiolus." Musical numbers.

Travelogue of Flowers, with colored slides, by H. J. Rahmlow, Madison. Short report from members of each club on "Flowers I Plan To Grow This Year and Why".

Try this Just Before the Daffodils Come

By Mrs. Garrison Lincoln, Madison

After the Christmas decorations have been taken down, and before the west coast daffodils find their way into the supermarket, there is a period of two months when the browns of autumn, and the orange tones of bittersweet do not seem appropriate. Seed catalogues have arrived, and we are looking forward to gardens and—growing things. House decorations should be lighter and gayer to correspond with this new mood.

The illustration shows a composition in tones of yellow and green that is as gay and springlike as any vase of daffodils. It will remain in good condition till warm weather, so the \$1.54 cost is moderate.

Material used

Two stalks of yellow dyed sea oats (10c each) from the florist were broken into 6 smaller units. Two sprays of yellow California acacia (supermarket price, 2 for 29c) made two flowering sprays and a cluster of blue green leaves. Fourteen yellow dyed skeletonized leaves (5c each) were made into four multiple-leaf clusters. Seven heads of golden yarrow at 5c each form the focal point. A small block of styrofoam, some No. 20 florist wire, green florist tape, a yellow container and a greenish block of glass complete the unit.

Skeletonized leaves are very delicate in tone when used singly, so they were clustered in groups of three or four to intensify the color. Hold the leaves so that the tips are at various levels, fold into fine pleats at the base, lay a four inch piece of No. 20 wire into the pleat, and tape leaves and wire together with florist's parafilm tape. The spray of yellov leaves is then inserted into the styrofoam as a unit, using the wire as a stem.



Mechanical Details

Perfect mechanical control is vital in a good arrangement. A rectangle of styrofoam wide enough to fill the mouth of the container, and extend an inch above the top was cut. It is important to extend the styrofoam block ABOVE the top of the container in order that the lowest material can be inserted with the stems sloping UPWARD, thus enabling the heads of yarrow to cover the mouth of the container and then sweep down toward the lowest cluster of yellow leaves. Sharpen the ends of stems to a point so that they will enter the styrofoam more easily.

The yarrow was several years old, and the acacia is very delicate and brittle when dried, so the arrangement was made, and then sprayed with a thin coat of clear lacquer from a pressbutton spray can. The lacquer changes the clear yellow of the acacia to a golden tone, but it keeps the material from shedding. Cover the container with newspaper to keep it clear while spraying, and insert the clusters of leaves into the arrangement after the lacquer job is dry.

All colored flowers must be dried in complete darkness to retain their color, so the two stems of acacia were bound together with a short wire, and hung head down over a coat hanger in a dark closet for a week, before being arranged.

Plants For Shady Gardens

By Mrs. Robert Holly, Waupaca

When I am asked what plants to use in the shade, very naturally I think of my wild flowers. I am going to mention just two or three that are less known but will do equally well in a wild garden or in a shady spot in your border.

The **baneberries**, both red and white; flowers are inconspicuous but the berries, in late summer are a joy both to the flower arrangers and our bird friends. If you wish to add a third and carry out a red, white and blue theme, plant the **blue cohosh**—flowers are small and yellow, but the berries are a lovely blue. Then for a change, plant cimicifuga racemosa. The flowers are the point of attraction and resemble a host of snowflakes caught and held on a tall spike above deeply cut dark green leaves. This plant grows fairly tall. All are well worth growing.

My second choice would be the Hosta or funkia. Some call them just plain "plantain lilies". The more shade you give these the nicer the leaves. They are used by our flower arrangers because they seem to fit in with anything. One person told me that she cuts off the buds of flowers, but I like those charming bell shaped blooms of pale orchid to deep purple; also two pure white ones. They bloom from early summer to late fall depending on the variety. Leaves vary in size, from a few inches in length to over a foot in width, and you may have them in varying shade of green, also with creamy or white edges and splashes, or with a deeper green margin. Two of them boast pronounced fragrance.

Very few annuals do well in the shade. You might try **Impatiens** which comes in colors of pink, white or salmon. One has variegated leaves.

Then there are the **tuberous rooted begonias.** Coleus has been suggested but I prefer to grow that in the sun. I think the colors are more brilliant.

Shrubs

I would like to recommend two shrubs, the High-bush cranberry, with its beautiful creamy white flowers in spring and clusters of red berries in the fall. In case you don't care to save these for the birds, they make delicious jelly. And lastly, grow the Tartarian honeysuckle, or even one of our natives. These will give you plenty of spring bloom and either red or orange colored berries in the late summer, food for the birds. Robins seem to love these berries above all others.

Of course there are many more and I hope they will give added joy and beauty to your shady spots.

A GARDEN PROJECT FOR 1956 Grow Fire Dance; Marigold Rusty Red And Celosia Toreador

A suggestion which I am passing on to you is this—that we members of the Garden Clubs of Wisconsin, made a special project of growing the following three plants this coming season—Petunia, Fire Dance — Marigold, Rusty Red — and Celosia, Toreador. Then at our annual meeting have a report, perhaps from each Region, as to their behavior and also have members bring arrangements or bouquets of the three either alone or in combination with something else. If you can't grow all three, won't you try at least one.

The object is to find how suitable these recent All American award winners are and if we can recommend them to the gardeners of Wisconsin. Sounds good! How about it fellow members?—By M^{-s.} Robert Holly, Waupaca.

Rugged individualism is that quality displayed by a hog when he makes ¹p his mind he won't go through the gate – DePere Journal-Democrat.

Ideas For March

MOVIE FILMS FOR YOUR CLUB MEETINGS

How to Grow Beautiful Roses—This is a 16mm film in sound and color with an approximate running time of 22 minutes. The theme is roses, planting, pruning, spraying, and other horticultural information.

How to Grow Beautiful Fuchsias and Begonias—This is a 16mm film in sound and color with an approximate running time of 22 minutes. The theme is planting and care of fuchsias and tuberous begonias.

Orchids of Hawaii — This is a 16mm film in sound and color with an approximate running time of 23 minutes. Filmed in beautiful Hawaii, there are scenes of orchids growing and preparation of orchids beds. Also includes scenes of other tropical flowers.

European Gardens — This is a 16mm film in sound and color with an approximate running time of 20 minutes. All scenes were shot in Europe. They include the Versailles Gardens, The Vatican Gardens, tulips growing in Holland, etc.

African Violets & Gloxinias — This is a 16mm film in sound and color, the theme being the care and growing of two of the most popular house plants. A must for any organization.

Keep America Growing With Better Fruit—This is a 16mm film in sound and color with approximate running time of 30 minutes. A film tailored for people interested in growing fruit on a commercial basis.

All of the above films are available from the California Spray-Chemical Corp. Write to Victor G. Ruh, Branch Manager, 625 Eastern Ave., Janesville, Wisconsin. The company prefers to have the film shown by an Ortho representative and requires an attendance of from 40 to 50 people for the showing.

YOUR GARDEN TOO SHADY? TURN TO TUBEROUS BEGONIA By Mrs. Ray Luckow, Milwaukee

The tuberous rooted begonia may well be considered the latest boon to the gardener who finds himself in the position of having too little sunshine to produce the variety of plants and profusion of color that may be expected under normal sunlight conditions. This plant flourishes in 75 degrees shade. Though the tuberous begonia is not a difficult plant to raise, there are a few simple rules, which, if carefully followed, produce results far above all desired expectations.

Soil Preparation

Perhaps the first and most important of these is the preparation of the soil. For those who have just bought or are intending to buy new bulbs it is advisable to keep the tubers in paper bags, filled with peat moss at 50 to 60° F. until planting time, which is about March 15th to April 15th. Those who have bulbs stored in torpedo sand from the previous year will find that they have started to sprout slightly. I have special flats made of galvanized sheeting 151/2 by 151/2 by 2 inches high into which 25-three inch florist plant band fit very well and makes an excellent starting bed. The bands should be filled ¾ full with a mixture of one part good garden loam. one part torpedo sand and two parts peat moss. Place each tuber in the prepared mixture so that the hollow side of the bulb faces upward and is level with the surface of the soil. Keep dark and damp but not wet, in a warm place about 65 to 70 degrees.

Never allow water to stand in the hollow part of the bulb for fear of rotting. Cover with paper box about two weeks to retain moisture. When the tuber has developed a top growth of $\frac{1}{2}$ inch it is time to remove paper and give light. Plant out of doors only when all danger of frost is past.

Make frequent use of "please" and "thanks" and you'll end up with dough in the banks.-Monfort Mail.

A friend is one before whom I may be sincere. Before him, I many think out loud.—Pure Milk Products Press.

Garden Club Reports

You Will Find Program Ideas Here

A MESSAGE FROM OUR STATE MEMBERSHIP CHAIRMAN

Members of the Garden Club of Wisconsin who have friends interested in joining our group may invite them to do so, as Members-At-Large. The annual dues are \$1.50 per year. Of this amount \$1.00 is sent to the Wisconsin State Horticultural Society for membership and the magazine; 50c for membership in the Garden Club of Wisconsin.

Send dues to the treasurer of the Garden Club of Wisconsin, Mrs. John Kiesling, Sr., Route 1, Ft. Atkinson, before April 1, 1956.

Any information about garden clubs interested in affiliating with us would be appreciated by the committee.

Let's make it a bigger and better Garden Club of Wisconsin.

> Mrs. Ray Luckow, Chairman Mrs. John C. Miller, Co-chairman

WEST ALLIS CLUB CELEBRATES 40TH ANNIVERSARY

The West Allis Garden Club celebrated their 40th Anniversary with a dinner at the Baptist Church at West Allis, with Mrs. Victor Schmidt, president, presiding.

Mrs. H. B. Buerosse, president of the Region, gave the awards, which were presented to Miss Martha Krienitz, Mrs. Clara Harrington, Mrs. J. Overholt, Mrs. Robert Stoll and Mrs. W. Parkin, for outstanding work in our garden club.

The club's history, beginning in 1916 to the present date, was given by Miss Esther Mueller, historian.

Mr. Voight, Supt. of Whitnall Park gave a most interesting talk and showed slides on Rose culture.

Attractive table decorations carried out the theme of our celebration.—By Mrs. Otto Rupnow, Secretary.

HILLCREST (WEST ALLIS) GARDEN CLUB NEWS

Projects planned by the Hillcrest Garden Club for 1956 are as follows: For each month the hostess of the month has a suitable table arrangement such as patriotic table arrangements June—conservation table October, dried materials, etc.

We have some very interesting topics planned as follows: Brighten your windows; plant for the birds; conservation; new trends in foundation planting; gardening for health; the perennial border.

We will have a woodland tour at Troy Center in May. Movies of Yellowstone National Park in November. An entire program on conservation, with Mrs. J. Dooley as speaker in June. A Christmas party with a big basket of Christmas goodies for a needy family. We will have book reviews of the newest on Dirt Gardening.

Last year articles on conservation were discussed. This is an excellent way to open group discussions in which all offer bits of material gleaned here and there from reading.—By Mrs. Henry Krueger, Secretary.

PARK RIDGE GARDEN CLUB (STEVENS POINT) NEWS

The Park Ridge Garden Club was organized 15 years ago. We meet in homes of members so our membership is limited to 20. At present our quota is filled and we have a waiting list.

Last year we tried to emphasize floral arrangements. Mrs. Joyce Carroll, well known for taking many blue ribbons, talked to us about floral arrangements and gave a series of lessons. We also had programs by members on care and hadling of cut flowers and the arrangement and use of dry materials.

As our civic project, we acted as host ss to the Central District meeting and the club filled the candy bags which wore distributed by Santa Claus to all the children in our village.

For our field trip we went to Waupaca, where Mrs. Braman and Mrs. Holly escorted us through their beautiful gardens and other points of natures beauty in their city.

In 1956 we plan to emphasize "Our Own Gardens". At our January meeting, our park superintendent talked to us on the care of lawns and trees. In April we're looking forward to having H. J. Rahmlow, speak to the group. We will also make a tour through the greenhouse of one of our members.—By Mrs. T. R. Stoner, Sec.

MILWAUKEE COUNTY HORTICULTURAL SOCIETY INVITES GARDENERS TO THEIR PROGRAMS

All gardeners are invited to attend the meetings of the Milwaukee County Horticultural Society. They are held in the Finney Neighborhood Library, Sherman Blvd. & North Ave., beginning at 7:30 p.m. The following are some of the programs:

MARCH 27—Miss Edith Hofstetter of the Boston Store, Milwaukee on "Down To Earth Flower Arranging". Also gardening movies.

APRIL 25—Mri. Foster Taylor (Taylor Grass) on "Lawn Care". Also movies on lawn care.

MAY 22-Mr. August Peters, Wauwatosa on "Roses", illustrated with slides and movies.

JUNE 26—Mr. Albert Myers, Milwaukee on "Azaleas and Camellias We Can Grow", illustrated with slides.

SEPTEMBER 25—Mr. H. J. Rahmlow, Madison on "A Garden Clinic—Our Gardens At This Time of Year". Colored slides of new varieties for our gardens and flower arrangements.

OCTOBER 23—Annual Chrysanthemum Show. Movies on Mums.

NOVEMBER 27 — Annual business meeting and election, with movies.

Ir December there will be a Christmas party.—By Walter P. Knuth, Pres.

NEWS FROM THE GREEN GARDENERS WEST ALLIS

These are a few of the outstanding programs the Green Gardeners of West Allis enjoyed during the past year: In February Mrs. J. W. Dooley told us how to use accessories and backgrounds in flower arranging. She explained the difference between an arrangement, a composition, a screen, a niche, and a landscape arrangement.

Our husbands joined us in March to hear an excellent talk by Mr. Staples on the care of lawns. The club spring flower show in April featured arrangements for special occasions through a lifetime, from the new baby to Grandma's 90th birthday. In November we enjoyed colored slides of several West Allis and State Flower Shows. Our January meeting dealt with attracting birds to our gardens.

This year we are looking forward to another stimulating program. Some of the highlights are: A talk by Mr. Stiefvater on "Pest Control in the Home Garden", in March; a corsage workshop in June; a tour of the Whitnall Park Botanical Gardens in July and a flower show in September.

In April, Mrs. George Strong will speak on "Knowing and Growing Wild Flowers" and in May Miss Helen Porter's subject will be "What Is A Weed"? In October we plan a program on the different aspects of forest conservation: soil, water, trees, and wild life.

At each meeting a different member will bring a flower arrangement to be discussed as a review of our earlier course in the principles of design in flower arrangement.

By Mrs. George Strong, Sec.



WAUPACA GARDEN CLUB NEWS

Some of the outstanding programs in 1955:

In February we enjoyed hearing Professor Ziegler, Landscape Specialist, University of Wisconsin, speak on "Plantings On Our Home Grounds", illustrating the right and wrong type plantings to use.

In September our club enjoyed a joint meeting with our Monday Night Club and heard Miss Gretchen Colnik, Interior Decorator of Milwaukee speak to us on "Count Your Blessings, Decoratively".

For 1956 we have had a lesson by two of our club members, Mrs. Sam Salan and Mrs. Ted Christoph on "My Interpretation of Japanese Art". They made arrangements with materials sent direct from Japan by Mrs. Christoph's son.

We also had a fine lesson on "Drug Plants" by Mrs. A. M. Christofferson.

We plan to have a talk on "Birds" in April by Mrs. Glen Fisher of Oshkosh.

We have a very large project for the coming 2 and 3 years: landscaping and planting the grounds of our new Waupaca Community Memorial Hospital and we expect to have Professor Ziegler come in April to help get us started out right.— By Mrs. Tom A. Browne, Cor. Sec.

40TH BIRTHDAY CELEBRATION BY THE WEST ALLIS GARDEN CLUB

Our garden club celebrated its 40th Anniversary on February 14, 1956. There was an anniversary luncheon with members and former members present.

A tour of the Haegar Pottery works was enjoyed by our members the past year. A trip to Portage and Madison is planned this year.

We have had several excellent speakers. Among them Mr. Voight of Whitnall Park, who gave a very worthwhile talk. Our president, Mrs. Victor Schmitt gave an outstanding demonstration of flower arrangement and other creative work.

The garden club is endeavoring to foster interest in club work by giving awards to those members who actively take part in such projects as conservation, flower shows, and horticulture.

Our roll call is made very interesting by our members giving some worthwhile garden news. We always have a flever show in September.

Our members wish to thank Wiscossin Horticulture for giving us so much ducation and entertaining material for our use.—By Mrs. O. Rupnow, Secretary

WAUWATOSA GARDEN CLUB NEWS

Our main program of 1955 was the celebration dinner and flower show of May 24th when the Silver Anniversary of the Wauwatosa Garden Club was held. The flower show had a May-pole decorated with vines, flowers and long streamers which led the eye to huge bouquets, arrangements and flowers potted plants in a lovely green setting of ferns. A most enjoyable dinner and program consisting partly of reminiscences of early days of the clubs beginning-partly of honoring members who had worked faithfully through the years, and a forward look at plans and plants for the future.

Another program, always looked forward to each year, is the annual Christmas program—1955 Christmas time was no exception. Added to the fun of planning, this time, members gathered in homes and made all of the decorations for the tree—birds made of glittering wings, heads and tails added to pine cones fluttered and sparkled. Each guest at the party was decorated with boutonnieres made by members and took home garden-aid gifts which all exchanged.

Programs of 1955 also included talks and slides on gladiolus, roses, house plants, shrubs and various other gardening topics. Some of the speakers were Mr. Kenneth Greaves, landscape gardener in Milwaukee; Mr. John Voight, Supt. of Whitnall Park; Mr. August Peter our own "Rose Authority"; Mr. George Melk, a gladiolus specialist; Mr. Lee Krainz, florist; Mrs. Carl Hofstetter, who spoke on Holiday Ideas and Mr. H. J. Rahmlow, Horticultural Society secretary, with experiences in all-round gardening.

Mrs. Edward G. Martag had a prizewinning movie to show at our December meeting entitled "The Changing S ne".

Civic projects: The Wauwatosa G aden Club is continuing to support the panting around the historic "Damon He ise". Anyone coming to Milwaukee for a visit might like to tour Wauwatosa's Antiquarian Museum at 2117 Wauwatosa Ave. This project is in conjuction with the aid of the Ravenswood and Blue Mound Garden Clubs of this community.

Some of our plans for the coming year include February's Men's Night. A surprise. Talks on perennials and herbs in April. The annual picnic in June. A talk on mums in the fall and on lighting the house and garden for the holidays. A tour to the Chicago Flower Show is planned and the annual tour of members gardens will be held when bloom is at its peak. — Mrs. N. J. Stratton, Publicity Chairman.

NEWS FROM THE HOME GARDENERS-WEST ALLIS

Our outstanding meeting of 1955 was "Let's Dramatize Our Flower Arrangements". Mrs. Roy Sewell gave an interesting talk on how to arrange flowers in niches. There was a flower show with member participation.

The secret of preserving flowers and foliage was the subject of another meeting. The source of information was from the "Complete Book of Dried Arrangements" by Mrs. Ray Miller Underwood.

We will have a flower show in May. It will be a progressive show where all members participate in table settings and arrangements, going to the homes of four members. Title: "Gay Time For May Time.

In October we will have another flower show with dry materials and driftwood. The title is "Dry Drama".

At each of our meetings two members bring artistic arrangements that are discussed.

Outstanding trips: Trip to Horicon March to study wildlife. Trip to Terry And the State Park and Wade House. Visit to our Museum with study of everyday marvels. Speaker, the Curator of Bota y.—By Mrs. Jack Holland, Sec.

To find a career to which you are adap ed and then to work hard at it, is about as near success and happiness as the world provides.—Spooner Advocate.

UNUSUAL FLOWERS WE SHOULD GROW Dwarf Morning Glory

The correct name for Dwarf Morningglory is Convolvulus. A garden writer recently stated. "If I could only have one flower in my garden it would be Convolvulus, they are such charming garden subjects".

The flowers of this Dwarf Morningglory are open all day long in good weather so they are not strictly "Morning-glories". Each flower is usually of three colors: the main part is either blue, pink or purple; the center is yellow, and there is a band of white between the center and the expanded part. The plants grow only about one foot tall.

The Dwarf Morning-glory is excellent as a low edging plant or for hanging baskets. It cannot be used in the same way as Sweet Alyssum because it spreads over an area of several feet. It blooms constantly and produces an excellent effect at the base of taller plants.

Sow the seed in the border as soon as weather permits—in May, and thin out the seedlings so they will stand a foot apart. They can also be grown in bands indoors, but difficult to transplant from flats. They like the full sunlight.

Many of us miss the opportunities of life because we are broadcasting when we should be tuning in. — Dorchester Times.



Marc., 1956

THOUGHTS ABOUT GLADIOLUS Continued from page 222

planted them in a flat in the back yard and they grew just like grass -perfect germination. In 1954 I went back to this practice and had six flats in my back yard. Planted them late, had excellent germination. They were planted in sterilized soil which I received from one of our greenhouses, but still had some disease spots in the flats. Where did this disease come from? This suggests that we will have disease problems no matter where we grow or how we treat our glads. At freezing time I put the flats in the garage and later removed them to the basement. Do you know when I dug those bulbs? Well it was during Christmas vacation. I just turned the flats up side down and there the bulbs were, right at the bottom of the flat. They weren't as large as those from field grown seeds, but it is a method which provides for late planting and late digging, after most of the other work is completed.

COMMENTS ON FLOWER BUD DEVELOPMENT

The cells, called initial primordia, from which the gladiolus spike develops are present in the parent corm. After the corms are planted and growth starts the cells of the initial primordia start dividing and differentiate into the various tissues such as leaves, stem and flower buds. The number of flower buds which will develop on a spike is largely determined at the third and fourth leaf stage.

Under favorable growing conditions more bud initials will be formed at the third and fourth leaf stage than when conditions are not favorable. Unfavorable growing conditions, such as drought and extreme hot weather, following the fourth leaf stage may result in a reduction in the number of buds. This occurs as a result of a sluffing off of the upper bud initials when the plant does not receive sufficient nutrients and moisture at a stage later than the fourth leaf stage.

A large corm usually develops more buds than a small corm because more nutrients are stored in a large corm. Also, a large corm on which only one bud is allowed to develop will usually preduce a spike with more buds per spike than if two buds develop. This is because all the food in the corm is available for the production of the single spike in place of being divided among two or more spikes.—By Jim H. Torrie, Madison.

MARATHON GLAD CHAPTER NEWS Continued from page 224

mittees for show schedules: Chairman, Gordon Melang; Paul Machmueller, Schofield; Ed Howland, Rothschild. Mrs. Ed. Kramer was named chairman of arrangement schedules with Mrs. Gordon Melang and Mrs. Robert Plath.

Dr. Juers will be supervisor of Judges. A sunshine committee was appointed: Chairman, Mrs. R. H. Juers; Mrs. Norma Spatz; Mrs. Mark Splaine, Mrs. Nina Drumm, Mrs. Ed Kramer. Publicity, Mrs. Ed. Kramer. Entertainment and program committee: Dr. R. H. Juers, Julius Birr, Archie Spatz and Mrs. Kramer.

Arrangements were made to hold a public bulb auction on March 18. Dr. Juers was appointed chairman, assisted by J. C. Plumb.

New Officers

The recently elected officers assumed their duties at this meeting. They are: Archie Spatz; vice-president, Mark Splaine; secretary, Mrs. Mark Splaine; treasurer, Mr. Charles W. Porath.

STRAWBERRY PEST CONTROL Continued from page 214

per 1 gal. water for berry spot and leaf spot.

Notes: All materials listed can be mixed together and applied at one time. If berry rot is a problem, spray or dust with captan after each picking.

A 7 to 10% captan dust, or a 5 to 76ferbam dust may be applied at the rate of 1 lb. of dust per 1000 sq. ft. of foliate area

Wealthy people miss one of life's greatest thrills—paying the last installment.— Woodville Leader.

Don't drive as if you owned the road Drive as if you owned the car.—Belden ville Reporter.



OFFICERS

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DISTRICT CHAIRMEN: Newton Boggs, Viroqua; Joseph Dieser, Superior; Emerson Grebel, Beaver Dam; Robert Knutson, Ladysmith; Len. Otto, Forest Junction; E. Schroeder, Marshfield; Don Williams, Beloit. Exec. Committee Members: Wm. Judd, Stoughton; C. Meyer, Appleton; Clarence Pfluger, DePere.

NOTES FOR SPRING MANAGEMENT

The best time to install package bees in Wisconsin is from 10 to 12 weeks before the main honey flow. However, since our flow in southern Wisconsin begins by June 5 to 10, it is impossible to get the bees early enough and so we must do the best we can. We should install them as early as possible in April. If we wait until May 1 it will be July before they reach their maximum strength and we will miss the June honey flow.

Method Of Installing Package Bees

Most commerical beekeepers have now adopted the spraying and direct release method, whereby the bees are sprayed and shaken into the hive. The queen is also sprayed and released with the bees. The combs are replaced, the entrance restricted in size and the bees given plenty of food.

For details on installation write the U.S. Bee Culture Laboratory, King Hall, University of Wisconsin, Madison 6, Wis., for Bulletin 702.

Size of Package

A 2 pound package of bees and good queen, given sufficient honey and pollen, will usually build up and reach a maximum population at about the same time as a larger package—with saving in cost. If you are a beginner and must install the bees on comb foundation, then a larger package will be best. In that case, sugar syrup or honey must be fed continuously to enable the bees to draw out the combs.

Reducing Size of Brood Chamber

We sometimes hear the recommenda-

tion that division boards be used to reduce the brood chamber to 4 or 5 combs. From all information we can find this has little if any value. The best way to fill the brood chamber in spring is to use combs of honey.

DISTRICT BEEKEEPERS MEETING WISCONSIN BEEKEEPERS ASSOCIATION

March 22 Thursday—Southeastern District meeting at Watertown, Plattdeutscher Hall, corner Second and Market St. Begins at 10:00 a.m. Pot luck luncheon served in hall. Bring a cake, dish or sandwiches.

March 24—Southern District meeting at Janesville, YMCA. Begins at 10:00 a.m. Lunch in cafeteria.

April 5—Southwestern District meeting at Sparta in the Court House. Meeting begins at 7:30 p.m.

April 11—Central District meeting at Marshfield Service Center at the University Experiment Station Farm, southeast of Marshfield. Lunch served by church group.

The Program

There will be an up to date and timely program on beekeeping methods. speakers will be Mr. John Long, Madison on "Bee Disease Control for the Coming Year and New Laws Pertaining to Beekeeping". Mr. H. J. Rahmlow, Madison will talk on "Modern Spring Management and Beekeeping Methods". Representatives of the supply industry will discuss modern equipment and outlook for supplies. There will be a panel discussion on "Package Bees and Installation for Beginners". The business meeting will include election of officers.

Build Strong Colonies In March

March, the month in which to check your bee colonies and prevent "winter losses". More colonies starve in March than in any other month.

Some experienced and expert beekeepers are able to provide enough food to each colony in the fall of the year so that there is no danger of starvation until they inspect them in April. However, the fact that heavy losses are so often reported in the spring, indicates that a great many beekeepers are not "experts".

Inspect your bees at once if you are in doubt as to whether they have enough stores. It won't harm them at all to open the colony, smoke gently to prevent them from flying out, and if the temperature is above 32, the sun is shining and there is very little wind you can safely take out combs, inspect and feed them.

Feeding

Since March may still have zero temperatures it is not safe to feed a colony to keep it from starving by methods which require that bees leave the warm cluster to bring in the sugar syrup or honey to the cluster. Entrance feeding is by far the poorest method. The 10 pound pail of syrup, inverted on the brood combs may be alright if the weather doesn't turn too cold.

We have found that the quickest and least expensive method is to shake the bees from two combs on each side of the brood combs; place the four combs one on the other on top of the brood combs and proceed to sprinkle sugar syrup into both sides of each comb. The sugar syrup must be hot to the touch. It is best made of about 1¾ parts sugar to 1 of water. A 1 or 2 gallon sprinkling can with the sprinkler holes increased in size with a one inch nail so it will provide a spray and the syrup will go into the cells, does a good job.

The advantages are: 1. Feeding is completed in one operation and takes less than 10 minutes. The hive can be closed and the bees will be safe for a month, if enough syrup is given. 2. It does not require additional empty hive bodies and other equipment. It is a sure method because the food is within the winter cluster and the bees do not need to leave the cluster to get it.

The Use Of Pollen Supplement

Why feed pollen supplement? The answer lies in the fact that nurse bees cannot produce the royal jelly necessary to feed the larvea unless they have a balanced diet, consisting of honey and pollen.

Brocdrearing is now in progress in Wisconsin and the nurse bees are feeding upon the pollen available to the winter cluster.

When the pollen supply has all been consumed the nurse bees can no longer feed the queen adequately to lay eggs or to feed the larvea for maximum broodrearing. Consequently broodrearing slows down and within several weeks, after the pollen supply is exhausted, there will be very little brood reared. This of course, effects the colonies three weeks after that time-when young bees no longer emerge to take the place of those that normally die every day. Then, we experience what beekeepers call "spring dwindling". We sometimes mistake it for loss due to cold weather when bees fly out and fail to return. We see them on the snow or on the ground and think they died from the cold. Actually, they probably are old or Nosema infected bees which would have died anyhow. If there had been young bees emerging at the maximum rate possible during March. the colonies would have maintained populations satisfactorily.

Feeding Pollen Substitute

According to the best information we can get, the best pollen supplement is 3 parts of soy bean flour mixed with one part of natural pollen. This is mixed into a dough, using regular sugar syrup such as is used for feeding, mixing so that the cake has the consistency of cake dough. It should not be thin enough to slide down between the combs and injure some bees.

WISCONSIN BEE-KEEPERS AT THE NATIONAL BEE-KEEPERS FEDERATION CONVENTION AT BILOXI, MISS.

Front Row: Left to Right: Mr. Henry Schaeffer, Osseo, Carol Lehman, Honey Queen of Stout Institute, Mrs. H. Schaeffer, Mrs. Harriet Grace of Madison.

Second Row: Mr. Vern Howard, Pres; Milwaukee, Mrs. H. Piechowski, Henry Piechowski, Red Granite, Mrs. A. J. Schultz, Ripon.

Third Row: Mrs. Vern Howard, Milwaukee, Mrs. J. Deiser, Superior, Mrs. Earl Silvernale, Patzau, A. J. Schultz.

Back Row: Joe Deiser, Superior, Carol Jakubowski, Mickey Jakubowski, E. S. Silvernale.

Members not present for picture: Mr. and Mrs. H. Dankemeyer and daughter, Marshfield and Mr. and Mrs. Leonard Otto, Forest Junction.

PLANS FOR THE HONEY QUEEN CONTEST

A letter from Mr. Henry Piechowski, Redgranite, states that plans are underway for greatly extending the honey queen contest for 1956. More details in early issues of this magazine.

Mr. Piechowski writes, "Our honey queen made quite an impression at the **National Convention at Biloxi.** There was no contest to select a National queen. There seems to be considerable interest shown in promoting honey queen contests at various County Fairs this season and there no doubt will be considerable discussion at the spring meetings.

"There is one thing we have learned from the honey queen contest; there is work to be done, and unless someone is willing to follow it through, there is not much use of doing the job halfway."



"SPRING INSPECTION" By John F. Long

What can I as a beekeeper help to do in the spring to reduce the loss I may suffer from foulbrood?

1. Check to see that no weak or dead colonies are open to allow robbing to get started in your yard. This applies without exception. Robbing once started may spread to any source of honey within a radius of three or more miles.

2. Do not feed honey to your bees by any method. (I recently saw a beekeeper storing sugar sirup in second-hand cans (60 lb. size) to be used later to feed his bees).

3. Remember it is almost impossible to pile hive bodies or supers outside in such a manner as to keep bees out until you are ready to use them.

4. Do not exchange bee equipment, combs, or honey with other beekeepers or permit them to trade with you.

5. If you find brood that to you does not appear healthy, send a sample of comb to the Bee and Honey Section, Plant Industry Division, 315 North Carroll Street, Madison 3, Wisconsin.

6. Do not rely upon your neighbor when you need an inspection of your bees; ask for a trained inspector.

7. If you have had American Foulbrood in a yard last year, number all hives in that yard and keep the equipment for each hive separate from other hives for at least another year.

8. Remember American Foulbrood infection may start as only one or two cells and last for two or three years before completely destroying the colony. Again it may destroy a colony in six weeks.

9. By the time American Foulbrood infection is noticed by the average commercial beekeeper, often 20% or more of the colonies are infected in the yard.

10. With more than 6,000 cells in a standard comb, any one of which could contain a scale of a larvae, dead from American Foulbrood, only the trained eye of a regular inspector can be expected to find 90% of the infection in a yard with one inspection.

11. If American Foulbrood is found in your yard by an inspector, you may be able to hide some of the combs, hives, etc. from the inspector at the time of his visit, but your bees will find the infected material, of this you can be sure.

12. For best success with American Foulbrood, destroy it when you find it and give your inspection department full cooperation; no inspector enjoys burning his own or your bees and equipment.

MARCH AND APRIL ARE IMPORTANT MONTHS FOR THE BEEKEEPER

Bee management during March and April will largely determine the amount of honey obtained by the bees during June.

Remember these figures. According to careful estimates which have been made, if a small colony of 15,000 bees can produce 15 pounds of honey in June, then a colony with 30,000 bees can produce 40 pounds. A colony of 45,000 bees could, under similar conditions, produce 80 pounds of honey.

EXTRACTING EQUIPMENT FOR SALE

Extractor, storage tank, heating tank, uncapping knife, etc. for sale. Complete outfit for small beekeeper. Also comb foundation and glass jars.

Write Mrs. E. P. Larson, 641 Sheldon St., Madison, Wis.

Many small boys are just the type their mother would not want them to associate with.

Soaking a wedding ring in dishwater three times a day makes it last forever.



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*T.M. Regis.

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State Horticultural Society. Annual dues ar-\$1.50 per year. Organizations of 10 members or more may affiliate at special rates which will be sent on request.

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ABOUT ORTHOCIDE TREATED CHERRIES, GROWER FRANK KALCHIK REPORTS:

"We got the largest fruit and has less loss from rot than ever before!" Grower Frank Kalchik, with 40 acres of red tart cherries in Omena, Michigan, reports that he had been getting some leaf spot with defoliation with the eight sprays of a fungicide and copper used in previous years. Last year he used ORTHOCIDE 50 Wettable in four applications, and says, "Leaf spot control was excellent. We got the largest fruit and had less loss from rot than ever before."

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On all chemicals, read directions and cautions before use.

Apple Thinning With Chemicals

By Armin Frenz, Thiensville

Our experiences in chemical thinning have been very interesting and also at times very costly, but we feel that it was all worth while.

We started using chemical for thinning apples in 1952, on Golden Delicious. We used to do hand thinning previous to that, but being a lot of work, using a lot of help and not getting the results which would produce large apples and an annual crop we decided to try "App-L-Set" (sodium 1 naphthaleneacetate) on one half of our block of Golden Delicious and hand thinning the other half. We used 12 ounces App-L-Set to 100 gallons of water and applied it with a speed sprayer 20 days after bloom. At harvest time the results showed no difference between hand or chemical thinning and our feeling was that we applied the spray too late after bloom.

Promotes Annual Bearing

In 1953 the half that was chemical thinned the previous year did come back with a very good set of blossoms whereas the hand thinned did not and we attribute this to the fact that the fruit had been thinned early enough for fruit buds to set.

So in 1953 we decided to chemical thin our entire block of Golden Delicious at the same rate of 12 ounces to 100 gallons, and applied it 10 days after bloom. Results were most gratifying as we had the best crop of large uniform apples that we ever had grown.

Too Much Drop In 1954

So by this time we thought we knew all about chemical thinning and would do the very same in 1954. We used the same material at the same rate and applied it again 10 days after bloom on all Golden Delicious and also tried it on a few Wealthy. They started to thin out very nicely again but never did quit dropping until there was hardly any fruit left on the trees. Whether we drove too slowly with the sprayer or if weather conditions had a part in this we really don't know to this day. We harvested about one fourth of a normal crop that year but the size was so large that they were rather hard to sell as our sales are mostly retail. That left us wondering again how much we really knew about chemical thinning!

Good Results In 1955

In 1955 we used the same material again but at 10 ounces per 100 gallons; applied it 7 days after bloom and possibly drove a little faster while applying and had excellent results once more.

From our experiences one can hardly say that results with a certain amount and time of application will hold true from year to year, as can be said with spray materials for insect and scab control.

We will just have to experiment from year to year and from results obtained in past years can be guided a little. But it is gratifying to know that even if the fruit was over thinned, the trees will come back with a lot of fruit buds for the next year and make an annual bearer out of a biennial one.

THINNING FOR BIG APPLES By Arthur Bassett, Jr.

Warm, dry weather for several days during bloom in 1955 resulted in a very heavy set of fruit on most varieties: Duchess and Wealthy—4 to 6 in a cluster; McIntosh—2 to 4; and Delicious 2 to 30.

We applied chemical thinner to Wealthies, Greening, Snows and Golden Delicious. Red Delicious were thinned by hand because we feel that they are too valuable to gamble with. We also hand-thinned Duchess, Wealthy, and Golden Delicious whenever the chemical did not take off enough. On varieties with long stems such as Delicious, we use a regular thinning shears and on the ones with short stems like Wealthy, we pinch the apples off with thumb and fore-finger leaving the stems on the tree. This gives a good sore thumb after the first day, but some adhesive tape around the finger nails will help.

We do not try to space the apples exactly a given distance, but closer or farther apart according to the individual vigor of each tree. Never more than one to a cluster except where they are very far apart. This improves the color as well as the size.

Our hopes for large red apples faded away when the July weather continued into September, giving us eighty days with no more than a few sprinkles of rain. From past experiences, however, we are sure that it pays to thin apples. A Hebrew friend who buys apples for retail once remarked, "They can't be too big; they're always asking for the red ones!"

EXPERIENCE WITH CHEMICAL THINNING OF APPLES By Albert A. Ten Eyck, Pine Bluff Fruit Farm, Brodhead, Wisconsin

On May 2, when Jonathan, Cortland, and Salome were an approximately full bloom and Haralson and Wealthy more than a day past full bloom we sprayed with **Elgetol**, using a 2X concentration or three pints to 100 gallons of water. We used a Myers concentrate sprayer. About 2 gallons were applied per tree on fourteen year old trees and 2½ gallons on thirty year old trees. We also sprayed two Golden Delicious, one McIntosh, and one Red Delicious.

Results: We had no results on Cortland, Red Delicious, Golden Delicious, and McIntosh. Checks and sprayed trees all had about the same crop.

Salome thinned very well but at harvest time practically all apples were checked and cracked on the exposed side; do not know the reason why.



Jonathan was well thinned but the foliage was badly damaged. Haralson and Wealthy thinned a little but the spray was probably too late to thin enough.

On May 6 we sprayed other trees in the same manner with a 2X concentration of Amid-Thin at 3 pints to 100 gallons of water. We sprayed all of the early varieties plus Early McIntosh, Snow and Talman Sweet. Of course, we did not spray the same trees.

We had no results on Cortland, Red Delicious, McIntosh, Salome and Early McIntosh.

Jonathan thinned erratically — some branches good and some not at all—on the same tree.

Haralson thinned much too lightly and Wealthy not at all. Snow and Golden Delicious thinned too little. Talman thinned well and the crop was good.

In 1956 we will use dilute spray and a hand gun for all thinning. We will use Elegetol on Wealthy, Early McIntosh and Haralson in full bloom. We will use Amid-Thin on all other varieties.

THE COST OF PLANTING AN ACRE OF DWARF FRUIT TREES

How much does it cost to plant an acre of Dwarf fruit trees? Recently Mr. Leonard Langord, Supt. of the University Orchards discussed with the editor the cost of planting an acre of Dwarf apple trees. He had a wholesale price list which gave me the cost of the trees at \$2.65 per tree when purchased in lots of more than 100.

The recommendation was to plant the trees 12×20 feet for a commercial orchard. This would require, said Mr. Langord, 180 trees per acre at a cost of \$477.00.

While we recommend testing standard Wisconsin varieties of apples and pears on Dwarf stock throughout the state to determine their hardiness, growth habits, bearing qualities and profitableness, it is nevertheless important to know about the cost and until we know more about what they will do under various conditions over a period of years one can hardly recommend planting commercial acreage at this time.

MdNTOSH AGAIN WINS IN BAKING APPLE TASTE TEST

The Milwaukee County Fruit-Growers Association with the assistance of Assistant County Home Agent, Bernadine Brentrup, conducted a "Taste Test" of baked apples at their annual meeting on February 16. Nine varieties of apples had been baked by Miss Brentrup. The apples of each variety were cut into sections and given numbers so that no one knew the names of the varieties. All members of the Association were asked to taste the apples and grade them excellent, good or fair.

Results were in line with the "Taste Tests" conducted by the Wisconsin Horticultural Society last October in co-operation with Carson Gully, former University chef.

The McIntosh received the largest number of votes as the best variety, and Cortland was second.

Other varieties had a number of votes as excellent or good varieties and an equal number as fair. For instance, North Western Greening had almost as many votes as an excellent baking apple as it had in the "Fair" group. It indicated, as we found last fall, the best eating variety and the most popular varieties in Wisconsin are favored as baking apples.

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How To

Fertilize And Prune Young Trees

KINDNESS KILLS YOUNG TREE

Writing in Better Fruit magazine, Lauren H. Milliman, Editor, makes observations on an orchard tour sponsored jointly by the Washington Horticultural Society and Washington State College. Discussing the "danger inherent in putting fertilizer in the hole when a young tree is first set out", Dr. John Snyder of the college, made this remark. There's a young tree over there, which looks completely discouraged, if not dead."

It was explained that a grower is almost sure to over do it when he puts all the nitrogen a young tree needs in the hole when it is planted or around it when it is set out.

Wait until the tree is pretty well started. If it starts growth in May, don't put any fertilizer on until June, and then put on only part of its yearly requirement. This amounts to only .2 (2/10ths) of a pound of actual nitrogen, which should be divided into three separate applications.

"Two-year-old trees can take their nitrogen in two applications, one during the dormant period; the second the latter part of June.

"Orchardists who are faced with the problem of keeping old trees in bearing while the young renewals are gaining size should consider the possibility of letting the centers fill up with fruiting wood while some of the leaders that shade the little trees are cut back, Dr. Snyder commented.

"Rather than taking out all the suckers, cut some of them back to 6-inch lengths so that fruiting wood will develop sooner, was his suggestion. Unless leaders which shade the young trees are cut back, growth of the new orchard will be slowed up.

Young Trees Need Spreading

"A grower must reconcile himself to the fact that interplants need artificial spreading. One grower was forcing the young branches apart with notched boards. "Another method of bending the branches to force young trees into earlier bearing was noted in the Ox Team orchard. There eyelets were screwed into the under side of the branches and into the tree trunks. Wires between the eyelets held the branches in position.

"Bending the branches to a 45 degree angle is a means of stimulating fruit bud formation, Dr. Snyder pointed out."

Do as well as you can with the talents you possess; think of the silence in the woods if no bird sang unless he thought he sang best.

The smallest good deed is better than the grandest intention.—Amherst Advocate.



Manitowoc, Wisconsin



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April, 1956

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APPLE STORAGE BULLETINS AVAILABLE

Construction and Management of Refrigerated Fruit Storage Discussed in two Bulletins.

Michigan State University, Department of Horticulture, East Lansing, Michigan has available two excellent bulletins of interest to Wisconsin Fruit Growers who are planning to build fruit storages.

Special bulletin 389 published in January 1954 is entitled, "On the Farm, Refrigerated Fruit Storage."

Circular 143 (1951) is entitled, "Construction and Management of Farm Storages, with Special Reference to Apples".

The bulletins are quite detailed with many pictures and drawings. They will be invaluable for anyone planning to build a fruit storage.

A woman will try on any number of shoes before she's finally dissatisfied.— Dakota Horticulture.

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April, 1956


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WHAT HAPPENED AT THE SPRING MEETING

The Spring Meeting of the Wisconsin Berry and Vegetable Growers Association held at the Retlaw Hotel, Fond du Lac, on March 21 proved most interesting. Dr. Keith Chapman answered many questions in regard to the Miller Bill and spray residues. For a mimeographed bulletin on residue tolerances write the Department of Entomology, University of Wisconsin, Madison, Wisconsin.

Dr. R. H. Roberts told about the new seedlings he has been producing and suggested forming a committee from the association to help him in selecting seedlings for further trial having the most desirable characteristics, especially in freezing quality. He said that a strawberry needs at least forty different desirable characteristics and it would take millions of seedlings to get one that had all the good combinations. He now has thirty to forty good freezing varieties of which the best will be selected. Other desirable characteristics are a light red color when it comes out of the freezer and it must retain its shape.

SUMMER MEETINGS

It was decided to dispense with the regular summer meeting. Instead it was decided to visit the Strawberry Seedling Trials at Madison and the strawberry Variety Plots at the Branch Experimental Station at Sturgeon Bay during the harvest season. Watch these pages for further announcements as to dates.

Talks by growers as listed in the program in our March issue proved most interesting and will be published in early issues.

GROWING STRAWBERRIES IN NORTHWESTERN WISCONSIN By Harvey Kamnetz, Cumberland

The strawberry crop was a good one this past year—one of the best in 5 years. We had an excellent crop of high quality fruit. All of our berries were sold locally. Over 10,000 quarts were sold right in the field on a "pick your own" basis.

Beaver was still our best producer of fruit but was followed closely by virus free Catskill. The Beaver produces over a longer period than the Catskill, but the Catskill will average a little larger in size through most of the season. Both varieties make beautiful rows with the plants standing about 6 to 8 inches high. We try to keep the rows down to 24" or less if possible. For 1956, we are growing only Beavers because of their outstanding production. Sparkle also had heavy yields in this area although we did not have a commercial planting of this variety.

Gem and Superfection are the most productive of the everbearing varieties in this area. The Gem makes a heavier fruiting row and therefore is slightly more productive than the Superfection variety. These two varieties produce more fruit with less care than any of the other everbearing varieties which we have tried. Red Rich should not be grown unless the mite can be effectively controlled.

In our plots of new numbered trial varieties from the University of Minnesota we had several varieties which yielded at the rate of 15,000 to 20,000 quarts per acre. This shows what can be done with intensive care, heavy fertility, and irrigation. However, none of these varieties coming summer we will fruit some trial have been released to the public. This varieties from both the University of Minnesota and University of Wisconsin in adjoining plots so that yields can be compared.

Our plants looked very excellent when they were covered with marsh hay during the first week in November.

There is a heavier trend of planting anticipated in this area for this coming year although the commercial acreage still is not large. More orders for plants are being placed earlier this year than ever before. It seems people are turning to small plots of strawberries for an additional cash crop.

Sow Oats In September

We find the practice of broadcasting oats on the new planting just before the last cultivation (about September 1) a good one. It holds down late weed growth and checks excessive late development of runner plants. The oats are killed by the winter weather which leaves a nice mulch in addition to the humus content left by the root system. It seems to leave the ground a little more porous after this treatment. With heavy fertilization and irrigation, the oats are 6-8 inches high when snow comes.

A cuniform list of more than 60 different kinds of vegetables grown in the Royal Babylonian Gardens of Merodach Baladan, has survived. The palace gardener grew very much the same kind of plants as the modern inhabitants of Basrah. Garlic, onions, mint, beans, cardamons, leeks, pennyroyal, lettuce, dill, saffron are among the plants which can be easily identified.—Garden Digest.

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April, 1956

Virus Free Strawberry Plants

By E. L. Chambers

Few plants of any kind are completely free from virus diseases and the strawberry is no exception. These viruses are infectious agents too small to be seen even with the highest power of the ordinary transmitted-light microscope. However, since the advent of the modern electron microscope, they can be readily studied and the different types identified.

They appear to be protein in nature and are capable of reproducing themselves in living hosts. Many viruses are carried from diseased to healthy plants by insects. They may be transmitted artificially when parts of diseased plants are grafted on healthy plants. Virus diseases of plants exhibit as wide a range of host reaction as is encountered in the bacterial and fungus diseases.

Virus Symptoms

The most pronounced evidence of this disease is expressed in the green tissues of higher plants as the alteration in the usual development of the chlorophyll. The mosaic pattern of yellow and green areas result from the integration of the various degrees of chlorosis with the normal green areas of the leaf, hence the term "mosaic disease" is used to designate a considerable number of these virus maladies.

Other symptoms are characterized by a more or less uniform reduction of the chlorophyll with very little apparent mottle or mosaic pattern and these are frequently referred to as "yellows" disease. Strawberries are subject to several types of virus diseases. Those of "yellows" have the type attracted the most attention and are now spread into every strawberry section of the country. These cause a loss of vigor of the plant and a marked stunting.

"Indexing"

The casual examination of the strawberry plant may not reveal the presence of a virus disease. To be certain the

parent stock is free from a virus disease. these plants must be "indexed". By "indexing" is meant to determine the presence or absence of a virus by grafting the plant in question on a plant of the wild strawberry (Fragaria vesca), it being very susceptible serves as an indicator if a virus is present. Once a source of such virus-free stock is found, it must be kept healthy. It can only be kept free from virus by isolation from insects. Insect vectors such as the strawberry aphid and others are the chief agencies of spread. Either the plants must be kept thoroughly sprayed with an insecticide to control the insects or they must be grown in screen houses to exclude them. Plants so protected may remain free from virus infection for some time; whereas plants grown near wild strawberries and other cultivated patches, or in a weedy environment will soon again become infected. Such plants can be sold as having been grown from originally "indexed" sources but certainly not as virus-free plants because they could not remain virus-free so long as they are exposed to infection.

The Horticulture Department at the College of Agriculture in cooperation with the State Entomologist's office is carrying on some plant breeding work, and by selecting virus-free plants and developing a supply of these plants in screen houses and in isolated plantings outside, hope to be able in another year to furnish some of our nurserymen and small fruit growers with plants grown from "indexed" stock. It will be necessiry for the nurserymen to replenish their stock from these virus-free sources from time to time to keep the virus infections to a minimum.

A man owes it to himself to be successful. Once successful he owes it to the Bureau of Internal Revenue.

Growing Better Vegetables

By John Schoenemann

Why not try some new and different kinds of vegetables in the family garden this coming season? Addition of several rather uncommon crops to the usual standbys can give more enjoyment, greater variety in the dinner menu and result in better nutrition for the family too. Why not select some crops such as Brussels sprouts, Chinese cabbage, endive, kale, leek, salsify, sweet potatoes and purple cauliflower, to mention just a few, in addition to the familiar beet, carrot, cabbage, tomato, lettuce, etc. combination we so often find planted in most gardens year after year.

Good varieties of most of these "unusual" crops can be obtained from most seed sources. These crops can be grown in most Wisconsin gardens with little if any extra special care.

Brussels sprouts are small cabbage-like buds formed on the stalk of the Brussel sprout plant. This crop is a member of the cabbage family and its culture is similar to that of cabbage. Catskill and Long Island are good varieties to try.

Chinese Cabbage

Chinese cabbage produces a tall, cylindrical, compact head. The harvested heads are firm, crisp and have a distinctively, slightly sharp flavor. It is grown as a fall crop in Wisconsin since early planting results in a large percentage of "bolted" plants. Plant seed around late June to early July and then thin to single plants spaced 6 to 8 inches apart in the row. Michihli is an excellent variety.

Endive is another late planted crop furnishing fine flavored salad greens for fall use. The low flat growing plants



should be blanched shortly before harvested by laying thin boards over the row. Green Curled is a recommended variety quite popular among home gardeners.

Kale is a highly nutritious pot herb which is also planted in late June for late fall harvest.

Leek belongs to the onion family and is used principally in soups and salads. It has a delightfully mild flavor and is easy to grow using cultural practices similar to those for producing onions.

Salsify is also commonly known as oyster plant. It is planted at the same time as the earliest crops to be seeded in the garden. Its long, smooth, slim, creamy white roots are harvested in fall and used as a creamed vegetable or for flavoring soups. It keeps well in storage or can be left in the garden to be harvested in the spring. Sandwich Island is a long-time favorite variety of this vegetable.

Sweet Potatoes

Sweet potatoes can be grown successfully in gardens in southern and central Wisconsin. However, it does best on light sandy type soils. Because a rather long frost-free period is needed to produce a crop, **plants** are set out as soon as all danger of frost is past. This is usually about June 1. Soil should be well fertilized with phosphorous and potash but high nitrogen fertilizers should be avoided. Yellow Jersey, Hearts o' Gold and Ranger are suitable varieties.

Purple cauliflower, sometimes called purple brocolli, is a delightfully different variety of this kind of crop. It forms a head similar to cauliflower or heading brocolli but of a deep purple color.

Buy Your Strawberry And

CERTIFIED STRAWBERRY PLANTS

Fresh dug to order. Postpaid. Thomas: Robinson:—25 @ \$1.00; 50 @ \$1.75; 100 @ \$2.85; 500 @ \$11.00; 1000 @ \$18.75. Wis. No. 214: 25 @ \$1.25; 50 @ \$2.10; 100 @ \$3.25; 500 @ \$12.50; 1000 @ \$21.00.

Red Glo Everbearing. 12 @ \$2.00; 25 @ \$3.50.

Blahnik's Glad Acres.-R. R. No. 4, Sturgeon Bay, Wisconsin.

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All plants grown under irrigation. Beaver; Wis. No. 537; Dunlap; Premier; Robinson; Thomas: 100 @ \$2.50; 500 @ \$10.00; 1000 @ \$15.00.

Sparkle, virus-free stock, highest in production: 100 @ \$3.00; 500 @ \$12.00; 1000 @ \$18.00.

All plants trimmed and postpaid.

Eric Franke, Route 5, Sturgeon Bay, Wisconsin.

CERTIFIED STRAWBERRY PLANTS

We have the following varieties of plants for sale. Plants listed (****) were grown from stock purchased in Maryland and originally indexed as virus free. All varieties are dusted at regular periods to eliminate aphids, which carry the virus. Plants postpaid.

Catskill ****; Sparkle ****; Empire ****; Thomas; Beaver; 50 @ \$2.00; 100 @ \$3.25; 300 @ \$7.25; 500 @ \$10.00; 1000 @ \$18.00.

Robinson ****; Premier-reg; Premier ****; Dunlap; Wis. No. 214; Wis. No. 261; 50 @ \$1.75; 100 @ \$3.00; 300 @ \$7.00; 500 @\$9.75; 1000 @ \$17.00.

Ambrosia; Nectarine; 50 @ \$1.50; 100 @ \$2.75; 300 @ \$6.75; 500 @ \$9.75; 1000 @ \$16.00.

Gem; Superfection everbearing: 50 @ \$2.75; 100 @ \$4.75; 300 @ \$10.50; 500 @ \$15.25; 1000 @ \$25.00.

Hy-Land Gardens, Bailey's Harbor, Wisconsin.

FOR SALE

Strawberry Plants. Robinson and Catskill. Certified and State Inspected. 100 @ \$2.25; 1000 @ \$18.00. Postpaid.

Cash with order.

Milligan Orchards, Bayfield, Wisconsin.

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We have the following plants for sale; Dunlap and Robinson, (June bearing). @ \$15.00 per \$1000; @ \$2.00 per 100. Postpaid. Gem, Superfection, Streamliner, Webster and 20th Century everbearing; Catskill. Fairfax. Premier. Thomas, Beaver, Wis. No. 214 and Wis. No. 261 @ \$18.00 per 1000; \$2.25 per 100. Postpaid. Latham and Viking raspberries @ \$40.00 per 1000 F.O.B. Bayfield. \$5.00 per 100; \$3.00 per 50; \$1.75 per 25. Postpaid. Durham fall bearing and Newburg raspberries at \$10.00 per 100-\$5.50 per 50-\$3.00 per 25-\$1.75 per 12. Postpaid.

John Krueger R. R. 1, Bayfield, Wisconsin.

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Premier, Wis. No. 537, Catskill, Wis. No. 214, Wis. No. 261 and Empire. Some Catskill from virus free foundation stock. 50 @ \$1.75; 100 @ \$2.75; 250 @ \$5.75; 500 @ \$9.25; 1000 @ \$16.00.

Also Durham everbearing red raspberry plants.

All plants freshly dug.

Al Kruse Nursery, 615 Effinger Road, Baraboo, Wisconsin.

CERTIFIED RASPBERRY PLANTS FOR SALE

Durham Everbearing at \$10.00 per hundred. June at \$10.00 per hundred, only in limited amount. Order early.

H. B. Blackman, Richland Center, Wisconsin.

Sideswiping trees is done a lot by drivers who are plumb half shot. God gave them eyes so they might see, y-it any fool can hit a tree.—From "Leisure".

Wisconsin Horticulture

Raspberry Plants Here

STRAWBERRY PLANTS

Now is the time to book your plant needs for spring. Be safe, not sorry. Pederson's plants can't be beat. Ask the grower who has bought from us. The old original Beaver, an outstanding producer, Robinson, Premier, Catskill, Dunlap, Wis. No. 537, No. 214, No. 261. Write: H. H. Pederson Fruit & Plant Farm, Warren, Wisconsin.

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Strawberry plants. Beaver: 100 @ \$2.75; 500 @ \$7.50; 1000 @ \$13.00. Premier & Bearmore: 100 @ \$2.00; 500 @ \$8.00; 1000 @ \$15.00. Gem Everbearing: 100 @ \$2.50; 500 @ \$10.00; 1000 @ \$18.00.

Irving H. Bowen, Alma Center.

PARISH PERFECT STRAWBERRY U. S. Patent 1422

Order your plants now for this strictly new and different strawberry. The Parish Perfect is a June bearing plant that produces all red, coreless berries on erect fruit stems, thus holding the berries off the ground. The berries are rich in flavor and excellent for freezing.

You will want to plant a bed of these quality producing plants.

Spring prices — \$10.00 per 100 plants, postpaid; \$5.50 per 50; \$3.25 per 25. Less than 25 plants 15c each.

Licensed Grower.

Suthers Moundview Nursery, Platteville, Wisconsin.

DON'T PRUNE RASPBERRIES TOO HEAVILY

Experiments carried on at the Western Washington Experiment Station in Puyallup, proved that if raspberries are pruned too heavily, yield is greatly reduced.

Researchers left 12 fruiting canes per plant and produced half a ton more raspberries per acre than plants with only 9

STRAWBERRY PLANTS FOR SALE

Beaver, Premier, Catskill, Robinson, Dunlap, Sharon, Wis. No. 537 Strawberry plants. Freshly dug, properly trimmed and packed. Prices: 25 @ \$1.00; 50 @ \$1.65; 100 @ \$2.85; 200 @ \$5.50; 500 @ \$10.00. No. 1 Raspberry Plants

12	Plants 2	5 Plants	100 Plants
Latham	\$1.35	\$2.65	\$11.00
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Logan Black	1.25	2.25	9.00
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Asparagus Roots 1.00 2.75 1 yr. No. 1 Canada Red Rhubarb; Valentine, 4 @ \$1.50, 2 @ \$1.85. Prepaid.

Fruit trees and plants of all kinds. Ornamental shrubs and evergreens.

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CERTIFIED STRAWBERRY PLANTS

Wide selection of vigorous strawberry plants adapted to Wisconsin. Catskill, Dunlap, Empire, Jumbo, Robinson, and Sparkle were grown from stock which was originally indexed as being virus free. Beaver, Wis. No. 537 and Sharon are from regular stock. Also Gem and Superfection everbearing plants. Write for price list.

KAMNETZ STRAWBERRY NURS-ERY, Cumberland, Wisconsin.

canes. The addition of extra nitrogen fertilizer increased the production by ½ ton of berries. Where the plants were pruned to 6 canes per hill they did not respond much to the extra nitrogen.

Recipe for Calmness: Try to remember what you were worrying about a week ago today.—Enterprise Herald.

April, 1956



Wisconsin Nurserymen's Ass'n.

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The Dutch Elm Disease

By E. L. Chambers, State Entomologist

We must be prepared to wage battle against a pest which threatens the very existence of our most desirable shade tree, the American elm. This No. 1 enemy, the Dutch elm disease, is another of those plant diseases of foreign origin which threatens to play havoc with one of our most useful native species of shade trees. Residents of our Eastern states who are now suffering from the ravages of this deadly fungus have previously watched another accidentally introduced tree disease, the Chestnut blight, wipe out completely the chestnut throughout its entire commercial range.

Disease Spreading

The Dutch elm disease was first discovered in the United States in 1930 in Ohio near Cleveland and at Cincinnati. This disease is now widespread, being found in many of our Eastern and Central states. The Dutch elm disease has never been found in Wisconsin but it can be said to be knocking at our door in that it has been found in Highland Park and Rockford, Illinois, only a little ways from our state border. It was first reported in Illinois in 1950 and within 5 years has spread over 72 counties, and at the rate it has been spreading, we may expect to find it attacking trees in our state by next summer. The disease is spread by, insects. There are two bark beetles which are definitely known to transmit the disease, both of which are already established here and will, consequently, menace our elms once the disease makes its appearance.

Of the two kinds of bark beetles important in the spread of this disease, one, the smaller European elm bark beetle,

the worst offender, is of European origin. This insect attracted very little attention as a pest until the Dutch elm disease made its appearance. The beetle itself was believed to have been introduced some 30 years ago. Without aid from the bark beetle, however, the fungus has no effective way to reach other elm except through natural grafts of roots of the diseased ones with the nearby healthy ones. It appears quite likely that the Dutch elm disease will eventually occur wherever elm trees are grown. While the disease can successfully attack all species of elm, the Asiatic and European varieties are said to be less susceptible. Shipment of burl elm logs from England to veneer plants in this country for the manufacture of furniture is believed to be the source of entry. Trees that have been killed by the disease have been salvaged for this purpose. These logs no doubt brought both an infestation of the European bark beetle and an infection of the fungus with them.

Must Control Vectors

The only successful methods developed for the control of this disease are based on the control of the vectors, there being no effective spray against the fungus disease itself. There are several ways that bark beetle infested or likely to be infested elm material can be destroyed: (a) by burning; (b) by removal and burning all bark on stumps, dead logs and branches, and (c) by thorough wetting of all bark surfaces with an emulsion or solution type spray containing 8 pounds of DDT in each 100 gallons. If solutions are used, the solvent should be a No. 2 fuel oil. All elm material infested or likely to be infested with elm bark beetle found during the dormant period must be destroyed no later than April 15.

Must Spray Trees

Any situation that results in a large amount of recently killed, cut, or damaged elm wood will result in a tremendous buildup of beetle population. It is, therefore important to remove all dead limbs resulting from storm injury, pest damage or other causes, and to keep the trees growing as vigorously as possible if beetle breeding is to be discouraged. Thorough spraying of trees with DDT will prevent the beetles from feeding for weeks or months. All breeding places must be eliminated and the trees given a dormant DDT spray each year if we are going to safeguard our elms. It should be remembered that the smaller European elm bark beetle can fly 3 or more miles.

Symptoms

It is next to impossible to detect bark beetle infested elm material from a casual examination of the external appearance of such material. It is, likewise, impossible to be certain of the diagnosis of Dutch elm disease without actually culturing the suspected sample specimens. The first symptoms of the disease are, of course, the wilting, curling, and yellowing of the leaves on one or more branches, a condition often called "flagging". These symptoms are followed usually by premature falling of the leaves and the sudden death of the wilting branches. On some trees only a few branches are observed to wilt at a time, in which case the death of the tree may be over a period of a year or two. On other trees all of the branches may wilt simultaneously and the tree die within the matter of a few weeks.

The presence of brown discoloration in the young sapwood of the elm is used as a symptom of this disease. In a cross section of a branch, this browning may appear to be a series of dots in a single wood ring; in some cases the dots are so abundant that the entire ring appears brown. This brown discoloration occurs most frequently in the spring wood of the current season's growth. In trees that wilt in early summer the brown discoloration may not be noticeable when branch wood is examined in cross section. However, this discoloration is usually conspicuous as fine streaks in the surface of the wood when the bark is carefully peeled from a wilted branch.

For accurate determination, a half dozen freshly cut sections 6 inches long of a recently wilted branch having a diameter of from ½ to 1 inch should be wrapped in a plastic bag, moist brown paper, or wax paper and sent to the State Entomologists' Office, 315 North Carroll Street, Madison, for examination and, if necessary, culturing.

PLANT THE POT TOO

A planting pot made of material which "returns to the soil" eliminates needless transplanting shock.

Shown in the picture is a pot produced by the Horticultural Division of Bird & Son, East Walpole, Mass. It is called the Vita-Green Pot.

There are several makes of pots on the market which can be planted in the soil and for certain transplants such as tomatoes, peppers and many kinds of flowers, will be valuable, light and easy to handle. They are unbreakable and stay firm until the final planting.

Reporter to Pa on his 105th birthday: "What is your opinion of modern women?"

Pa: "Son, I quit thinking about women two years ago."

Hardie Irrigation Equipment

Represented by

ERIC FRANKE

Route 5 (County Trunk "U") Sturgeon Bay, Wisconsin Now offering complete repair service for Rainbird & Skinner Sprinkler heads.

Frequently have good used systems available

One tractor-drawn Holland Transplanter to plant one acre strawberries. Can't be told from new. Priced to sell fast.

From the Editor's Desk

OUR COVER PICTURE

This month we show the Blue Jay, a winter resident in most of Wisconsin.

The Blue Jay has a handsome color, the blue being very striking. It has a three note call which is melodious and sounds like SIR-ROO-TLE.

It is an early nester, lays from three to five eggs which have a dull olive green color, mottled with brown and lavendar. It eats large quantities of a wide variety of insects but also eats fruits. It is protected by law.

TREE AND SHRUB BULLETIN AVAILABLE

A new bulletin entitled "**Pests and Diseases of Trees and Shrubs**" is now available for \$.25 from the Wisconsin Department of Agriculture, State Capitol, Madison.

It is an 88 page booklet filled with excellent illustrations of various pests.

ACCURATE WAY FOUND TO TEST INSECTICIDES

U.S.D.A. Pathologists have discovered that brine shrimp, the tiny crustaceans sold in pet shops for tropical fish can be used to test dilute concentrations of insecticides.

This is a wonderful discovery because now traces of insecticides in foods suspected of being contaminated can be detected. It seems that the brine shrimp are extremely sensitive to dilute concentrations of these chemicals. They even show toxic symtoms from as little as one part in a million of such common insecticides as DDT, lindane, and toxaphene. New chemicals can be tested very quickly and cheaply in the research program.

New laws provide for the testing of all sprayed fruits and vegetables and so we can feel that any of the food we eat is safe since the laws are being enforced rigidly.

BECHTEL CRAB

We recommend the Bechtel Crab for it's large double pink, roselike flowers, its round buds, and its great profusion of bloom year after year.

Bechtel Crab is a natural sport producing double flowers found by Mr. Bechtel, a nurseryman near Staunton, Illinois. It has become greatly admired as a small, bushy tree and attractive foliage. If gardeners object to other crab apples dropping their fruits on the lawn in the fall, this should be a welcome type since it does not produce fruit.

FRUIT TALK

Says Dr. E. L. Loewel of Das alte Land in Germany, "The face of a pack represents the face of the man, and the contents represent his character.

Fruit thinning is now requiring the most labor of any orchard operation, according to the Fruit Industries Research Foundation, of Yakima, Washington—50 hours an acre of the 162 required for the entire crop, including harvesting.

The bill for marketing farm food products was 28 billion dollars in 1955 compared with 17.7 billion in 1947, whereas the payment to farmers is nearly the same (actually less—18.3 billion in 1955 compared with 18.7 in 1947).

Consider the tea kettle. Even though it is up to its neck in hot water, it continues to sing.—Walworth Times.

It's all right to follow the advice of the optimist to keep your chin up—but don't stick it out too far.—DePere Journal-Democrat.

The rainy days you are saving for now probably will come during your next summer vacation.—Viola News.

Wisconsin Horticulture

VIBURNUM OPULUS COMPACTUM A Very Nice Dwarf Form For The Border

A rare, dwarf form with umbels of red berries in early autumn. Very compact habit and very freely fruiting are the outstanding characteristics of this variety. The common Viburnum Opulus is a well known and much used shrub. Its drawback is that it grows too fast and too big, constantly requiring pruning to keep it in bounds. All these objectionable habits are eliminated in the new compact, dwarf form. Grows about 4 to 5 feet high.

Teacher—"Jerry, are you eating candy or chewing gum?"

Jerry—"Neither one—I'm soaking a prune to eat at recess."

SALE ON EVERGREENS

Close out on Pyramidal Arbor Vitae and Blue Spruce. Mugho Pine, Juniper and Yew. Sturdy Plants, priced to sell. Globe Arbor Vitae: @ \$2.50 and up. Call at nursery on week ends. Write for price list. Allen Troemmer, Quincy Nursery, Friendship, Wisconsin.

HANDY GRAFTING KITS

WISH I'D SAID THAT: "A lot of people didn't foresee the coming of automobiles. Be careful, or you can still be one of them."

MIXED GLADIOLUS BULBS

Medium to jumbo size; all named varieties—not labeled. 25 @ \$1.00; 50 @ \$1.50; 100 @ \$2.50; plus postage. Ralph Blahnik, R. R. No. 4, Sturgeon Bay, Wisconsin.

HARDY CARPATHIAN WALNUT TREES

A limited supply of 1 year seedlings for spring delivery at \$2.00 per tree or 6 trees for \$10.00.

N. C. Jacobs & Son, Sturgeon Bay, Wisconsin.

TREES-SHRUBS Raise Them From Seed

\$\$\$\$ for you in Christmas Trees, ornamentals, timber and others. Seeds normally produce seedlings in a few days or weeks. Transplant from garden or seed bed when conditions of soil and weather most favorable. For FREE Planting Guide Write to

Woodlot Seed Co., Norway 26, Michigan



GRAFT FRUITS, NUTS ROSES, CAMELLIAS, ETC.

ALL-SEASON materials and easy instructions. New cold grafting paste. Summer budding strips, etc. Book. GRAFTING MADE EASY, included. Kit shown, 100graft kit, \$1.95 Postpaid or C.O.D. Free bulletin.

Green Thumb Products Box 6273-W Memphis, Tenn.





April, 1956



WISCONSIN GLADIOLUS SOCIETY

Society Carl Knoll and S. F. Darling, Appleton. Madison: Ed Ling,

ce-Pres

Two Rivers

DIRECTORS: Fox River Valley Chapter: Carl Knoll and S. F. Darling, Appleton. Madison: Ed Lina, Spring Green; Theo. Woods, Madison. Manitowoc: Joseph Rezek and Gil Thompson, Manitowoc. Marathon County: R. H. Juers and Mark Splaine, Wausau. Sheboygan: Paul Beer, Port Washington; Walter Axel, Sheboygan. Twin City: Jerry Merchart, Marinette; Arthur Kottke, Oconto. At Large: Walter Bell, Appleton; Ralph Burdick, Edgerton; H. A. Kasten, Wausau; Al Schmidt, Two Rivers; Leland Shaw, Milton and Gordon Shepeck, Green Bay.

THE SPRING MEETING

The Wisconsin Gladiolus Society spring meeting was held in Appleton, in spite of adverse weather conditions. A blizzard Saturday night made it impossible for many State members to be present. The only members from any distance present were Dr. R. H. Juers, Dr. H. A. Kasten, Mr. and Mrs. John Flad, Mrs. Woods and myself. We had all left for Appleton on Saturday afternoon. Sunday morning the telephone was jammed with calls from members. They were informed the meeting would be held as scheduled with suspension of the Board of Directors meeting.

After dinner the Board of Directors met, with Vice President Al Schmidt presiding. The Central International Show Rules were adopted unanimously. A short business meeting was followed by the bulb auction which netted \$160.65. All bulbs were sold at almost retail price. Credit should be given to Wisconsin's new and convincing auctioneer Dr. S. F. Darling. He can sell anything that's in the bag. I want to express my sincere good wishes to the people of the Fox River Valley Society.

Bulb donors are as follows: Harold Blessman; Dr. Darling; Carl Fischer; John Flad; F. X. Graff; Al Schmidt; and Ted Woods.

By Ted Woods, Madison

Treasurer's Report

Treasurer, H. A. Kasten, reported a balance and new receipts of \$654.83. Expenditures since the last meeting were \$331.17 including \$200.00 voted the International Show Committee. Balance on March 10 was \$323.66.

GROWING GLADIOLUS FROM BULBS By S. F. Darling, Appleton

OFFICERS Ralph Burdick

Edgerton

Al Schmidt.

Last month we wrote of some of our experiences in growing gladiolus from bulblets. This month we would like to tell about gladiolus culture from mature bulbs.

Young Bulbs Best

Beginners often have the mistaken idea that the larger the bulb the larger the spike. This is true to a certain extent but old, flat bulbs are likely to produce inferior spikes because of their tendency to split and produce more than one spike from a bulb. A high crowned young bulb not over two years from a bulblet is considered to be the ideal one. Even medium and small bulbs of many varieties produce excellent spikes of given culture in a normal season.

When To Plant

When to plant bulbs depends on whether you wish to grow spikes for home decoration and sale or to use them for exhibition at shows. Glads known to bloom in 80 to 85 days should be planted about this many days before the show date. If one is not trying to produce show spikes but wants a long period of blooming, the bulbs should be planted as early as possible, May 1st here, until the first week in June. Small bulbs take a longer period to throw a spike than large bulbs so if one plants large, medium, and small bulbs of a variety he will have a longer blooming period of that variety.

How To Plant

Bulbs should be planted in trenches in well worked garden soil to a depth of about eight inches for the largest bulbs to four inches for smaller bulbs. If bulbs are planted too shallow the huge spikes have a tendency to "tip or fall over. It should not be necessary to support the spikes when growing although there are many who do when they have small plantings. We prefer to peel the husk from our bulbs before planting because the bulb can be inspected for disease much better. The bulbs will grow just as well if the husk is left on. Peeling the husk enables one to do a better job of dusting before planting. So far we have used Spergon dust for fall treatment after digging and as a pre-planting dust and have had good results.

When the plants are a foot high spraying or dusting with 50% wettable DDT or Chlordane should commence as a preventive against thrips. If this treatment is carried out every ten days or two weeks the insects should be controlled. Some people treat the soil before planting with Chlordane to kill grubs and wire worms. While we have not practiced this, the procedure appeals to us because considerable damage to bulbs can be done by such pests. There is good evidence that such soil insects may have a lot to do with propagation of bulb diseases.

To Be Continued

VIRUS DISEASE OF GLADS Dr. R. M. Gilmer

Gladiolus, like many other species of plants, are suject to virus diseases. Viruses are characteristically a greater problem in plants that are vegetatively propagated than in plants that are typically grown from seeds.

What viruses affect glads? At least 6 of importance are known and there are undoubtedly others. Fortunately, several of the most common viruses affecting glads do not cause a critical amount of damage—although they are no improvement, they can and are tolerated.

1. Yellow bean mosaic: This virus has been known in glads since the late 1920's, and is widespread through many of the standard glad varieties. In glads, it causes a slight reduction in vigor and has no other apparent ill-effects. It is, however, a serious disease of beans, so that glads and beans in the garden are not likely to mix well. This virus, like many others, is spread from plant to plant by aphids.

2. Cucumber mosaic virus: This virus is very variable in its effects on glads. Many varieties tolerate it well, and in many, the symptoms are so slight and transient as to be unnoticed. Certain other varieties cause a yellowish hue of the foliage and reduce the amount of bloom, so that only one or two florets open on a spike. As indicated by the name, this virus attacks cucumbers and many weeds. It is transmitted both by aphids and through mechanical injuries.

3. Tobacco ring-spot: This virus, although common in glads, is not of great importance. Symptoms are usually present on the inner younger leaves in the form of a chlorotic ring of small size with a dark green center. This virus attacks a great many plants other than glads and is easily transmitted through mechanical injuries. It is undoubtedly also spread by insects, probably by glad thrips, although the insect vector is not definitely known.

4. Aster yellows: This virus, fortunately, is relatively uncommon in glads, although isolated cases occur frequently. One of the common plant hosts is aster, in which it causes a pronounced yellow mottle, severe stunting and virescent flowers. Symptoms are very similar in glads; growth is stunted severely and is spindly—if buds are produced at all they usually fail to open, and the petals remain leaf-green in color. The virus is transmitted by a leafhopper, which fortunately, does not feed on glads by preference.

5. White break: This virus causes most of the economic damage to glads. There are usually no significant leaf symptoms; plants remain smaller than normal, and the flowering spikes may fail to differentiate entirely. Many "blind" plants, those which fail to bloom are affected with white-break. In plants in which flowers are produced they are frequently malformed, off-color and splashed or mottled with white.

Of the 5 viruses diseases unnumerated, only the last 2, aster yellows and white break are of major importance. All plants showing symptoms of either disease should be rogued immediately, since corms and cormels from such plants are infected and worthless. There is no known cure for the diseased plants and they will never recover.

In regard to other control measures besides roguing, these can be only general rather than specific. Application of DDT to control flower thrips will afford good control of most leafhoppers and will control some species of aphids. A mixture of DDT and lindane will not only improve thrip control but will give excellent aphid control also. Any horticultural practice that tends to improve the vigor of the plants will help overcome the ill-effects of yellow bean mosaic and cucumber mosaic. For obvious reasons, beans and cucumbers should not be grown in close proximity to glads, not so much to prevent infection of glads as to protect the beans and cucumbers.

In conclusion, glad viruses are here to stay and must be lived with. Since there is no way of eliminating a virus infection from a plant barring killing the plant or nearly killing it, control measures are, of necessity, indirect—aimed at prevention rather than cure.—In the Bulletin of the Empire State Gladiolus Society.

EASTER LILIES CAN BE SET OUTDOORS

Easter Lilies usually bloom the first fall after being set outdoors. They are easy to transplant. While the plants are still indoors, remove the flowers as soon as they begin withering. Keep the plants in a sunny place where the temperature does not fall below 60 degrees. You don't need to water them as often as when the hilles are in full bloom.

After the plants have turned brown, cut off the stem at the soil surface. When the garden soil warms up in late May, move the plants outdoors. Choose a warm sunny place with well-drained soil. Add compost, peat or well-rotted manure to the soil to improve drainage and allow better air movement through the soil. Plant the bulbs 4 to 6 inches deep (soil surface to top of bulb) in most soils and somewhat deeper in sandy soil.-From Circular 511, Dept. of Horticulture, U.W.

AFRICAN VIOLETS

African Violets — 10 leaves of good blooming newer varieties, including my own new outstanding hybrids, plus 1 leaf Pink Fringette and 1 leaf double pink—All for \$3.00. Postpaid.

Top grade, healthy stock. Write for list. I sell plants at the house.

Mrs. Frank Sperka, Route 2, Crivitz, Wisconsin.



Garden Club News

OFFICERS s.____Mrs. A. J. Wiesender, 217 Park St., Berlin Pres. Mrs. C .H. Brimmer Vice Pres.___ Wausau Treas.____Mrs. John Kiesling, Sr.,

GARDEN CLUB OF WISCONSIN EXECUTIVE BOARD: Blackhawk Region: Mrs. Ed Streich, Jefferson: Mrs. John Kiesling, Sr., Central Region: Mrs. C. H. Brimmer; Mrs. C. H. Braman, Waupaca. Milwaukee Region: Mrs. Ray Luckow, Milwaukee: Mrs. H. B. Buerosse, Winnebagoland Region: Mrs. Carl Peik, Chilton; Mrs. A. J. Wiessender. Parlimentarian—Mrs. Roy H. Sewell, 7341 N. 76th St., Milwaukee. Mr. H. J. Rahmlow, Madison, Exec. Sec. Ex-officio.

CONSERVATION CONVERSATIONS

For the first time, the Garden Club of Wisconsin is offered an opportunity to schedule a Workshop at the Trees For Tomorrow Camp, Aug. 26th afternoon, through Aug. 29th afternoon. The Camp is located on the outskirts of Eagle River, the County Seat of Vilas County. Accommodations: Dormitories have inner-spring mattresses, steam heat. fireplaces and showers. Home cooked meals are served in the large Dining Hall, in the Field and at the Paul Bunyan Barbeque. Deadline April 15.

You will meet the Chief State Forester, Ranger of Nicolet Forest, Game Biologist and other Conservation Department men. You will tour Nicolet State Forest, a Cranberry Marsh, the Oneida Potato Farm and Trout Lake, where you will be given a Forest Fire Protection Demonstration. With the Trees For Tomorrow Forester. vou will participate in the use of Forest instruments and other techniques. Linen is furnished, but bring towels. Also rain coats and comfortable clothes and shoes, including a warm wrap. Cost, Camp \$18.00. Field trip transportation, \$1.50. Total cost, after reaching Camp, \$19.50. Reservations should be sent to me not later than April 10th, accompanied by a Five Dollar (\$5.00) deposit. Camp accommodates about 36 people. First come, first registered. Husbands and wives, adult daughters and sons are welcomed up to capacity.

Make this a part of your vacation.

Mrs. J. W. Dooley, **Conservation** Chairman 7724 West Rogers Street West Allis 14

SPRING MEETING WINNEBAGOLAND REGION **Garden Club of Wisconsin Calumet County Park**, **On Lake Winnebago**. West of Chilton

Tuesday, June 12, 1956

This should be a most interesting indoor and outdoor meeting. Watch for program in our next issue.

ADDITIONAL GARDEN CLUB **OFFICERS**

Ikebana Study Group, Milwaukee

Pres.: Mrs. Chester Thomas.

V. Pres.: Mrs. Norbert Gresbach.

Sec. & Treas.: Mrs. Herbert D. Hentzen.

Oshkosh Horticultural Society

Pres.: Mr. Charles Wiechering, Jr.

V. Pres.: Mr. Arthur Loabs.

Sec. & Treas.: Miss Dorothy Hendricks.

PRINCETON GARDEN CLUB JOINS

We were very happy to have the newly organized Princeton Garden Club join the Wisconsin State Horticultural Society and The Garden Club of Wisconsin in February. Mrs. M. Mosolf, one of the organizers, writes "We are proud to be associated with these organizations". The officers elected for 1956 are: Pres.: Mrs. Millerd Mosolf, Princeton; Vice Pres.: Mrs. G. G. Mueller, Princeton; Sec.-Treas.: Mrs. Luke Buchen, Princeton.

FOR YOUR GARDEN CLUB CALENDAR

September 11-12, 1956. Annual Convention Garden Club of Wisconsin at the Baptist Colony, Green Lake.

It's April

By Mrs. Robt. Holly, Waupaca

Some scurrying clouds—a flash of sun, Mother Nature is starting her fun.

A sprinkle of rain—some flakes of snow, Sudden gusts of wind, the dust will blow,

It's April.

A few brave flowers—the song of a bird,

The call of the wild to it's mate is heard.

A fishing urge-the desire to garden,

The rushing of water, an earth all sodden.

IT'S APRIL

Yes it's April, and to most of us gardeners, the busiest month of the year. However, we are so enthusiastic at this period, we don't mind the extra work.

May I suggest a few important things to do, in this most tempermental of months.....

First—if you haven't already done so, put your garden tools in order, oil and sharpen those needing it. Check your fertilizer needs, insecticides and plant foods. It is not too late to give your lawn some fertilizer or to seed bare spots.

Finish uncovering your beds and borders, not all at once though—Also finish cleaning and raking the garden and lawn. Use the suitable leaves and refuse for the compost pile. Much of the finer mulch may be left on the beds or borders and worked in. Fork that old compost heap over thoroughly, the bottom should be in fine shape for use.

Dig and work over the seed beds early in the month, letting them settle, for later planting. Fertilize both beds and borders thoroughly, and use compost to help rebuild the soil.

Straighten edges of beds and borders.

Divide and transplant "Mums," "Shasta daisies", fall asters and most other hardy perennials.

If you haven't planted your sweet

peas and candytuft, do so at once. Also put in larkspur, sweet alyssum, portulacea, etc. The first two mentioned, oftimes are planted in March.

Transplant trees and shrubs; cut back shrubs that appear dead, you may give them a new lease on life. Plant nursery stock as soon as it is received.

Do not roll your lawn when the ground is sodden, grass roots need to breathe.

Here's a bit of news: Dr. Emsweller, head of the section of ornamental plants of the U.S. Department of Agriculture, suggests planting lily bulbs early in the spring, provided you can secure plump firm bulbs. I think that it would be fun to try.

Good gardening to all of you.

MY GREEN AND WHITE GARDEN

By Mrs. Peter Portman, Wausau

My green and white garden has given me the greatest pleasure. It really was a garden within a garden, a bit of grass surrounded by evergreens.

There can be no doubt that of all the many types of gardens the most restful is the green garden. Essentially simple, it is composed largely of turf, tree and evergreen and depends for its effect upon the leaf and needle. Without detracting from the quiet, restful appearance of such plantings you have a refreshing note of white.

The whites should include scented blooms. Beginning with intimate groupings of snowdrops, narcissus, alyssum stock, petunia, white hosta, nicotiana. Last but not least are the lilies, our ROYAL SHOW-OFF: Madonna, Regaand Auratum, each a joy in itself.

Plantings such as these bring pleasurafter the work day is ended, for a this time of day most gardens are used and enjoyed.

Wisconsin Horticulture

On Moving Day For Flower Arrangements

By Mrs. G. L. Lincoln, Madison

It is amazing to hear "I cannot enter flower shows because I live 15 miles away" while, without realizing it, that same person is looking at arrangements which have been carried 100 miles in a car. Perhaps there are methods of arranging, packing and carrying finished arrangements which should be shared.

Mechanics

Mechanics are vital in moving. Chicken wire is a must, for tall branches fastened through many layers of wire, will stay where you placed them. Add a piece of styrofoam on top of the chicken wire, or fastened to a needlepoint if you are doing a dried arrangement.

Needlepoints can be anchored with three small balls of clay on the bottom. Fasten down with a twisting motion. Roll another ball of clay into a long string, and fasten around outside edge of holder. Use clay of first quality, such as "Posy Clay".

Packing is a Breeze!

Save 2 or 3 shallow wooden fruit lugs, removing covers. Ask your grocer for corrugated cardboard dividers like the ones that come around pint fruit jars the quart size is too high. Wooden boxes are important, for a cardboard box which has become damp during the long ride might disintegrate as you carry containers from car to building. Place cardboard dividers in wooden box.

The dividers are indispensable. Being cardboard, they can be bent back to make larger divisions. The shorter wood sides of the box permit downsweeping flowers and branches to droop over the edge. The sections of the divider not filled with containers can be used to hold accessories such as rocks, figurines, or small bases wrapped in kleenex or soft cloths. Such a box will hold 2 or 4 or more finished arrangements, depending on how far the flowers spread out. Pour out about 2 inches of water in tall containers before packing.

Low Containers

Low open bowls may sit on the floor of the car, but they should be deep enough so that after part of the water is poured out, there is still enough to cover the stems on the needlepoint. Two low container may be fitted into a fruit lug without dividers. Use cardboard between the edges to prevent chipping. Remove all rocks used to hide needlepoint, and pack separately, for the shifting of the car will cause them to chip container, or to loosen the clay.

Tall Containers

Extremely tall and heavy containers may be packed singly in a broad bottomed pail, but pack with the handle of pail upright, so that it can be carried that way, and be sure packing is tight enough to hold vase securely upright.

Take along extra leaves, scotch tape, dry clay, extra needlepoint, a few extra flowers, pitcher for water, scissor or sharp knife, fine wire to cover any small or large emergencies which might arise.

LANDSCAPE PLANTS THAT INVITE BIRDS

A new bulletin, circular 514, has just been issued by the University of Wisconsin Agricultural Extension Service, Madison, Wisconsin. It is entitled "Landscape Plants that invite Birds." The author is Professor G. W. Longenecker, Chief of the Landscape Section of the Department of Horticulture. The bulletin lists large trees, medium size trees, low growing trees, high growing shrubs, medium and small shrubs and vines which attract birds. Write to the mailing room, College of Agriculture, for it.

The Latest News About Lawn Grasses

E. B. Stiefvater, Asst. County Agent, Milwaukee

One of the factors involved in lawn preparation and maintenance is the selection of grass seed and grass seed mixtures. It was not long ago when the average home owner was unaware that there is a difference in grasses and considered all lawn seed to be the same.

Kentucky Bluegrass

There is no perfect grass for northern lawns, so let us take an inventory of what we have to work with. Of the Bluegrasses, the most popular is the Kentucky Bluegrass. It makes a beautiful, close-knit turf on sandy loam, loams and tolerates clay soils. In dry summers Kentucky Blue enters a dormant state but it revives when autumn rains return. It may dry out in hot summers if clipped too close. It is one of the first grasses in spring to become green and the last in autumn to turn brown. It is relatively disease resistant except for leaf spot disease. A new, very popular strain of Kentucky Bluegrass called Merion Bluegrass has entered the picture recently and is considered in many cases an improved form of Kentucky Bluegrass. It spreads more rapidly to form a turf, is more drought resistant and is more immune to leaf spot. It is susceptible, however, to a rust disease which often discolors the grass during moist, cool weather.

Alta Bluegrass is another new strain of Kentucky Bluegrass but its susceptibility to leaf spot has not made it an important grass.

Roughstalked Bluegrass is used in moist and shady areas. There are no stolons so these areas should be seeded annually.

Canada Blugrass is used in open, dry poor soil. It is a very thin looking grass and does not have too good an appearance and is seldom recommended.

Annual Bluegrass is actually a weed. It begins its growth in late summer and has short seed stalks which are often seen on mowed lawns. It is one of the first grasses to die in hot, dry weather. The Fescues

The Fescues are also a very important family of turf grasses. The Red Fescue, or Creeping Red Fescue, is probably the most popular. Gllihee and Rainier are horticultural varieties which are in common use and available here in Wisconsin. Trinity and F-47 are fairly new and still bear watching. Chewings Fescue, is really another strain of Red Fescue. Both form a moderately thick turf and are tolerant of sandy and other dry soils. They are relatively drought-resistant and shadetolerant and withstand considerable neglect. They do not like alkaline conditions and will tolerate fairly acid soils. The Fescues do not green up very early in spring but usually remain green late in the summer when the other grasses have become dormant. They will die if cut very close or over watered. The Fescues are very tough and hard to cut-especially with dull or poorly adjusted mowers. Meadow fescue, Tall fescue and their strains of Alta and Kentucky 31 fescue, make thin permanent turfs and are used in areas where there is tough, abnormal wear.

Of the **Rye grasses**, the Italian, which is also called **Annual Rye grass**, and the Perennial Domestics or Common are all used **only as temporary grasses** or nurse grasses. They need cool temperatures, grow fast and almost always die in hot, dry summers. **Perennial Rye lasts** a **year or two**.

Bent Grass

The Bent grasses are another populat turf grass and of these **Redtop or Herd's** grass is the most important. It is a temporary grass of creeping habit and does not seem to offer too much competition to the other permanent grasses. It is used most often as a nurse crop and is highly recommended as a companion for Merion Bluegrass at seeding time. Velvet bent is sometimes used in a permanent, fine-textured turf only in its pure state. This bent, along with Colonial, Creeping, Seaside, etc. are not recommended mainly because they demand too much time for most home owners. They become a matted turf, must be fertilized frequently, watered daily and require special mowers, rollers and fungicides.

Timothy is seldom recommended and then only for temporary lawns.

Zoysia and Bermudagrass both made a big splash in newspapers and magazines in 1954 and 1955. Zoysia japonica and U-3 Bermuda did not show well in the Whitnall Park grass plots here in Milwaukee and are not generally recommended for any area of Wisconsin. They brown out early in fall and are still brown in late spring. They are not entirely hardy, making it possible for the cool weather plants to invade. Information on grass seed mixtures is obtained in University of Wisconsin Extension Service Circular.

Any of the new strains should be used in the same amounts as the variety mentioned except Merion Bluegrass. This grass should have only temporary grasses in the mixture for nurse crops or a noncompetitive type such as Redtop.

VEGETABLE VARIETIES FOR OUR GARDENS

(Continued from March Issue)

POTATOES (MID-SEASON): Chippewa, Cherokee.

POTATOES (LATE): Katahdin, Russet Rural, Kennebec, Sebago (white or russet).

PUMPKIN (SUMMER "SQUASH"): Early Prolific Straightneck, Caserta, Dark Green Zucchini.

PUMPKIN (FALL "SQUASH"): Green Table Queen.

PUMPKIN (PIE): Small Sugar, Winter Luxury. RADISH: Cavalier*, Comet* Cherry Belle*, Early Scarlet Globe*, White Icicle*.

RHUBARB: McDonald, Canada Red.

RUTABAGA: Laurentian.

SALSIFY: Sandwich Island.

SPINACH: Long Standing Bloomsdale, King of Denmark, Giant Nobel, America (non-bolting). New Zealand "Spinach" for summer use.

SQUASH: Butetroup*, Green Gold*, Sweetmeat*, Golden Hubbard, Green Hubbard, Butternut, Golden Delicious.

SWEET CORN (EARLY): Improved Spancross, Seneca Dawn, Sun Up, Golden Rocket, North Star, Marcross, Our Choice.

SWEET CORN (SECOND EARLY): Improved Carmelcross, Gold Rush, Golden Beauty.

SWEET CORN (MAIN CROP): Golden Cross Bantam, Iochief, Wis. Golden 900, Wis. Golden 950.

TOMATOES (EARLY): Bounty or Victor, Sioux (orange-red, uniform ripening types).

TOMATOES (MID-SEASON): Stokesdale*, Urbana, Long-red.

TOMATOES (LATE): Wisconsin 55, Rutgers.

TOMATOES (YELLOW): Jubilee.

TURNIPS: Purple Top White Globe, Golden Ball, Shogoin for greens. ,

WATERMELLONS: New Hampshire Midget, Rhode Island Red, Dixie Queen, Winter Queen.

This is a list of varieties that have proved adopted to Wisconsin conditions. A variety not on this list can be substituted, though, if it has given good results in your locality in the past. Varieties in heavy type are especially recommended for freezing. Varieties marked with an asterisk(*) are especially recommended for the North-those parts of the state that lie north of a line running from St. Croix Falls to Marshfield to Marinette. These can also be used in the southern counties as first early varieties, but usually won't produce as much in total yield as some of the other varieties listed.

April, 1956

Dahlias In The Amateur Garden

By Dr. C. L. Fluke, U.W., Madison

Dahlias are a delight in the home garden. The growing of these flowers is a challenge and offers one of the finest hobbies for the retired business man or woman. They require considerable attention and a little know-how to secure good cutflower bloom, and for those who delight in growing blossoms for show, they offer unlimited possibilities.

Kinds of Dahlias

There are many kinds of dahlias, from small pompons, less than two inches across, to large blossoms of nine to twelve or more inches in width. The largest, eight or more inches are called "A" size; four to eight inches, "B" size; less than four inches, miniatures or poms. The petals vary in formation from formal to informal to semicactus to cactus, depending upon the placement and shape of the petals. A beginner should probably work towards perfect bloom rather than size, gradually enlarging into the giant showy types. The colors vary all the way from pure white to very dark reds, straight colors to variegated colors.

The dahlia overwinters, in the north, as roots which must be protected from freezing and drying out. Catalogues are available and "root auctions" are often held by dahlia societies where the plants may be purchased at reasonable costs.

Plants Like Moisture

The soil selected generally should be well manured and fertilized. The best site is one where water is available as dahlas like lots of moisture and will not do well in dry soil. A little shade does not interfere, but they will not compete if too close to large shrubs such as lilac, viburnum or honeysuckle. Some growers add a complete fertilizer to soil at planting and also make two or three side dressings during the growing season.

The roots should be planted approximately three feet apart in the row and about four feet between rows. This will depend somewhat on the variety; smaller ones can be planted closer and larger ones a little farther apart. If careful pruning, disbranching, and disbudding is followed, they can be planted somewhat closer.

Divide Root Clumps

Entire root clumps, the whole plant from the year before, should be carefully divided into two to six or more "roots". Failure to divide these clumps will give very poor results. A part of the stem should be attached to each root as the buds for new growth come from the stem and not from the root itself. Roots which have a break on the narrow neck which comes from the stem should be cut off. Very large roots, six or more inches long should probably have the apical half removed. This will help to stimulate new root development in the growing plant.

Planting should be delayed ordinarily until all danger of frost is over and it also is a good plan to plant at different times, although the novice may prefer to put all his roots out at the same time. Each root should be planted so that the stem is an inch or so under the surface. Some growers place the root on its side in a rather deep well-spaded hole and cover it with an inch of soil, adding more soil as the plant grows, until the original hole is filled.

We will attempt to bring you more information from time to time on summer culture, spraying, disbudding, watering, etc. In the meantime, why don't you start a dahlia garden? If you have questions on where to get roots, we will be glad to help you out.

One mistake of mankind is in attempting to compel other persons to believe and live just as we do.—DAC Ad-viser.

Maintaining a budget is the easiest way for folks to prove to themselves that both ends won't meet.—Menomonee Falls News.

Garden Club Reports

Ideas For Your Club Meetings

FROM THE AMHERST GARDEN CLUB

Some of the outstanding programs presented to the Amherst Garden Club, in 1955 were: "Fun With Birds" with colored movies by Mr. Charles Braman of Waupaca and Bible Plants in American Gardens, by Mrs. Robert Holly of Waupaca. We had an interesting talk on the "origin of the botanical names," by Mrs. Vincent Grosek, of our club.

Programs and projects planned for 1956 are: Bird study; study of trees, with movies and slides by Mrs. Seybold, our State Forester: a lesson in making corsages by Mrs. Inez Iverson, a member of our club. We are planning a tour of our local gardens, which is always enjoyed.

Mrs. Charlotte Lepak, Secretary

ANTIGO GARDEN CLUB NEWS

The Antigo Garden Club is planning several tours: inspecting a sugar bush; wild flowers; nature study; and trip to lilac gardens. For our programs we will have slides, several motion pictures of flowers, arrangements and gardens.

We are planning a silver tea and will have the Garden Club of Wisconsin Regional meeting here the later part of September. Our civic committee met with the Antigo Park Committee to outline plans for Springbrook Park, which will be started soon.

In 1955 we honored our past presidents; gave a skit by members entitled, "The Florist Shop." We had Mr. C. H. Braman of Waupaca lecture on "Birds and Flowers"; Mrs. C. McClean of Antigo gave a talk on "Owls" illustrated. Mr. Marvin Hansen, County Agent, gave a talk on "Fruit Tree Spraying". We went to Wausau for a tea and a tour of Wausau gardens and held our annual picnic and Christmas huncheon party.

Mrs. Jay Thompson, Secretary

FROM THE BARABOO GARDEN CLUB

The Baraboo Garden Club was pleased to have Mr. and Mrs. Harold Kruse, of Logansville present a talk on Wisconsin wild flowers with colored slides of flowers found on their farm.

The club has had a work shop on corsage making, conducted by Mrs. Don Townsend, from a local florist shop. We have planned a meeting on conservation, another for bird study with an early morning hike and breakfast and a tour of new homes and gardens in the Baraboo area. Mr. H. J. Rahmlow presented a program in January.

The club has undertaken the project of providing funds for landscaping the grounds of new schools in the city. The landscaping of the West School is completed, the East School will be done this year.

By Mrs. Maurice S. Jones, Sec.

BERLIN GARDEN CLUB REPORT

The Home Garden Club of Berlin held one of its most delightful meetings last August, a "Progressive Tour". We visited six homes and at each viewed a table setting for a specific occasion.

At the first home we were given a paper container and told that there would be something at each stop to pick up so we would have a picnic lunch to enjoy at the last home.

The first was a "Buffet Supper Table" where we picked up sandwiches. Second, "An Easter Luncheon for the Girls" where we added deviled eggs to the picnic lunch. Third, "An August Breakfast" which supplied cookies wrapped individually. Next. "Sunday Night Supper" with an attractive plate of raw appetizers. The fifth was "A Picnic Supper on the Porch" where we added more dessert in the form of a wrapped brownie.

The last stop was at a home on the

April, 1956

Fox River which flows through Berlin. Here the picnic lunch was enjoyed on the lawn with punch being served. Each hostess had a lovely centerpeice on her table as well as appropriate floral decorations throughout her home.

In the spring, the club conducted a plant sale which is a very good way to add to the treasury. Every gardener has some surplus plants in the garden and very often these are just what someone else is looking for.

By Mrs. A. D. Huebner, Secretary

CHILTON GARDEN CLUB NEWS

The Chilton Garden Club was organized in 1954 and we have had some very interesting meetings. The following were some of our outstanding programs: Mr. W. C. Burgdorf of Kiel gave a program on bees showing a swarm and a skep. Mr. Elmer Whitby of Chilton, gave a talk on vegetable gardening and on growing strawberries. Mr. Orrin Meyer, our County Agent, showed us colored movies and talked on practical gardening.

We had a number of guests present when our State President, Mrs. A. J. Wiesender of Berlin gave an illustrated talk on her trip to Greece and Bavaria.

Mrs. Oscar Schaubs of Chilton gave a talk on growing gladiolus. Just before Christmas, members of the club put on a large display of seasonal centerpieces at the State Bank, Chilton, which created a great deal of interest.

In 1956 we will grow flowers, bearing in mind the display at the Calumet County Fair. We will also have a flower display at the State Bank when members of the 4-H group will dispense free milk during Dairy Week in June. We also plan a flower show this summer.

A major project is the long-range planting of flowers and trees on the grounds of our newly built hospital.

A new innovation of interest is our Question Box which brings out considerable discussion at the meetings.

By Mrs. Oscar Schaubs, Secretary

FROM THE PLYMOUTH GARDEN CLUB

During the summer and fall of 1955 the Plymouth Garden Club had a weekly 15 minute program over their local radio station, WPLY. This series proved so popular that they have been asked to repeat it this year.

Club members take turns discussing subjects pertaining to lawns, trees, fertilizers, pest control, etc. Those who grow special plants such as African violets, Tuberous Begonias, Cactus and Orchids discussed these hobbies.

This year we plan to have several talks on birds, attracting them, their homes and migrations.

Our club is planning to do the landscaping of a new park beside the Mill Pond. We have the trees selected and are waiting for the final surveying to be done so that we can make this a real beauty spot.

Each year we have a hobby section in connection with the Flower Show which has proven very popular. Last year the arrangements were judged by the merit system, with constructive comments by the judges so the show was of real educational value.

From June until September our meetings are held at some beauty spot in the form of picnics. Last July the Kiel Garden Club joined us at a nearby lake and this year we plan another joint meeting.

By Mrs. L. O. Stair, Publicity Chm.

PEAT IS EXCELLENT MULCHING MATERIAL

Peat is one of our best mulching materials because it lowers soil temperatures.

Tests at Kansas State College indicated that where manure mulches were used the temperature was lowered only 4 to 8 degrees, but peat reduced temperatures as much as 10 degrees. Ground corn cobs did not lower the temperature of the soil because the natural sugars in the cobs are food for fermenting bacteria, which raise temperatures. Peat moss does not ferment. How To Prepare The Soil For

Our Garden Flowers

By Prof. C. J. Chapman Dept. of Soils, U.W., Madison

A rich mellow fertile soil balanced with plant food nutrients is essential to productive gardens. Just what do we mean by a fertile soil? Well, my idea of a good garden soil is one supplied with an abundance of all of the plant food elements required by growing crops and as well abundantly supplied with humus and organic matter.

This matter of tilth or physical condition of the soil is of great importance especially in the preparation of a seed bed and subsequent cultivation of the soil. Organic matter of course helps to loosen and mellow a soil. Not only is it a pleasure to work a soil that is well supplied with organic matter—one that spades up loose and crumbly, but hoeing and cultivation of soils in good tilth or physical condition adds not only to the pleasure, but makes for more efficient production of vegetables or flowers.

Then, too, there is the factor of water holding capacity. A soil abundantly supplied with humus and organic matter will store and hold more water than a soil deficient in organic matter.

I suppose we get more letters here at the College asking how to improve the tilth or physical condition of a soil than we do relative to plant food requirements. Letters such as this, "My garden soil works up lumpy and hard, what can I do to loosen up this soil and make it more mellow and fryable?"

We invariably tell these gardeners to get some peat moss or composite material. In most parts of the states there are areas where a trucker could dig and haul you loads of well decomposed peat. But to really do a good job this peat should be applied liberally, that is 3 to 4 inches on the surface of the soil befor spading. And of course, this operation must be repeated every year or two.

Results From Peat

Over a period of thirty years, I have conscientiously added peat to my soil most every year. I applied a layer of 3to 4 inches on top of my perennial row last fall. The soil never worked so beautifully as it did this year. Easy to cultivate, and more than anything else it was literally a sponge for absorbing and holding moisture.

How Deep Shall We Dig

This brings up the matter of depth of cultivation. We of course like a deep well prepared seed bed for garden truck. A deeply prepared seed bed will hold more water, but this is a point to be considered in the plowing or spading of any piece of land whether it be farm or garden. Care must be exercised that the plow or spade does not bring up too much subsoil any one year. Increasing the depth of cultivation should be a gradual process. This clay sub-soil of course, thrown up on the surface, not only makes it very difficult to work in the preparation of the seed bed, but a lot of sub-soil clay just does not contain the plant food that is needed for shallow rooted vegetables. If it is possible to spade to a depth of 7 inches without bringing up sub soil, all well and good, but if you plan to eventually increase the depth of cultivation to 8 or 9 inches, I suggest doing so over a period of several years, adding each year some peat or well decomposed leaf mold or composite organic matter and working this into the entire body of the soil from top to bottom.

Editors Note

Prof. C. J. Chapman of the Soils Department, University of Wis., has had a most beautiful garden, which may be seen as one drives along University Ave. on Madison's west side.

April, 1956

1956 Spray Schedule

Plum, Cherry and Peach Pest Control

Stone fruit pest control can be improved by keeping the trees pruned, and keeping the orchard tidy.

Peach and plum mummies (the rotted and dried up fruits) should be collected and buried to reduce brown rot.

If black knot is prevalent on plums, prune out all infested branches and burn. When to spray:

1. Dormant, before growth starts in spring. or aphids and mites.

Use Elgetol or Krenite, 2 tblsp. per 1 gal. water.

2. Petal fall. When 90% of blossom petals have fallen. For Brown rot and curculio.

Use captan, 50% wettable powder 2 tblsp. or ferbam 2 tblsp. plus methoxychlor wettable powder 2 tblsp.

3. Ten days after petal fall. For Brown rot.

Use captan 2 tblsp. or ferbam 2 tblsp. per 1 gal. water.

4. Continue sprays at 10-14 day intervals until fruit begins to ripen. For Brown rot.

Use captan 2 tblsp. or ferbam 2 tblsp. per 1 gal. water.

Notes:

1. If curculio is a problem (the insect causes crescent-shaped punctures on the fruit), dieldrin is the most effective insecticide (2 tblsp. 50% wettable powder) per gallon of water.

2. If brown rot has been a problem (generally fruit rots before ripening), spray with captan, ferbam, or sulfur in full bloom. Sulfur is the most effective fungicide against brown rot. (3 tblsp. wettable sulfur) per gallon water.

3. If the first or dormant spray was not applied, aphids may be prevalent.

Use malathion (2 tblsp. 50% emulsion) per 1 gal. water or nicotine sulfite (2 teasp. plus 5 teasp. dissolved soap) per 1 gal. water when the first aphids are noticed.

4. Cherries should be sprayed right af-

ter harvest with ferbam or captan (2 tblsp. per gal. of water) to prevent cherry leaf spot which causes defoliation of the trees.

5. Peach tree borers can be reduced by painting the trunks and lower limbs several times during the summer with DDT (6-8 tblsp. 50% wettable powder per gal. water).

Pears

Pear scab may be a problem in some areas. The fungicides used in the apple spray schedule are effective in controlling most pear diseases.

The two main insects that may attract pears are the pear blister mite or pear psylla. One of the phosphate materials such as parathion is effective for their control.

Grape Pest Control

Prune grapes ever year. Do not use 24D or 245T near grape vines.

When to spray:

1. When new shoots are 6-8" long. For Black rot. Use Ferbam, 2 tblsp. per 1 gal. water.

2. Just before blossoms open. For Black rot, Leaf hopper and Rose chafer. Use ferbam, 2 tblsp., plus 2 tblsp. DDT 50% wettable powder, or methoxychlor, 2 tblsp., 50% wettable powder per 1 gal. water.

3. Just after blossoms have fallen. For mildew, Berry moth, Rose chafer and Leaf hopper. Use bordeaux mixture of 45-53% fixed copper material—1 tblsp., plus hydrated lime, 3½ tblsp., plus methoxychlor, 2 tblsp. per 1 gal. water.

4. Spray for mildew just when berries touch or are about the size of mature peas.

Use bordeau mixture. If prepared bordeaux spray powders are used, follow directions on package.

Notes: Fixed copper materials, 45-53%, are sold under such trade names as Copper A, COCS, Tenn. tribasic copper sulfate, Triangle Brand Basic Copper Sulfate.



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DISTRICT CHAIRMEN: Newton Boggs, Viroqua; Joseph Dieser, Superior; Emerson Grebel, Beaver Dam; Robert Knutson, Ladysmith; Len. Otto, Forest Junction; E. Schroeder, Marshfield; Don Williams, Beloit. Exec. Committee Members: Wm. Judd, Stoughton; C. Meyer, Appleton; Clarence Pfluger, DePere.

News And Views About Beekeeping

Our Wisconsin honey queen, Miss Carol Lehman, who is a student at Stout in Menomonie, appeared at the National Convention in Biloxi, Mississippi.

Wisconsin's large 1955 honey crop was not all marketed before the first of the year. Buyers report considerable honey available in February. The retail market seemed to hold up quite well—super markets are doing a fine job of selling to the consumer.

During March there were reports of a shortage of stores in overwintering colonies and some winter loss.

April is an unpredictable month for beekeepers. If we have warm, sunny, weather, plenty of flying days, and bees are able to bring pollen and some nectar, brood rearing will be stimulated and colonies will build up rapidly. That means strong colonies for the dandelion honey flow in May. On the other hand, cold, rainy weather during April will mean a delay in brood rearing and weaker colonies in May. Watch your pollen supply this month. Without pollen a colony cannot build up its population in time for the honey flow.

All beekeepers should learn to recognize A.F.B. if they are to remain in business and make a profit. We cannot depend entirely upon our inspectors to locate disease for us and keep it in check -there just aren't enough inspectors nor enough money available to hire more. It will pay every experienced beekeeper to teach his neighbor beekeepers how to recognize A.F.B.

Danger of starvation is not yet over. As brood rearing increases so does consumption of honey. Inspect colonies frequently and give them **more sugar syrup** than you think they will need. The most inadquate feeder we have ever seen is the entrance feed and the beekeeper uses a pint or quart jar for feeding. Remember a strong colony can consume as much as two pounds of syrup per day.

Moving Bees To Orchards

Due to the danger of poisoning from arsenate of lead used in the "pink" spray when some blossoms are open and the insecticide is sprayed on to the pollen, it is well not to bring bees to an orchard until the trees are in almost full bloom. Be sure to remove them just before the "calyx spray" is applied.

Package Bees

Install package bees by shaking the bees from the package onto the bottom of the hive and providing at least three or four combs of honey or sugar syrup and one or more combs of pollen if possible. Losses often occur if bees cannot cluster onto food immediately, in case of cold weather. Sprinkling syrup into the combs is much better than giving syrup in a feeder.

Watch out for drifting. It's best not to locate package bees beside strong colonies—the new bees may follow the strong flight from an established colony to their hives—thereby weakening the package colony.

How We Control Swarming

By Ivan Whiting, Roscoe, Illinois

Nearly all of my colonies are wintered in three brood chambers. My general method of swarm control is reversing, but I also requeen in May to control swarming.

In early May the bees and the brood in most colonies will be in the top story. When this story is well filled with brood, it is reversed with the middle story. The next move in about two weeks is to place the bottom story on top. Thereafter, until the bees give up swarming for the season, the top and bottom stories are reversed around the middle.

My work is not by a "rule of thumb" but rather by the principle that the queen prefers to work up with the heat rather than down and immediately occupies empty space above a full brood chamber.

Supering

Empty supers should be put on at least a week before a main honey flow. I use queen excluders and place the supers next to the brood nest, supering under those containing honey until swarming is over.

Bees have 2 instincts, (1) getting honey for a honey crop and, (2) swarming. Swarming is caused by a congestion or crowding of bees in the brood chamber. Reversing the brood chambers relieves the crowding, as does putting on supers where the bees will occupy them. Often times when the colony is busy storing honey further reversing is unnecessary.

I always begin manipulations by raising the top body and looking under it for queen cells. If none are found I may or may not reverse, depending on colony population. Should open queen cells be found, I destroy them, reverse the bodies, and give more supers. Should sealed queen cells be found, I remove the brood from the brood chamber and make a "shook swarm." The beekeeper's objective is to prevent swarming by preventing congestion that is by keeping the queen laying eggs and the bees busy storing honey.

Dividing Colonies

I also prevent swarming by dividing my strongest colonies in May, first with queen excluders to locate the queen, then double screens 5 or more days later, giving a young queen to the queenless body of brood. (I buy about 25% as many queens as I have colonies.)

After the honey flow starts I unite the two halves or give the half with the new queen to some colony needing to be requeened. The colony with the young queen will seldom swarm. But don't forget to super!

Reason For Failure

I believe the chief reason for failure to prevent swarming is lack of a knowledge of bee behavior. If you don't know what to do, how are you going to know when to do it. Beekeepers seek a magic "rule of thumb" to work by. Commercial beekeepers lose swarms because they can't afford to spend enough time to prevent swarming. Then there are the great many beekeepers who just own bees, and neglect them.

HOW I CONTROL SWARMING By Newton Boggs, Viroqua

I use 2 and 3 brood chambers in colony management and start reversing for swarm control about May 15th and keep on until the time of the honey flow.

I also take brood and bees from the strongest colonies and use it for making new colonies. I take these to another yard and give a queen shipped in from the south. I have queens already booked for May 15th delivery this year and will use them for this increase to overcome winter losses. When I take bees and two frames of brood away from strong colonies it reduces the "swarming fever" and there is often no need to reverse them until later and sometimes not at all. I also use brood from the strongest to add to the weaker colonies which helps in control of swarming.

So far this year we have had about a 10% winter loss—some from Nosema and a few from the bees not being able to get at the honey because it was so cold in December and January, for such a long period.

SWARM CONTROL By M. Osborne, Beloit

We operate our bees two brood chambers and a shallow super. These are reversed twice during the swarming season.

We begin swarm control during fruit bloom in early May.

As soon as weather permits, all colonies are inspected for disease, stores and strength. All weak colonies are marked and during the first reversing of the strong colonies, the weak ones are given frames of brood with bees from the extra strong ones. When the upper brood chamber is full of brood, the brood chambers are again reversed.

Timing is very important in control of swarming. If proper practices are followed the year around and it is done at the right time, swarming is pretty well under control.

DISTRICT BEEKEEPERS MEETINGS

April 26, (Thursday) District Meeting; Court Room, Court House, Barron, Wisconsin. Begins at 10:00 A.M.

April 27, (Friday) Northern District Meeting at the High School in Poplar, Wis. at 7:30 P.M.

April 24—at 7:30 P.M. Milwaukee County, Amateur Beekeepers Meeting at County Agent's Office, 9035-A Watertown Plank Road, Milwaukee. Speakers John F. Long and H. J. Rahmlow, Madison.

Hey ! ! We Did Not Intend to Miss Greeting You Last Month. It Was a Slipup During the Rush to Get Things Moving!				
Let us serve ye	ou this year with			
PACKAGE BEES				
2 1-24 25-99 100 or more	b. with regular queen 3 lb. with regular queen \$4.00 each \$5.00 each 3.75 " 4.75 " 3.50 " 4.50 "			
	Queens add 25c each			
	PRODUCE"			
	o or more main lines at night.			
"SATISFACTION GUARANTEED"				
ROSSMAN APIARIES				
P.O. BOX 133	MOULTRIE, GEORGIA			

HIVE SPOTTING MAY MEAN STARVATION

If you see spotting around the entrance of the colony of bees it is of course an indication that something is wrong. It can mean several things. At this time of year it is well to check such colonies. In February we found several colonies showing spotting which proved to be indications of partial starvation. The colony was clustered in such a position that the bees on one side of the cluster had stores and on the other side did not. During a long period of cold weather, evidently the bees on the side without food began to starve and just before they died, spotted around the entrance.

It is well to check through any colony showing an unusual condition on the first warm day possible. By warm day we do not mean a summer day, but with temperatures above 35 degrees and no wind. If you think that the colony is infected with nosema, you might feed Fumidil.

APIARY INSPECTION REPORT

The 1955 apiary inspection report is now available from the office of Mr. John Long, 315 N. Carroll St., Madison, Wisconsin.

The report indicates that in the state, 2,726 active apiaries were inspected of which 259 showed some foul brood. There were 68 apiaries with some immovable frames. There were 976 inactive apiaries and 829 colonies were taken off the list.

Colonies Inspected

A total of 33,604 colonies were inspected during the year and 860 colonies of disease (A.F.B.) were found. A total of 164 colonies had immovable frames.

Winnebago County ranked first in the number of colonies inspected—2,015, with 11 colonies of A.F.B.

Brown County was second with 1,495 inspected. Pierce County was third with 1,301 and Clark County was fourth with 1,259 and Taylor County fifth with 1,221. No A.F.B. was found in Taylor County.

Some counties need more inspection, as indicated by the number of colonies of A.F.B. found. There were 967 colonies inspected in LaFayette County, with 66 cases of A.F.B. and 869 colonies inspected in Marathon County with 64 cases of disease.

AMERICAN BEEKEEPING

FEDERATION ELECTS OFFICERS AT IT'S ANNUAL CONVENTION IN

BILOXI, MISSISSIPPI, JANUARY 23-26

The American Beekeeping Federation elected the following officers: President: Mr. Joaquin Watkins of Fruita, Colorado; Vice-President: Mr. Ray R. Reed of Los Angeles, California: Sec.-Treas.: Mr. Robert Banker of Cannon Falls, Minnesota.

The chairman of the Research Committee on beekeeping reported that Research funds of \$75,000 have been received. Of this, \$25,000 will be for research on equipment at the Central States Laboratory, Madison, Wisconsin, and one half at the laboratory at Tuc-Arizona. The remaining \$50,000 son will be used at field stations under the direction of Mr. James I. Hambleton for work on pollination, bee breeding, management studies, and investigations on bee diseases.

BEES FOR SALE

Until May 1, 200 colonies ready for the honey flow. All equipment—good extracting unit, etc. Write Wis. Horticulture, Horticulture Bldg., University of Wisconsin, Madison 6, Wisconsin.

HONEY WANTED

WANTED honey in all grades. Highest prices paid. Schultz Honey Farms, Ripon, Wisconsin.



Honey Containers

60 lb. cans, 5 and 10 lb. pails. Also 5 lb., 3 lb., 2 lb. and 8 oz. glass jars. We can make immediate shipment.

Complete line of bee supplies. (also used equipment).

We are always in the market for Honey.

We will buy your beeswax or trade for supplies.

Write for complete price list.



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The Finest Sections Made from Select Basswood Grown in the Heart of the Basswood Country

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How We Grow McIntosh Annual Convention Paper

By Ben Drew, Massachusetts

Eastern Massachusetts from the Atlantic Ocean to a point about fifty miles back from the sea, is a heavily glaciated land with many stones, many large boulders,, quite a few out-crops of ledge, and small fields, surrounded by stone walls. Most of our fields were originally not more than five acres in size. The soil type and drainage varies from lot to lot. Most of the fruit land is rather undulating, which means that light equipment cannot be used. Our best soils have underlying clay, with six to eight inches of good loam on the surface. Many of the stones in our land are of granite, which means that we have a rather acid soil, and also that we derive a high mineral content, particularly the potash from the feldspar in the granite stones.

Subject to these limitations, we do grow excellent McIntosh apples of good flavor, color and texture. Most of the orchards which are still in business use speed or other automatic spraying equipment. Most of us have turned to the larger rubber-tired tractors, because the rough and stoney soil has kept maintenance costs on crawler tractors high.

Pest Control

Our spray programs are concerned with the following major pests: Apple Scab, Cedar Rust, Pinpoint Scab and occasionally Sooty-blotch. We have many insects to fight, as a result of the many nearby and abandoned orchards, and pasture trees which are a hangover from the more agricultural days of Massachusetts and from the hard times which our industry experienced in 1949, 50 and 51, when many of the marginal and general farmers went out of the apple business. The insects which are most serious pests are budmoth, the apple maggot, which we have to fight until very late in August, and even early September. Mites, in all colors, are universal and we have our share.

In New England our only processing outlets are for cider and vinegar at salvage prices. Our land areas are not large enough to be really big producers. We must, therefore, extract our living from a relatively small production and sell our apples for the greatest possible net.

Marketing

My own operation is somewhat unique in that I am independent of any one sales agent, and in the fact that my production is diversified among peaches, pears, and grapes, as well as about a dozen varieties of apples. We are picking fruit from the last week of July until the middle of October. We sell our packed fruit through commission men in the Boston market and the J. P. Sullivan Companly Sales Agency, but our best net usually comes from our direct sales either at our storage or delivered to nearby stores.

The best outlet we have, both as to volume and price, is our own retail sales stand. Over a period of years we have developed a retail business, located seven miles from the nearest center of population, which has taken an increased amount of our total production each year. To this retail fruit stand we have added a small clean cider mill, where we produce a quality cider and sell at a premium price. This latter has proven to be an additional attraction and distinguishes our fruit stand from the many that are in my area.

At our stand we sell everything prepackaged in paper bags, tills and halfbushel baskets. We carry a full range from our fanciest fruit down to our small sizes and a good utility grade. I believe that the disposal of our utility apples at a fair price is one of the major benefits which we receive from our stand. These apples are at all times kept fresh and fairly priced, but the margin in these particular sales is far better than we could realize in the general mark it.

We have our own cold storage rooms, as do many growers in our area. We pack our apples all through the fall and winter and can generally offer fresh packed fruit to all our customers.

In summing up the economic aspects of our particular operation, I might say that we operate a fairly complete fruit business on a relatively small scale and stretch a 50,000 bushel crop to provide jobs for seven full time employees, and occasionally a pay check for the owner.

AVOID INSECTICIDE RESIDUES ON FRUIT AND VEGETABLE CROPS

Based upon the much commented-upon "Miller bill," Public Law No. 518, the Food and Drug Administration warns that "Food shipments bearing residues of pesticide chemicals in excess of established tolerances will be contraband and subject to seizure as adulterated."

A circular by Prof. E. H. Fisher on this subject may be obtained by writing the Department of Entomology, College of Agriculture, University of Wisconsin, Madison, Wisconsin.

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To Thin Apples With Chemicals Recommendations From Maryland, Massachusetts and New York

The following recommendations for thinning apples, was condensed and rearranged by Professor J. D. Winter, of Minnesota for his Newsletter to Minnesota Fruit Growers. Recommendations for Maryland were prepared by A. H. Thompson and B. L. Rogers of the Maryland Stations; those for the other two states were prepared by F. W. Southwick of the Univer. of Mass. and by M. B. Hoffman of Cornell Univ., respectively.

Time of application—In general, experiments in Maryland have shown that more consistent and better thinning can be obtained when sprays are applied in the period from 2 to 3 weeks after full bloom. Earlier sprays on fall and winter varieties have generally not thinned enough, and have resulted in very little off-year blossoming. Later sprays (later than 3 weeks after full bloom) have produced either no thinning at all, or have arrested growth on a large number of fruits which remain on the trees for the remainder of the season.

On Early Varieties

On summer varieties, earlier spraying is necessary to achieve sufficient thinning to avoid premature ripening of the fruit, and to avoid the fruit splitting which is associated with maturity. On all summer varieties studied, sprays applied 8 to 12 days after full bloom have given a considerable amount of thinning ranging from underthinned to just about the full amount desired; timing the spray before 8 days or later than 12 days after full bloom has produced unsatisfactory results on summer varieties.

Massachusetts: At the moment we favor late bloom or calyx applications of chemial thinners (the material depending on the variety) on the early, heavy setting biennial varieties which overset in virtually all years when they bloom heavily. For the mid-season and late varieties which require cross-pollination for fruitfulness, such as McIntosh, our growers prefer to wait a week or two after petal fall, when the need for thinning may be determined more accurately, before applying a thinning material.

New York: Early apples must be spray thinned at petal fall or soon thereafter.

Materials and concentrations - After six seasons' experience with the hormone thinning sprays in Maryland, certain materials and methods are emerging as standard practice, while other procedures are still very much in the experimental stage. Two hormone compounds for thinning purposes are available to apple growers, naphthalene acetic acid (NAAcid) and naphthalene acetamide (NAAmide). Both materials appear to have a place in the apple thinning picture at the present time. NAAcid was the first compound to be used, and still remains the standard in Maryland for certain varieties as indicated below. NAAmide on the other hand, has only been used the (Continued on Page 288)

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last three years. This material is considerably milder in action than NAAcid, and is better adapted to certain varieties, particularly summer varieties.

Specific concentrations for common varieties are as follows:

Golden Delicious: NAAcid @ 30 ppm. With trees in something less than optimum vigor, a concentration of 20 ppm. is recommended.

Red Delicious: NAAcid @ 10-20 ppm. Delicious trees in high vigor standing in close proximity to good pollinizers in the orchard may require as much as 20 ppm; 10 to 15 ppm, however, will be adequate for most Delicious plantings of this variety, for in this past season Delicious trees produced apples of all sizes in response to applications of this compound. NAAmide sprays have always produced a few stunted fruits on Delicious trees, which never dropped from the tree, but in 1955, a considerable portion of the crop was so affected. It is recommended, therefore, that NAAcid only be used on Delicious trees.

Jonathan: NAAmide @ 50 ppm. NAAcid has generally proved to be somewhat harder on the foliage, but can be and is used on vigorous trees at 10-15 ppm.

Duchess, Wealthy: NAAmide @ 50-75 ppm, sprayed about 10 days after full bloom. Good vigorous trees of the varieties may not be thinned enough with this treatment, but a considerable proportion of the thinning job will be taken care of by the sprays.

In Massachusetts naphthaleneacetic acid materials (NAA) as sprays and dusts and naphthaleneacetamide (NAAmide) are the only materials now being used to thin apples chemically. At the present time NAAmide is the most popular of these materials for most varieties.

The chief reasons for the greater popularity of NAAmide are:

1. It generally causes little or no foliage injury at concentrations up to 75 ppm regardless of whether it is applied in bloom or later. Even repeat applications of the material can be made with little chance of apparent foliage injury (Early McIntosh was an exception in 1955 since several cases of foliage injury occurred when NAAmide was applied at bloom or petal fall.)

2. NAAmide is generally much less apt to over thin than NAA materials under a wide variety of environmental conditions. However, the mildness of the thinning effect of NAAmide often results in the underthinning of many heavy setting varieties. Also, Golden Delicious heavily cross-pollinated may not be thinned at all with NAAmide so that NAA compounds are often preferred for chemically thinning this variety.

Naphthaleneacetamide (a m i d e) and naphthaleneacetic acid (NAA) are the two materials used most extensively in New York State. There are a few growers who use a DN bloom spray on Wealthy apples and peaches when dry weather prevails. Amide is the more popular of the two growth regulators. This is because it is more moderate in its thinning effects, resulting in less over thinning than frequently occurs with NAA. The amide has proven well adapted to summer apples. Furthermore, the amide does not

(Concluded on Page 290)

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cause the foliage injury that commonly follows early sprays of NAA.

Why tree response may differ — The same variety of apple does not necessarily respond the same way in different orchards; indeed, response often varies widely. Among the factors responsible for this variable response are tree vigor, pollination, and thoroughness of the spray application. (Maryland).

Effect of tree vigor—The more vigorous the tree, the greater the margin of safety when using thinning chemicals. Weak trees, on the other hand, are easy to thin with the spray, but rarely do weak trees "come back" with an off-year bloom following chemical thinning. (Maryland).

Proximity to pollinizers—Proximity to pollinizers is most important in the use of chemical thinners for most apple varieties. If sufficient pollinizers are available in the orchard, fruit set is usually reliable, uniform, and heavy with a given bloom. Such conditions are ideal for chemical thinning, and in such a situation orchardists can proceed with confidence. In orchards containing few pollinizers, risks in the use of chemical thinning are correspondingly greater. (Maryland).

Effect of gallonage used-Gallonage of spray used per tree is most important. Clusters which are not sprayed will not be thinned. Sloppy or otherwise inadequate spray coverage can result only in inadequate thinning. The thinning spray must be a thorough one, particularly on vigorous wood in the top half of the tree where fruit set is likely to be heaviest. Growers trying chemical thinning sprays for the first time often tend to limit the amount of material applied so as to avoid overthinning. Such a procedure usually fails to thin at all. First trials with chemical thinning in any orchard should limit the number of trees sprayed rather than the gallonage per tree, and whatever trees are selected for the test should be thoroughly sprayed. (Maryland).

Effect of weather conditions — Results or the amount of thinning may vary considerably from year to year or orchard to orchard. These variations may be associated, at least in part, with the amount of hormone absorbed by the foliage. It has often been observed that thinning is heavier with all materials in years when cloudy, rainy weather predominates during the prebloom or post bloom period. This is true even though favorable weather accompanies the bloom and an excessive set occurs.

Compatibility with other spray materials — While the hormones are compatible with many organic insecticides, and fungicides, growers are advised that the thinning spray should be applied as a separate spray, and not in combination with early cover sprays. (Maryland).

Do not spray young trees — Young trees should not be sprayed with chemical thinning materials until they reach mature bearing characteristics. For most varieties, this means that until they reach an age of 13 to 15 years, they should not be sprayed. The only exception to this is the Golden Delicious variety. Golden Delicious has been successfully sprayed at 11 years of age. (Maryland).

Present Status

The amount of chemical thinning in apple orchards of New York State varies with the variety and the season. It is common practice with heavy setting varieties such as Yellow Transparent, Duchess, Wealthy, Macoun, Baldwin and Golden Delicious. These varieties usually set excessive amounts of fruit and spray thinning has proven relatively safe for them. When a heavy bloom and favorable bloom weather occurs other varieties including Delicious, Cortland, McIntosh, R. I. Greening, Northern Spy and Rome Beauty are spray thinned. Such conditions occurred in 1955 and more were spray thinned than in any previous yea".

It is all right to be contented with what we have—but never with what we are.—Iron County Miner.

It's funny how much easier hard wors seems when you really enjoy doing it. -Walworth Times.



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BULLETIN AVAILABLE ON FIRE BLIGHT

Circular 517, entitled, Apple and Pear Fire Blight Disease is now available by writing the University of Wisconsin Extension Service, College of Agriculture. Madison.

The bulletin gives the causes of fire blight, orchard management, insects and their influence on blight, and methods of control. Discussing the use of antibiotic sprays the bulletin states, "In most of these spray tests a 50 or 100 p.p.m. (parts per million) strength streptomycin spray was used, and three applications were normally made during the bloom period. Cover sprays of streptomycin have also been tried in addition to the blossom applications.

Results from these tests in terms of fire blight control range from outstanding to little or no control.



May in the

Orchard and Berry Patch

With George Klingbeil



FRUIT TREE NUTRITION

Fruit tree nutrition experiments conducted in several eastern states, primarily with the McIntosh variety have given results that should be of interest to Wisconsin growers.

A summary of much of the work indicates that continued application of only nitrogen-carrying fertilizers will eventually lead to an unbalanced nutrition and poorly colored, low quality fruit. Fruit trees have need for other elements beside nitrogen. Poorest colored, less firm fruit is producd by trees high in nitrogen and low in potassium. Fruit of high color and greater firmness is produced by trees with medium levels of nitrogen and high levels of potassium. As growers raise the level of potassium applications of high magnesium lime may be needed to prevent potassium-induced magnesium deficiency. (Lime should not be applied, however, in areas where soil pH is already high.)

The potassium requirements of apple trees can be met by applying adequate amounts of potassium fertilizers or hay mulch. Hay mulch is valuable because of the balance of nutrients contained in the hay and for the beneficial effects of organic decomposition products of the hay on availability of phosphorus.

It has been reported by several research workers that a mature fruit tree bearing 25 bushels of fruit requires annually about 4 pounds nitrogen, 3.5 pounds potassium, and about 0.5 pound phosphorus.

The history and present condition of many Wisconsin orchards indicates that a change in the fertilizer program would be helpful.

CHEMICAL THINNING OF APPLES

Many commercial apple growers thin some varieties by means of chemicals. This is a brief summary of reports from various stations reporting on chemical thinning.

Most common materials being used are napthaleneacetic acid (NAA) and napthaleneacetamide (NAAmide). Practically no one is using the caustic dinitro materials for thinning during bloom. In Wisconsin the most widely used material is NAA. NAAmide has a wide range of tolerance, seems to cause less foliage injury, and may result in underthinning more often than overthinning.

Timing is important. Generally best results are reported on early ripening biennial bearers when thinning is done about petal fall or calyx time. Midseason and late ripening varieties respond best to a later thinning spray, generally a week or two after petal fall.

Experience indicates that thinning should not be done until adequate cross pollination is assured.

Several other factors should be considered: (1) tree vigor, vigorous trees are harder to thin and thus offer a greater margin of safety. (2) Pollination and factors effecting it, if many pollinizing varieties are in the orchard and weather favors pollination apple set is generally reliable. (3) Spray coverage, thorough coverage is necessary to do a good job. (4) Weather conditions, thinning is often heavier when weather is cloudy and rainy.

Storage Scald

Storage scald was quite common in a number of mechanically refrigerated storages in Wisconsin during the 1955-56 storage season. Scald was most commonly experienced on Cortlands and Mc-Intosh and in storages that were in most cases overloaded. No scald was noticed in common or air cooled storages.

Most generally storage scald first appears on the green or unblushed side of the apple; however, in many cases observed this season, the scald was more pronounced on the blushed side of the fruit. The fruit remained firm and the scald penetrated only a few cells under the surface of the skin. Scalded areas on the fruit turned dark often to a brown mahogany color. This type of scald seems somewhat different than that generally reported.

Research workers appear to be in agreement that storage scald often results when certain gases given off by the fruit accumulate in quantity. These gases are often referred to as "apple volatiles." These gases will accumulate when storages are overloaded and poorly ventilated. In 1955-56 Wisconsin growers had more Cortland and McIntosh in storage than average, many storages were overloaded, apples were held in storage longer, and an item that cannot be overlooked was the fact that we experienced in 1955, an early bloom followed by a hot dry season which would be a factor leading to early maturity. Many Cortland and McIntosh apples probably went into storage in an over mature condition which would shorten their storage life.

In order to reduce the volatile gases in storages several practices can be followed. Do not overload the storage and provide for adequate ventilation and air circulation. Shredded paper treated with odorless mineral oil mixed with the fruit will absorb many volatile gases and will reduce scald. It may require up to onehalf pound of the treated paper per bushel of fruit. Air filtration through activated charcoal filters will remove many odors and gases and will reduce scald. Good air circulation must be assured if the air is to be filtered.

SPRAY SCHEDULE FOR PLUMS Brown Rot

Brown rot often attacks plums in home orchards. Captan, ferbam, or wettable sulfur can be used to aid brown rot control. Start spraying as soon as the petals have fallen and about every ten days thereafter until about two weeks before harvest. Brown rot control is improved if the rotted or "mummied" plums are destroyed. Remove them from the trees and the ground and destroy them. Spores of the brown rot fungus can be spread by the plum curculio.

Plum Curculio

The insecticide dieldrin is very effective in controlling this insect. It should be applied at the calyx (petal fall) time at the rate of ½ pound of 50% dieldrin. However, it does not appear to have any lasting or serious effects.

Aphids

Spray just as the blossom buds begin to swell and show white (the so-called popcorn stage of development) with nicotine sulfate (Black Leaf 40). Use two tablespoons of nicotine sulfate and $\frac{1}{2}$ cups dissolved soap in 5 gallons of water.

Plum Black Knot

Some plum orchards in the state are badly infected with "black knot", the fungus disease that produces large, rough, warty, black growth on the branches and limbs of the tree. A dormant (before growth starts) lime sulfur spray 1-8 strength (four pints liquid lime sulfur or five cups dry lime sulfur in five gallons water) should be used in the spring plus the regular spray schedule. Elgetol or Krenite, 1 quart in 25 gallons of water, may be used in place of the lime sulfur spray. Any knots starting to develop should be pruned out at once.

A wife always pays attention to what you are saying when you are talking with another woman in a low voice.

It's a wise man who will not let his yesterdays use up his todays.

Growing Better Vegetables

By John Schoenemann

Plants for the vegetable garden. Late May is transplanting time for many of the transplanted crops in our vegetable gardens. The weather during this time is usually not too ideal for moving plants from hotbeds and coldframes and expecting them to move ahead without delay in our gardens. The size and condition of the plants we use can be very important in insuring success.

First of all, we are looking for a plant that is the right size and age for transplanting. Over-age or over-sized plants are as unsuitable as small-undersized seedlings for best production. Neither of these is the type we want for garden planting purposes. Generally speaking, an eight week old tomato plant about 7 or 8 inches tall is ideal. The same is true for peppers and eggplant in respect to age of the plant. But, of course, we would not want plants of these particular crops to be more than 5 to 6 inches tall at planting time.

Conditioning Plants

"Hardening" or "Conditioning" plants is important. "Hardening' is a rather unfortunate term often used when talking about getting plants ready for field setting. Actually "conditioning" would be a better word. It means a gradual reduction of temperature and moisture to get the plant out of a soft, succulent condition before being exposed to the rather adverse condition found in the field or garden. This conditioning period should actually have been begun about 10 days to 2 weeks before transplanting time. The most frequent problem with plants not conditioned is sunscalding, wind burn, and more severe wilting compared to conditioned plants. This



means more time passes before the plant actually gets "rooted" and can begin to grow.

"Setting" plants in the garden. Plants growing in pots or other containers or in hotbeds or coldframes should be watered heavily an hour or more before transplanting time. If this is done, no further watering will be necessary when the plants are set. All plants except onion should be carefully removed with a block of soil attached to avoid unnecessary root injury.

Wilting may be reduced and recovery hastened by transplanting late in the afternoon or on a cloudy day. Wilting also may be reduced by the removal of one or two lower leaves from plants like cabbage, peppers, and tomatoes and by breaking off a portion of the leaves of lettuce plants. Roots should never be removed from transplants of any kind. Removing tops from tomato plants at the time they are set in the garden results in delayed ripening and reduced yields. If very tall plants must be used, they may be "trenched in" so that the tops extend only a few inches above the ground.

Antibiotics show promise for combating vegetable diseases. Streptomycin has controlled downy mildew of lima beans and late blight of tomatoes in USDA tests. Antibiotics have already been proved successful against several bacterial diseases of vegetables, including halo blight of beans, bacterial spot of tomatoes and peppers, potato seed-piece decay, black rot of rutabaga, and bacterial blight of celery.

(Continued on Page 314)



Wisconsin Berry and Vegetable Growers Ass'n.

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CHEMICAL WEED CONTROL IN STRAWBERRIES

Crag Herbicide I, which kills germinating seeds of many weeds should be used preferably in new strawberry plantings. To be most effective the planting must be free of weeds just before applying. The first spray should be applied 2 to 3 weeks after planting, and the second spray about 4 weeks after the first one. To make a spray mixture to cover 2,500 square feet, dissolve 5 ounces (one heaping cup) of Crag in 5 to 10 gallons of water and spray the mixture evenly over the area. A regular knapsack sprayer with a fan type nozzle is satisfactory. Crag should not be applied during the bloom period.

From Circular 512,

Strawberries for the Home Garden Univ. of Wis.

CONTROL OF BERRY ROT

Oregon Strawberry Grower Praises Captan. "Increasing his yield 'by many tons' was reported by Allen Weisner of Silverton, a five-ton Club member who applied captan as soon as the first blossoms appeared on his 40-acre field. Rots affected 10% of 28 untreated rows, but only 4% of the treated.

Two year tests with ziram and captan resulted in increases from 1 to 2½ tons per acre with three to five applications of dust on Northwest and Marshall strawberries, Dr. R. M. Bullock, superintendent of the Southwest Washington Experiment Station, told growers in the small fruits section.

On the other hand, Norman Dobie, Extension Certification Specialist of Oregon State College, commented that "no appreciable benefit was apparent in twoyear trials in Oregon." — From "Better Fruit" magazine.

PEST CONTROL FOR CURRANTS AND GOOSEBERRIES

1. Spray just as the leaf buds swell in spring for aphids.

Use Malathion 50% emulsion, 2 teasp. per gal, water, or nicotine sulfate, 5 teasp. plus 5 teasp. dissolved soap.

2. Spray when leaves are as large as a dime, for currant worm.

Use DDT, 2 tblsp., 50% wettable powder, or 2 tblsp. lead arsenate per gal.

Raspberry Pest Control

Do not plant red and black raspberries in the same planting. Black raspberries are very susceptible to anthracnose and will spread the disease to other varieties.

Destroy abandoned and wild raspberries near your planting.

Prune raspberries every year.

Keep plant rows narrow and control the weeds to allow good air circulation. Destroy prunings by burning.

When to spray:

1. When leaf buds are showing ½ to ¾" of green. For spur blight and anthracnose.

Use Elgetol or Krenite, 2 tablsp. per gal. (See note.)

2. Just before blossoms open. For cane borers and red-necked cane borer.

Use Chlordane 50% wettable powder, 1 tblsp., plus Captan, 3 tblsp. or Ferban, 3 tblsp.

Notes:

1. Do not use Elgetol 318 or DN 289.

2. Elgetol and Krenite must be thoroughly stirred before mixing with water.

3. Materials listed can be mixed together and applied at one time.

3-4-100 bordeaux mixture can be prepared at home (3 teasp. copper sulfate dissolved in 1 gal. water, plus 3½ tblsp. fresh hydrated lime).

Berry Plants

FOR SALE

Strawberry Plants. Robinson and Catskill. Certified and State Inspected. 100 @ \$2.25; 1000 @ \$18.00. Postpaid.

Cash with order.

Milligan Orchards, Bayfield, Wisconsin.

CERTIFIED BERRY PLANTS

We have the following plants for sale; Dunlap and Robinson, (June bearing). @ \$15.00 per \$1000; @ \$2.00 per 100. Postpaid. Gem, Superfection, Streamliner, Webster and 20th Century everbearing: Premier, Catskill, Fairfax. Thomas, Beaver, Wis. No. 214 and Wis. No. 261 @ \$18.00 per 1000; \$2.25 per 100. Postpaid. Latham and Viking raspberries @ \$40.00 per 1000 F.O.B. Bayfield. \$5.00 per 100; \$3.00 per 50; \$1.75 per 25. Postpaid. Durham fall bearing and Newburg raspberries at \$10.00 per 100-\$5.50 per 50-\$3.00 per 25-\$1.75 per 12. Postpaid.

John Krueger R. R. 1, Bayfield, Wisconsin.

STRAWBERRY PLANTS FOR SALE

Beaver, Premier, Catskill, Robinson, Dunlap, Sharon, Wis. No. 537 Strawberry plants. Freshly dug, properly trimmed and packed. Prices: 25 @ \$1.00; 50 @ \$1.65; 100 @ \$2.85; 200 @ \$5.50; 500 @ \$10.00.

No. 1 Raspberry Plants

12	Plants	25	Plants	100 Plants
Latham	\$1.35		\$2.65	\$11.00
Durham	1.50		3.00	12.00
Minn. No. 321	2.00		3.75	14.00
Logan Black	1.25		2.25	9.00
Cumberland	1.25		2.25	9.00
Sodus Purple	1.50		3.00	12.00
Martha Wash	ington			

Asparagus Roots 1.00 2.75 l yr. No. 1 Canada Red Rhubarb; Valentine, 4 @ \$1.50, 2 @ \$1.85. Prepaid.

Fruit trees and plants of all kinds. Ornamental shrubs and evergreens.

HALL NURSERIES, ELMWOOD, WIS-CONSIN.

CERTIFIED STRAWBERRY PLANTS

Fresh dug to order. Postpaid. Thomas: Robinson:—25 @ \$1.00; 50 @ \$1.75; 100 @ \$2.85; 500 @ \$11.00; 1000 @ \$18.75. Wis. No. 214: 25 @ \$1.25; 50 @ \$2.10; 100 @ \$3.25; 500 @ \$12.50; 1000 @ \$21.00.

Red Glo Everbearing. 12 @ \$2.00; 25 @ \$3.50.

Blahnik's Glad Acres.—R. R. No. 4, Sturgeon Bay, Wisconsin.

CERTIFIED STRAWBERRY PLANTS

All plants grown under irrigation. Beaver; Wis. No. 537; Dunlap; Premier; Robinson; Thomas: 100 @ \$2.50; 500 @ \$10.00; 1000 @ \$15.00.

Sparkle, virus-free stock, highest in production: 100 @ \$3.00: 500 @ \$12.00; 1000 @ \$18.00.

All plants trimmed and postpaid.

Eric Franke, Route 5, Sturgeon Bay, Wisconsin.

PARISH PERFECT STRAWBERRY U. S. Patent 1422

Order your plants now for this strictly new and different strawberry. The Parish Perfect is a June bearing plant that produces all red, coreless berries on erect fruit stems, thus holding the berries off the ground. The berries are rich in flavor and excellent for freezing.

You will want to plant a bed of these quality producing plants.

Spring prices — \$10.00 per 100 plants, postpaid; \$5.50 per 50; \$3.25 per 25. Less than 25 plants 15c each.

Licensed Grower.

Suthers Moundview Nursery, Platteville, Wisconsin.

If you could kick the person responsible for most of your troubles you wouldn't be able to sit down.



Wisconsin Nurserymen's Ass'n.

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How To Select Street Trees

By G. Wm. Longenecker

Much has been written lately about street trees. The kind of trees to plant depends a great deal on the place where they are to be planted. The utility companies would like trees that do not get high enough to interfere with their wires. Nurseries prefer to sell trees that are easy to propogate and to supply.

Before selecting trees for our streets we have to understand what it is we want. Elms have been very popular because of their form. They arch up and over a street giving it shade and a pleasing avenue affect. Desirable trees should help adjoining houses and buildings blend into a pleasing community landscape. They should make adjoining property more attractive and a better place in which to live.

Street Trees

Street trees are being used in a variety of ways. We find them in the planting strip at regular planting distances—often this planting distance is too close. The proper distance should be governed by the type of tree, the width of the street, the size of the lots, and the type of building. Average large trees will be most effective for the greatest length of time if they are planted 50 to 60 feet apart rather than 20 feet apart. No moisture and nourishment is normally obtained by the trees on the paved street side.

In informal residence areas a random street tree pattern may be the most satisfactory and pleasing. Too large a variety of trees in a single area is not good but this type of planting does allow for a bit more variation than the normal street planting scheme. There should at least be a dominant variety — perhaps most of the trees should be sugar maple with a few other kinds such as Red maple, or White ash. If the adjoining houses are one story type or low forms some lower headed trees could be used to give better scale relationship and transition from the high tree forms to the lowest horizontal architectural lines.

In addition to our needs and desires, street trees should have certain characteristics before they will be practical for this use. Some of the things which need to be considered carefully are:

Hardiness to the locality for the particular situation in which they are planted.

Length of life. Do not plant such short lived trees as willows, poplars and chinese elms.

Suitability to the soil and temperature. The ecology of a street may be quite different than adjoining property. We must consider the reflected heat; the wind or air movement; the soil and the moisture which may be limited on the paved side.

We should plant a vigorous, good growing tree. The character and form of the tree is important; the type of branching; the shape—whether it has a straight trunk appearance. The tree should naturally be high branched or one which can be pruned and adapted to this purpose without ruining its looks. Low branching evergreens are not suitable.

We must consider the type and amount of shade desired. The Thornless honey locust or Norway Maple or Horse chestnut create good shade.

The trees should not have any nuisance

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effects such as branches which easily break off in the wind or from sleet. They should not be dirty or excessively fruitful; have thorns which drop to the grounds.

Freedom from disease and insects must be considered. Some of these are of the Dutch elm disease—Elm Necrossis; European Elm Scale; Oak Wilt; and Chestnut Blight.

Selecting Trees

A tree selected should have at least 12 feet or more of straight trunk. If a number of trees of the same kind are planted they must be uniform in shape seedling elms are quite variable. The first branches should be 7 to 9 feet from the ground.

Some Good Trees

Some good trees are as follows: Moraine Honeylocust, Thornless Honeylocust, Sugar maple, Norway maple, American elm, Little leaf linden, Pin Oak, Red maple, Green ash, American linden, White ash, and Red oak.

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BUCKTHORN BEING ERADICATED IN ROCK COUNTY By George Hafstad

Real progress in the eradication of the common buckthorn, Rhamnus carthartica, the **alternate host for crown or leaf rust** of oats is being made in Rock County. Last summer, the County Board of Supervisors declared this plant noxious, under their noxious weed law, thus leading the way to county wide eradication. In order to facilitate buckthorn removal, town and county officials adopted the following means of assistance:

Plan 1, Hedges along highways, 5 rods or more in length, can be buildozed out and piled up by the county highway department if the owner removes fencing he desires to keep. The highway department is interested in the removal of hedges because of reduced snow drifting.

Plan 2, Hedges 5 rods or more in length off the highways may be destroyed by the use of herbicides. The town or county will asume the chemical and application costs. Individual owners may hire county equipment for buildozing at the cost of about 15 dollars per hour. Plan 3, For hedges less than 5 rods in length and scattered bushes. The chemical will be supplied by the township. The owner, however, must make the application.

Because of the assistance given to land owners by the town and county and because many oat growers are convinced the removal of the common buckthorn will reduce annual rust losses, many hedges both along the highway and along fences have been removed this fall and winter. Some farmers have sprayed scattered bushes along fence rows and in woodlots. One of the many good features of using herbicide is that it can be sprayed on the bush while it is dormant, November to March. In open winters it is relatively easy to get to scattered bushes.

It is hoped other counties in the state will follow the lead of Rock County and give aid to removal of the common buckthorn. Most good can be realized if large areas take part in the campaign as rust may be windborne for long distances.

Do Not Plant Buckthorn

The Wisconsin Nurserymen Association as well as the Wisconsin Seed Dealers and the Wisconsin Experiment Association all have passed resolutions discouraging the use of and encouraging the destruction of the common buckthorn. Resolutions are but the beginning, they must be followed by definite action to become worthwhile. Actions speak louder than words.

Hardie Irrigation Equipment
Represented by
ERIC FRANKE
Route 5 (County Trunk "U") Sturgeon Bay, Wisconsin
Now offering complete repair service for Rainbird & Skinner Sprinkler heads.
Frequently have good used systems available
One tractor-drawn Holland Transplanter to plant one acre strawberries. Can't be told from new. Priced to sell fast.

From the Editor's Desk

OUR COVER PICTURE

If every homeowner would plant flowers, shrubs, and trees, what beautiful cities and countrysides we would have.

The print for our cover cut this month was sent to us by The National Garden Bureau of Chicago. Wouldn't you like to "sit a spell" on the garden seat and contemplate that when the Almighty created the earth He "planted a garden in Eden and there He put man whom whom he had formed."

NATIONAL APPLE INSTITUTE ANNUAL MEETING

June 11-13, are the dates for the National Apple Institute annual meeting at the Dennis Hotel, Atlantic City, New Jersey.

This is a most interesting meeting of fruit growers from all apple growing states of the nation. Much serious consideration is given to the promotion and marketing of apples. Growers who wish to attend should write to the Institute, 726 Jackson Place, N. W., Washington D. C.

CHERRY TREES PLANTED FOR THE PRESIDENT

President Eisenhower will be able to pick and eat cherries when he returns to his farm at Gettysburg, Pa., in the summer of 1957.

The presentation of a planted acre cherry orchard to the President is being sponsored jointly by the National Red Cherry Institute and the National Cherry Growers' Council. When the trees have been planted, a formal presentation ceremony will be held with representatives on hand from 10 states making the donation. This will include Wisconsin.

FRANK B. SWINGLE

Frank B. Swingle for nearly fifty years, associate editor of Wisconsin Agriculturist and Farmer Magazine of Racine passed away on April 16 at the age of 82.

Mr. Swingle was always interested in Horticulture. He wrote many articles for the magazine on fruits, flowers, and vegetables. Each year he came to the annual convention of the Wisconsin State Horticultural Society to "get the news" about the convention and our honorary recognition services. He continued active with the Farm Paper until the end.



ASTERS IN TWO TYPES OF FLOWER POTS

The aster plant on the left is in a clay pot and the one on the right is in a "Jiffy-Pot." The plants in the "Jiffy-Pots" show greater vigor and size.

A NEW IDEA FOR SIGNS

Is your advertising sign drawing customers to your roadside stand. If not here is an idea that may help. A Missouri farmer, with some Will Rogers philosophy, put up this sign at his stand last summer, "Home groan water melins, rite off the vine. Cheep." Or, "These shore air fresh aigs!" Business boomed. You may have to have a genius for misspelling to make it work.

THE DUTCH ELM DISEASE By E. L. Chambers

While the Dutch elm disease has not yet been found in Wisconsin, it is spreading by leaps and bounds and has now reached points as near as Marengo, Rockford and Highland Park, Illinois.

The disease is spread only by insects and the two species of bark beetles known to spread it have been found in Wisconsin. (except possibly thru natural root grafting) The smaller European bark beetle, the most active species, has now been found in fifteen southeastern counties of the state. Since the beetles breed in sickly elms, broken, weakened or dead elm limbs, elm brush over one inch in diameter, elm firewood and slabs, these should be sought out before the beetles begin to emerge in May, and disposed of.

Any efforts in this direction will reduce the beetle population and thus help delay the spread of the beetle and delay the risk of the spread of the disease once it makes an appearance.

There are three ways that bark beetle infested or likely to be infested elm material can be destroyed.

- 1. By burning.
- 2. By removing and burning all the bark.
- 3. By thoroughly wetting all bark surfaces with an emulsion or solutiontype spray containing 8 pounds of DDT in each 100 gallons. If solutions are used, the solvent should be No. 2 fuel oil.

THURLBY'S HYBRID IRIS GARDENS

1434 Northport Dr.

Madison 4, Wisconsin

AMERICA'S FINEST IRIS

SEE OUR GARDENS

LATE MAY-EARLY JUNE

DAHLIA-ROOT AND PLANT SALE

Sunday afternoon, May 20, 1956, at 2730 Mason Street, Madison, Wisconsin. Come anytime from 3 to 6 PM. Roots and plants of many of the newer as well as standard varieties will be available at reasonable prices.

SALE ON EVERGREENS

Close out on Pyramidal Arbor Vitae and Blue Spruce. Mugho Pine, Juniper and Yew. Sturdy Plants, priced to sell. Globe Arbor Vitae: @ \$2.50 and up. Call at nursery on week ends. Write for price list. Allen Troemmer, Quincy Nursery, Friendship, Wisconsin.



MOULTON IRRIGATION COMPANY

Represented by

H. D. Roberts



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REPORT OF PROGRESS Central International Gladiolus Show University Field House, Madison August 15-16, 1956

Show manager, Mr. John Flad, is busy these days organizing preliminary arrangements for the big Central International Gladiolus Show, August 15-16, in the University of Wisconsin Field House.

Professor Darling and Mr. Al Schmidt are lining up special trophies and Mr. Dave Puerner is planning the publicity.

The executive committee, which has had five meetings to date, expects to stage an exceptionally good show, but it is also trying to avoid needless expense. For example, there will be no elaborately printed schedule booklets paid for by reluctant advertisers. Instead, the plan is to prepare a neatly mimeographed schedule.

The committee has \$400 in its treasury at present and approximately \$320 in bulb auction money not yet claimed from the co-sponsoring societies.

The next meeting date of the committee is May 27, 1956.

By Prof. Leland Shaw, Milton.

FOX RIVER VALLEY GLADIOLUS SHOW August 11-12, 1956, Appleton

The Fox River Valley Gladiolus Society will hold its first gladiolus show on August 11- 12 in the Masonic Temple at 330 E. College Avenue in Appleton.

All gladiolus lovers are invited to attend.

By Mrs. Carl Knoll, Sec.

GLADIOLUS PUBLICITY Presented at the Annual Meeting of the Wisconsin State Gladiolus Society, November 6, 1955, Appleton,

Wisconsin

By Sidney J. Wilson, Menasha

It is not as a seasoned Gladiolus Society member, nor as a gladiolus grower of long standing that I address these remarks to you. I have raised glads seriously about five years; I have attended but two gladiolus shows, and have been in your membership only a few months. But the two shows I have attended were enough to prompt the question: "Isn't too much incomparable beauty going to waste at many of these magnificent events—and what can be done to create more **public** interest?"

I would not wish to presume that all Gladiolus Shows are a disappointment so far as attendance is concerned (by that I mean the attendance of the general public), but I am sure that no one will object to any suggestions that might make folks more gladiolus conscious and particularly have the effect of making all glad shows, from the smallest to the largest, events that are literally bursting at the seams.

The first Gladiolus Show that I attended was a Seedling Show of no small importance. Upon arriving at our destination and asking one of the local citizenry where the Gladiolus Show was being held, we were amazed to learn that he knew neither of the location, nor the show itself. Of course, we found the school building where the show was in progress, but it took our car to make a total of three parked outside the edifice. Several exhibitors' cars were parked at the rear

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of the building although it was with some misgivings that we entered the display room. There, however, was such an array of beauty as to make our hundred mile trip well worthwhile, and we spent a never to be forgotten two or three hours before having to return home.

Our second Gladiolus Show, a district society affair held for two days, was somewhat more lively, but not overcrowded by anymeans, and I was forced to the conclusion that about 80% of those in attendance were Gladiolus Society members and exhibitors; whereas, the attendance of the general public in spite of the fact that admission was free had fallen somewhat flat.

I should like to propose, therefore, that all of us who love the gladiolus so dearly give some thought as to what publicity we can give this flower to promote its popularity and swell the attendance of the shows. The three mediums which we shall call the tools in this effort are:

- 1. The newspaper
- 2. Television
- 3. Pre-show displays.

You will, I am sure, find the first two, newspaper and television, very co-operative with non-profit organizations such as ours. Let us explore the possibilities of newspaper publicity. If each society would see that an announcement and report of each meeting be sent to the local newspaper, several stories would immediately be accounted for. When members of a society bring home the bacon in the form of ribbons and awards from the various shows, added publicity will be obtained if news of such events are sent to the local newspaper. The greatest help can be obtained from the newspaper when the district is about to present a show. At that time it is quite possible to have newspaper photographers make pictures right within your own gladiolus patch with sought after glamour shots of local maidens hugging armfuls of the gorgeous blooms to match their own beauty. Such pictures as these tied in with a news-

(Continued on Page 314)

SUMMER CARE OF GLADIOLUS By S. F. Darling, Appleton

During the growing season gladiolus like lots of water but of course they do not like wet feet. In other words they should be planted in a place that is well drained. Thorough watering is necessary if they are too dry. By thorough watering is meant soaking in such a manner that the water penetrates the soil to the depth of the roots or lower. Sprinkling does more harm than good unless sprinkling is done for a period of several hours to thoroughly soak the ground. It is good practice to conserve water and keep the soil loose by mulching with marsh hay or some other suitable material. Some people prefer well rotted manure but clean marsh hay is less likely to introduce weed seeds or disease.

After the flowers have bloomed it is well to let the plant continue to grow for six weeks to mature the bulb and produce bulblets. As long as the plant stays green it need not be dug but if it starts to turn yellow dig right away. Immediately after digging, the stem should be cut close to the bulb with a sharp pair of pruning shears and the bulbs allowed to dry in a warm, airy place. Lately we have adopted the procedure of washing the bulbs in a screen bottom box with a stream of running water to remove the dirt from the bulbs and bulblets. This actually allows the bulbs to dry out faster and makes the task of removing the dried up corms later on much more pleasant. At this time the bulbs and bulblets should be sprinkled with 5% DDT powder to kill live insects that may be present.

After the bulbs are thoroughly dry, the old dried up bulbs may be snapped off and the bulbs placed in storage. The time to remove the old bulbs may be as long as six weeks for large bulbs. Smaller bulbs take less time to dry and therefor the bulb can be removed sooner. Allow plenty of time for the old bulb to dry because it will make removal much easier and there is less likelihood of injuring the new bulb. Before placing the cleaned bulbs away for storage they should be dusted again with a good insecticide and fungicide mixture such as Spergon dust. This is easily done by placing a dozen or so bulbs in a paper sack with a half teaspoonful of dust and shaking the bulbs in the bag for a few seconds until they are evenly dusted. The bulbs should be stored in screen bottom trays stacked in such a manner that air can circulate freely through the bottoms and sides of the storage trays in a place that can be kept as low as 38 to 40 degrees.

These simple rules of gladiolus culture should enable even the most inexperienced to have success in growing this most popular flower. For details about hybridization and more minute details of culture one should consult any of a number of good books on gladiolus such as, "The Complete Book of Gladiolus Culture," by Lee Fairchild available through most bulbs supply houses. Sound Advice for the ambitious gardener: "Words of wisdom you'd better heed—Don't plant more than your wife can weed."—Blair Press.

When thou art in the bathtub ask not for whom the phone is ringing for thou knowest '⁴ is for thee.

MIXED GLADIOLUS BULBS

Medium to jumbo size; all named varieties—not labeled. 25 @ \$1.00; 50 @ \$1.50; 100 @ \$2.50; plus postage. Ralph Blahnik, R. R. No. 4, Sturgeon Bay, Wisconsin.

AFRICAN VIOLETS

African Violet leaves. Newer varieties, including double pinks and my own hybrids. Blooming plants sold at the house.

Mrs. Frank Sperka, Crivitz, Wisconsin. 13 miles west of Crivitz on Hy. W.



NEW BLUE PEONY ASTER

New for home gardeners in 1956, is the Blue Peony Aster, created by the W. Atlee Burpee Co. Its flowers are fully double and peony-shaped with incurved petals. The color is a clear azure-blue. Good for cutting and showy in the garden, the Blue Peony Aster is one of 24 new flowers introduced by the company this year.



Garden Club News

 GARDEN CLUB OF WISCONSIN
 Treas..._Mrs. John Kiesling, Sr., Route 1, Ft. Atkinson

 EXECUTIVE BOARD: Blackhawk Region: Mrs. Ed Streich, Jefferson; Mrs. John Kiesling, Sr., Central Region: Mrs. C. H. Brimmer; Mrs. C. H. Braman, Waupaca. Milwaukee Region: Mrs. Ray Luckow, Milwaukee; Mrs. H. B. Buerosse. Winnebagoland Region: Mrs. Carl Peik, Chilton: Mrs. A. J. Wiessender. Parlimentarian...Mrs. Roy H. Sewell, 7841 N. 76th St., Milwaukee. Mr. H. J. Rahnlow, Madison, Exec. Sec. Ex-officio.

PRESIDENTS MESSAGE

What a time we have all been having, trying to uncover our gardens in this cold, windy weather. My crocus are blooming valiantly and the border of miniature purple iris, creeping phlox, and saxatile alyssum is coming along by leaps and bounds.

When I drove up to Clintonville April 4th for the Central Region's spring meeting robins were everywhere, yes, and the blue birds are back. And what a splendid program Central Region gave us with Mr. Rahmlow's instructive talk and slides. Mrs. Sewell's excellent demonstration of Geometric Design for Flower Arrangement, the beautiful colored movie of Springtime in Holland, not to say anything about the beautiful roses made out of grapefruit peel that Mrs. Portman taught us how to make.

I hurried down from Antigo to Oshkosh, all in one day, to attend the Oshkosh Horticulture Society's get-together supper meeting at Peace Lutheran Church. The husbands and wives seem to have a lot of fun about their garden troubles, one wife complaining that her husband grew so many vegetables she was kept at home all summer freezing them, but when I ate her delicious casserole dish made with frozen green beans and mushrooms. I wasn't sorry for her.

Thanks to Mr. Rasmussen everyone went home with a big, beautiful apple from his store room.-Arlisle Wiesender, Pres. Garden Club of Wisconsin.

ANNUAL CONVENTION **Garden Club of Wisconsin Baptist Colony, Green Lake** September 11-12, 1956

A wonderful two day convention this year. Watch for more details in coming issiles.

SPRING MEETING AND FLOWER SHOW

Milwaukee Region, Garden Club of Wisconsin

June 8, 9, 10, 1956

Annual Meeting, Friday, June 8 West Allis Methodist Church 1574 S. 76th St. at W. Lapham

11:30 A.M. - Luncheon and Business Meeting.

Design in the Garden, by Mrs. A. J. Wiesender, President of the Garden Club of Wisconsin.

Arrangement of Trees, Shrubs, and Flowers in Our Gardens, by Professor George Ziegler, landscape specialist, Department of Horticulture, University of Wisconsin, Madison, Wisconsin.

THE FLOWER SHOW

Official Opening of Flower Show at 3:00 P.M. following meeting. Franklin Field House, 1964 S. 86th Street (S. 86th at W. National Ave.)

Mrs. Ray Luckow-General Chairman, 935 S. Apple Tree Lane, Milwaukee 14, Wisconsin. Mrs. Eugene Germershausen -Co-chairman, 2840 S. 124th Street, West Allis 14, Wisconsin.

Show hours: Saturday, June 9, 10:00 A.M. to 9:00 P.M.

Sunday, June 10, 10:00 A.M. to 6:00 P.M. Admission 50 cents.



OFFICERS

Wiesender, 217 Park St Berlin Mrs. C .H. Brimmer ice Pres._ Wausau

Visit Gardens In May

By Mrs. Robert Holly, Waupaca

And now it is May, the month of tulips, jonquils, and daffodils, of some iris and the early peonies.

It is one of the loveliest of our gardening months, as well as one of the busiest. But busy or not, I am going to suggest, that you take the time to go garden visiting. Leave your own work, go and see how the other fellow gardens. Go as a garden group, or individually. Visit your friends garden, your neighbors, and if there is in your locality an outstanding garden, visit that also.

It is much easier to see designs and outlines now, than several weeks later, when the plants have increased in growth. If you find something you particularly admire in plants or design, it may not be too late to put it into effect in your own garden, especially if you go early in the month.

You may have a landscape problem. Look carefully for something to help solve it, perhaps you won't find exactly what you like, but even the germ of an idea can be nourished, and later developed into just what you need.

Or perhaps you have decided to specialize in some particular plant family. I am certain you will find some gardener nearby, who has made a study of, and successfully grown those you are interested in, and who will be most happy to tell you how to succeed with them, and you will probably return home, not only full of advice, but with a generous start of the plants themselves.

Don't be afraid of asking questions. We gardeners all love to talk about our plants, and gardens and are most generous with our advice. It is possible that you might be able to give your garden hostess a new adea for hers. "Turn about is a fair play".

May I suggest also, that you take special notice of what trees, shrubs and plants are growing in these gardens you are visiting, to feed our bird friends, for birds and gardens just naturally belong together.

There is a saying that "we are never too old to learn" and that is especially true in gardening. We learn of new plant life and new ways of doing things every day we work in our gardens.

So lets go garden visiting in May. I hope each one of you may find some new idea to improve your garden and make it more attractive, if it is only an added zest to work.

SPRING MEETING WINNEBAGOLAND REGION GARDEN CLUB OF WISCONSIN

Calumet County Park

- (on Lake Winnebago, west of Chilton) Tuesday, June 12, 1956
- 9:30 A.M. Registration (\$.50) In shelter house. Set up flower arrangements, one by each garden club.
- 10:00 A.M. Call to order by the president; Mrs. Carl Peik. Introduction of guests.
- 10:30 A.M. History of Calumet County Park by Orrin Meyer, County Agent, Calumet County.

Flower Arrangement in our Garden, demonstration by Professor George Ziegler, Department of Horticulture, U.W. of Madison.

- 11:30 A.M. Business Meeting.
- 12:00 m.Pot luck luncheon; bring a dish or sandwiches—coffee furnished by The Chilton Garden Club. Bring plate, Silver, and cups.
- 1:30 P.M. Short tour of park. Discussion of planting, landscaping, care of shrubs, trees, and flowers by Professor Ziegler and H. J. Rahmlow, Madison.
- 2:30 P.M. Talk by our state president, Mrs. A. J. Wiesender, Berlin.

Discussion of flower arrangements. By Committee Chairman from each garden club in the Region.

3:00 P.M. Report from one delegate from each garden club on "Favorite Flowers Our Members Are Growing This Season" (6 minutes each).

Prize Winning Arrangements Need Planning

By Mrs. G. L. Lincoln, Madison

Unusual flowering or fruited branches and carefully selected flower in perfect condition can do a great deal to start an arrangement on the road to a special award. But even a choice arrangement, entered in the incorrect class, can lose its choice for a special ribbon.

Check the Schedule

It is important to check the show schedule when you first receive it to see which classes interest you. Make notes of the containers you plan to use, type of flower and color combinations, bases and accessories. From this list you will estimate the material you need to buy, or beg from friends.

Collecting Material

The day before the show, slip in hand, cut what is available from your garden, or those of your friends. A quick tour of the country side may net you the "spice" or finishing touches which will lift your combination of plant material into the "conversation piece" level. Look for flowering or fruited material not found in every home garden, such as wild crabs, mulberries, acorns, berries.

Carry several pails about quarter full of water in the car, and large sized juice cans for smaller flowers. Then sort it at home, putting each type and color of flowers in a separate jar. Allow to condition for at least several hours in a cool, dark spot, away from drafts.

Arranging at Home or Show

Where you arrange is a matter of preference, but I prefer to do mine at home the night before, and carry the finished arrangements to the show in the morning.

FOLLOW THE SCHEDULE EXACT-LY, for schedules are easy to misundersband. Time and time again exhibitors have entered classes calling for "three gladioli only" with arrangements combining other material, or with four or five flowers. Consult the schedule chairman when in doubt. Try to imagine a judge's reaction to your entry in relation to the schedule. Is it possible to question the material you've used, or the size of the arrangement for the class it's in? In an analagous color combination, have you added green leaves when green doesn't belong there? In a complimentary color class, state the color system you used, for in different color theories, the two colors considered to be complimentary may differ.

Strive for Distinction

Distinction is a quality difficult to define, but easy to spot. It may be achieved by one or more of the following points:

- 1. Unusual color.
- 2. Dramatic line.
- 3. Unusual material.

Unusual material doesn't mean orchids, or expensive or exotic seeds, pods or flowers, but rather material not often seen in shows. Outstanding awards have been won by combining branches of pale green bur oak acorns with yellow and pale orange glads in a chartreuse container lined with yellow. Or by combining five white glads with clusters of black elderberries in a Chinese brass container, with two white birds touched with black and gold, on a black Carrar glass base. Or by using three branches of gray Russian olive berries in a flat semi-circular design in a large round dull gray container, combined with gray furry lamb's ear leaves (stachys lanata) and one rose colored dahlia.

Your neighborhood may have equally interesting material. Look for it. Your originality in combining it may win that coveted ribbon.

Little Dickie, aged 6, seized with hiccoughs, ran to his mother and said, "Oh, Mother. I'm coughing backwards."

About Conservation

CONSERVATION CONVERSATIONS

I should like to refer to two subjects-Conservation in the Schools and Conservation Programs. Many communities are co-operating with the schools in outstanding Conservation programs. Other schools are handicapped by lack of trained personnel, material or finances. I would like to quote, in part, from a Superintendent of Schools who believes in Conservation: "As a rule, school superintendents are a pretty fair lot of fine individuals, but their profession has been agitated. There never was a time when more salesmen, mail, fourth class, community concerts, adult classes, selling campaigns, teen-age recreation centers, savings plans-just to name a few that are dumped in his lap: plus increased enrollment, new buildings, more parent demands for readin', ritin', and 'rithmetic; shortage of teachers, etc. parade through his office. Result-State authorities in Conservation for a while at least, may get nothing more done than to offer their services to the school. Sodon't criticize; offer your help because it is a new and different field to us,-and we might welcome informed help". Can your club volunteer?

Programs. Many garden club members have told me that it is difficult to find interesting programs because conservation is the same thing all the time! Suggestion: every county in Wisconsin has a County Agent and a County Extension Office. Every office puts out a little brochure entitled "This is your County Extension Service," listing the great variety of services offered by that office. I believe every club would benefit from such a copy, and be pleasantly surprised at the wealth of available and interesting information, services and speakers.all free. It is yours for the asking, and your county agents will be glad to help. Suppose you see for yourself .- By Mrs. J. W. Dooley, Conservation Chrm. Garden Club of Wis.

Your children may not follow your advice, but they will follow you.

IN MY GARDEN

By Mrs. Peter J. Portman, Wausau

We have had a great deal of pleasure from the Apple tree planted close to our kitchen windows (even though everyone says it's too close to the house). This tree has about 8 or 10 chunks of suet tied to its branches, and is usually alive with birds all winter. About 5 feet away from the tree we have a sunflower feeder. We also tie donuts on the tree which the chickadees enjoy very much.

Two years ago I planted one Auratum lily bulb and last year I had three bulbs, two of which blossomed.

In the vegetable garden I grow oak leaf lettuce under an Apple tree which gives enough shade to keep the lettuce in perfect growing condition. I do however, water with manure water.

I also have a parsley border in front of the peonies.

NEW BULLETIN,

A new circular, No. 435, entitled Learning to Know Common Wisconsin Trees, has just been published by the University of Wisconsin Extension Service, College of Agriculture, Madison.

The circular contains many illustrations which enables the amateur to identify the common trees of the state. There is a chapter devoted to "How to Plant a Tree", also well illustrated.

TULIP TIME WALK

"Tulip Time", a walk through the wooded gardens and informal contemporary house of Dr. and Mrs. Paul Hausmann, 14155 Juneau Blvd., Elm Grove, will be offered to the public by the members of St. Edmund's Episcopal Church, Elm Grove, on Sunday, May 20, from two until six o'clock.

Refreshments will be served, and the entire proceeds will be given to the building fund of the church. Tickets are available at Elm Grove Flowers Shop or from church members.

For pictures or additional information, call Mrs. Charles Granger, SU 2-7312.

How To Grow Dahlias

Tips For the Beginners

It is about time for planting dahlia's in Wisconsin. The month of May is the usual time but roots should not be planted until the soil warms up for good growth and all danger of frost is over.

The amateur who has not secured his roots will have opportunities to get some from friends or attend auction sales. One of the better places will be a sale on the 20th of May, 3 to 6 PM. at the home of Walter Senty, 2730 Mason St., Madison, Wisconsin. All kinds will be available, "A" size, "B" size, miniatures, and poms. Some plants as well as roots will be offered.

Fertilizers

A well manured soil should be thoroughly worked up and a good fertilizer added at the time of planting. Some growers do not apply fertilizer at this time if the ground has been we'l manured, but usually add a side dressing during July and again in August. The treatment will depend a lot on the richness of each individual's soil.

During a dry year the plants will do much better if the roots are planted six to eight inches deep. Dahlias do very poorly in a dry soil; however, they prefer a soil with good drainage.

Staking

Many of the larger dahlia plants will grow to a height of six or even more feet. It is therefore necessary that they are well staked. The stakes should be strong and from four to six feet in length, depending upon the growth habits of the variety. Generally it is best to place the stakes at the time of planting although the beginner may find it more convenient to wait until the plants start growing.

Dahlias growing in the open are subject to several insects and mites (red s) der). Preparations should be made to start spraying with DDT as soon as the p) nts are six or eight inches tall. Contral of the leaf hopper is best if the applications are repeated at weekly or ten day intervals. Red spiders are sometimes difficult to control. There are several miticides such as Aramite or Genite EM-923 that will help if applied when the first infestation appears. More will be said on insect control at a later date.— By C. L. Fluke, Univ. of Wisconsin, Madison.

THE BEAUTY OF IRIS "A Fairyland of Color"

Picture the breathless beauty of your garden as the amazing panorama of color reveals itself with the unfolding of each new Iris. The Color! The opened flower of one of the new pinks. Over there the warmth and velvet touch of the rich, deep-toned blacks and reds. Rainbow flower indeed. Few flowers can present such a wide array of colors and hues, and glamour! The gleam and glitter from the elegant gold-coppers, the gay sunshine-bright yellows, the sonorous blacks and the eternal appeal of the lovely pinks and blues. The parade of colors is almost endless-bold colors, bright, subtle, blended-they'll all charm ou. For a truly brilliant garden, plant some Iris.

Working with growing things gives a spiritual and mental uplift. Whether you are an ardent hobbyist or α plain dirt gardener, sharing the pleasure of Iris growing with your family, neighbors and friends will give you not only delight but a warm, fraternal feeling. There are no two ways about it—"You just can't beat Iris!"—M. F. Thurlby, Madison.

A mere 44 years hence, they say, a man of 90 will be thought young. At 135, he will be classed as more mature. His average life span will be 150. As for women, they will stay young and beautiful indefinitely.—Inter-County Leader.

The farmer's share of the consumer's dollar is now back to 40 per cent, where it was in 1935-39.

A Page About Roses

PLACE YOUR ROSE GARDEN IN PROMINENT LOCATION

The well-kept rose garden is so lovely that it should occupy a prominent location on the property where it will be most convenient and at the same time give the most pleasure to the whole family. Some home owners prefer to spread single rose bushes around the property for colorful effect where color is needed either in a foreground planting, or for accent in general. Whichever you do, locate the plants where they will catch the eye.

Preparation of the rose bed is not difficult. Good natural drainage is important. Dig down a foot to eighteen inches, make a hole big enough to fit the roots of the plant, with a few inches to spare. You don't have to dig up the whole bed. You'll get just as good results this way and really enjoy planting.

Thoroughly work over the soil in the hole so it is fairly loose and friable. Add peat moss where soil is heavy or very light. Fertilize in early spring and again after the flowers have bloomed. Don't fertilize in the late fall in climates where roses are dormant in winter as it tends to make the growth tender to frost.

Plant roses at the same depth they were planted in the nursery. Note the previous soil line, which will be at the bud union, or "knob" on the stem, usually about 4 to 6 inches above the top of the root. Place this "knob" about two inches below the soil surface when planting, as the soil will settle. Plants should be set about three feet apart, depending on their size. Small compact rose plants can be placed closer.

"And what is your reason for wishing to marry my daughter?" asked the father.

Puzzled, the young man scratched his head, pondered a second, then answered: "I have no reason. I'm in love."

HOW TO PLANT A ROSEBUSH

This is what a good No. 1 rosebust looks like. Note the sturdy main canes and the healthy fibrous root system. First step is to dig a hole deep enough to allow the roots to spread. Now you are ready to plant.



Last step; in order to protect early planted rose from freezing in colder climates or drying out in milder ones while in its early stages, mound soil well up over bud union as shown.—Photos courtesy of Howards of Hemet, California



Wisconsin Horticulti e

Garden Club Reports

HELP FOR GARDEN CLUBS

I have recently come across a few very good booklets offered by several companies which I think are very good and also very educational. These booklets would be appreciated by many gardeners.

One is entitled, "Guide To The Weather" in which various cloud formations are shown in color and when studied along with the direction of the wind help in forecasting the weather, which is always valuable when we do our gardening. It can be obtained by writing to: Wolf's Head Oil Refining Co., Wolf's Head Bldg., Oil City, Pla.

Two other booklets which can be obtained free from The General Electric Co., Lamp Division, Cleveland 12, Ohio are "Light for Plant Growth" and "What's Happening To Horticulture".

The first one tells a very interesting story about the effects of light on plants in general and tells how to place Fluorescent lamps for best results.

The second one is mostly for African Violets growers. It tells a complete story of light and its affect on African Violets. —By Walter P. Knuth, Pres., Milw. Co. Hort. Society.

THE CLINTONVILLE FLOWER AND GARDEN CLUB

At our annual garden club banquet last year, we had Miss Eunice Felelon, landscape architect from Weyauwega talk to us on landscaping. She showed slides of formal and informal gardens and correct and incorrect foundation plantings, which would be of interest to any garden club.

Last December we had a display of h liday arrangements and a Christmas T a at the Veterans Memorial Building, v lich was open to the public.

Dur program this year includes a trip t Mrs. West's tulip garden in Manitowoc a tulip time; to Rosendale at peony t he in June and for our annual picnic w plan to go to Whispering Pines at V hupaca Chain o' Lakes in July, where w will see the begonias in bloom and g through the museum. In June we will hold a "Flower Arrangement Workshop" and in August we will have a Flower Show in connection with our annual Harvest Festival.

Our president has appointed a landscape committee to investigate the possibilities of plantings of trees and shrubs in Central Park, the grounds surrounding our Veterans Memorial Building and our new High School grounds that our club should sponsor.

We have just purchased four new books for our public library—"The Care and Feeding Of Garden Plants", (recommended by our Agricultural instructor), "Whats New In Gardening, by Pirone, "Gardening The Small Place", by Wm. Horace Clark, and the "Complete Book Of Dried Arrangements", by Ray-Miller Underwood.

We are also planning to have one flower arrangement at each meeting this year.—By Mrs. Matt G. Dahm, Sec.

THE COLBY GARDEN CLUB

Screening the city dumping grounds has been a leading project for our society this year.

The plans were made last year and now as soon as weather permits we will plant two rows of evergreens, "Red spruce and Norway Pine", to screen the grounds from the highway.

We financed this project by giving benefit card parties, and donations from various civic organizations in the city.

Our flower show is always a very popular event, with a large number of exhibits. It is always very well attended and considered one of the highlights of the year.—By Mrs. Louis Justman, Sec.

EAU CLAIRE GARDEN CLUB

The Eau Claire Garden Club made a tour to Minneapolis, in June, to visit the Eloise Butler Wild Flower Gardens, Lake Harriet Rose Gardens, Armory Gardens, and Mr. Ben Haskell's private garden.

A gladiolus bulb sale and silent plant

auction was held in the spring.

In July a pionic was held for club members and their families.

Civic projects included: "Planting flowers in front of the Public Library and City Hall" and "Garden Club goes to Church Day" with members furnishing altar flowers to fifteen city churches.

Programs enjoyed last year were: A film "How to Grow Beautiful African Violets and Gloxinias" with Mr. Sosnovske of the Ortho Company as guest speaker; colored films on "All American Roses" and "Modern Chrysanthemums" and slides of "Iris" from the American Iris Society.

Mr. Edwin Baker, County Erosion Control Agent, spoke on garden and lawn management.

Mr. Harold Gelein, City Recreational Director, spoke on the value of clubs to the city.

Plans for 1956 include a tour of more Minneapolis gardens and another club picnic. A flower arrangement contest among club members is being planned. Civic projects will be the same as for last year.—By Mrs. R. M. Nelson, Sec.

THE NEAR NORTH GARDEN CLUB OF CRIVITZ

The outstanding program of the Near North Garden Club in 1955 was a Wildflower tour which began at Crivitz, going on to Veterans Park ending at Thunder Mountain. This tour was planned and led by Marie Buckman who really knows wildflowers.

We had a very interesting speaker in March: Mr. Leroy Linterteur of the Conservation Department at Wausaukee, gave a talk on songbirds. He is an expert in the field. We invited 4-H bird members from the community.

List year we planted petunias at the Wayside Park just south of Middle Inlet and around the Court of Honor at our Town Hall, getting, of course, permission from the Highway Dept. and the town board. We will replant this spring if necessary.—By Ethel McAlpine, Sec.

FORT ATKINSON GARDEN CLUB

One of the highlights of last year for members of The Fort Atkinson Garder Club was the "Tables on Parade" stagein the Municipal building in May. A totaof 32 prizes were awarded in the show. Tables were arranged in three classes, Period, International and Modern. Mrs. Albert Witte received an excellent rating with a score of 99 with her floral piece. Mrs. Victor Schmidt of West Allis had spoken to the women of the club previously on table settings and decorations. She is one of the best and most entertaining instructors the Fort Atkinson women have heard.

For the August meeting this year the club is planning a picnic at the Aztalan park near Lake Mills where a study of the ancient mounds and the Indian museum will be visited. A tour of a mint farm nearby will also be on the day's schedule. Prior to the annual fall Regional flower show the club will devote meeting to a workshop in preparation for the show.

Another highlight of the 1956 program is the program on Birds, how to attract them to homes and gardens. Mr. R. S. Ellerson of the Wildlife Dept. at the U.W., Madison will be the speaker for that program.—By Ray Breitweiser, Sec.

An Honest Man's Work is worth a thousand times as much as a slicker's contract.—Union Grove Sun.



Wisconsin Horticult ire

News And Views About Gardening

Soybean meal may be used as a slow acting organic fertilizer. Use the kind found in feed stores which may be low enough in price to warrant its use. Years ago we also used wheat bran as a complete fertilizer as it contains organic matter and also Vitamin BB. This was during the depression years when bran was very low in price. Today its use will depend upon comparative prices with other fertilizers. Divide the number of pounds of plant food listed, into the price per hundred pounds of the material and thereby get the price per pound of fertilizer elements for comparison.

Dwarf purple-osier Willow is a fine textured shrub sometimes called Blue Leafed Hedge Plant. It's good as a low hedge, clipped or informal and fairly hardy.

Asparagus Sprengeri also called Asparagus Fern is related to the Garden asparagus. It's the one so often used by Florists as a filler when sending out flowers for bouquets and arrangements. In spite of the fact that Garden Clubs all over the nation have discontinued the use of the asparagus fern and have pointed out its lack of harmony of texture and form with the cut flowers commonly used, it is nevertheless still widely used by florists. It must mean that there are still many people who like it.

Pruning Grapes In Spring

Bleeding of grape vines when they are pruned in the spring continues to be a cause of concern among gardeners. Since grapes should not be pruned prevous to very low temperatures because they will "kill back" we may wonder when we should prune.

The answer is: prune in the spring, in V isconsin. Shoemaker in his book "Small-Fruit Culture", one of the best books published on the subject states: "Heeding of Grape Vines may occur

after late spring pruning. This causes growers, particularly Novices, many great, but usually undue concern, for the bleeding seldom causes serious injury. Damage from bleeding has probably been overemphasized (except perhaps with unusually large cuts)." He adds, "When pruning has been delayed or neglected, it is generally better to prune late in the spring even though the vines bleed, than to leave them unpruned. When the leaves appear, bleeding usually stops." He also adds that in experiments, no difference in yield was found between grapes pruned in winter or late in the spring and that analysis indicated the sap consists almost entirely of water, and that no great amount of plant nutrients is lost through bleeding.

TREES FOR OUR CITY STREETS

The sugar maple which excels in fall color may be given preference over elms in plantings during future years in Madison.

Meetings have been held in Madison at which the problem of shade trees for city streets was discussed. Due to the danger of the Dutch elm disease coming to this state there is a trend toward elimination of the elms, which have been so popular in the past. Also, elms are loosing face because of the spring litter of fine seeds they drop over the city and the gummy substance their leaves drop upon cars parked beneath them.

At a conference in Green Bay, attended by many park superintendents and foresters the following rated as the best street trees: First, Sugar maple, Second, Honey locust; then Pyramid maple, Norway maple, American elm, Little Leaf linden, ginkgo (an eastern Chinese native with shiny, fan-shaped leaves and yellow fruit), the Red maple, Flowering crab, and the Hophornbeam.

Big Mistake: The delusion that your advancement is made by crushing others.

Publicity For Gladiolus

(Continued from Page 302)

paper story are bound to create attention, as would a picture of junior standing beside a six or seven foot bloom, which may not be unusual to us old salts, but is positively phenomenal so far as the general public is concerned. In addition a little column giving hints, at the right time, on gladiolus culture such as varieties, planting, cultivating, spraying, cutting, digging and storage would be well received.

Television

Our society has already given one television program in connection with gladiolus; it is highly successful. We have found that both TV stations in our community are willing and anxious to present well prepared programs on the subject of the gladiolus. These may last from ten minutes to half an hour, and constitute part, or all of a home hints type of program featured on practically every TV station. Here are some of the subjects that might well be presented on TV at different seasons of the year. At pre-planting time, a guest might appear with several trays of bulbs ranging from bulblets up to giant three or four inch types. Dipping or dusting of the bulbs could be explained and the correct depth of planting for each size. During the growing season an interesting program could be presented by showing every size of gladiolus from one inch to six inch florets, and the differences in their stature (the general public is surprisingly unaware of these various sizes). Despite the absence of color TV an interesting topic could be a presentation of the various types of florets, plain or ruffled, solid colors and marked, and the qualities required such as number of blooms, and placement, etc. for judging awards. If a good floral arranger is available it is not necessary for me to say that he could easily furnish a half-hour program with the gladiolus as his ammunition. Lastly, according to the requests of my neighbors and friends for information as to how to dig, cure, and store bulbs, a

TV program on this subject would by greatly worthwhile.

Local Displays

The last item of gladiolus publicit; and I think the most important and efective so far as the local Gladiolus Show is concerned, is a pleasant task for each member of the society. That is displaying of gladiolus in local business places, where there is considerable traffic, for a period of ten to fifteen days before show time. These displays will be welcomed in banks, drug stores, department stores, grocery stores, etc. They should be made as attractive as possible with your proudest glads. They should be cared for every twenty-four hours, and should never be allowed to become shabby for a moment or they will do more harm than good. Beside them should be placed a neat card, large enough to attract attention, and invite the general public to come to your Gladiolus Show on such and such a date, and at such and such a place. If admission is free, let them know it.

I hope these few suggestions may have tapped the spring wherein flows many an idea of your own. If we will come forward with them, and see that they get into print in the various gladiolus publications, I am sure it will be to our mutual advantage.

GROWING BETTER VEGETABLES (Continued from Page 295)

USDA scientists report that best results were obtained with commercial preparations of streptomycin (Agrimycin, Phytomycin, Agristrep).

Badger Ballhead, a new cabbage. This is a new yellows resistant cabbage variety for fresh market released recently by the University of Wisconsin and the USDA. Heads average smaller than Improved Wisconsin Ballhead and can be planted closer in the row. The new variety is resistant to mosaic as well as yellows. Seed is now available from seed producers.



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News and Views About Beekeeping

Cold weather in March again resulted in heavy losses in some sections of the state, and brood-rearing almost stopped, resulting in weak colonies three weeks and more later.

Of course, this could all be avoided by more careful attention on the part of the beekeeper. Again we saw, about April 1, strong vigorous colonies with four, five and six frames of brood in yards where a mixture of soy bean flour and pollen had been fed. The bees were taking it down liberally. A two pound cake of mixture was consumed in a period of two weeks.

Of course, such feeding not only means heavy brood rearing but heavy consumption of stores as well; but this is well repayed by large populations in time for the dandelion honey flow in May when, if weather is favorable, colonies will more than make up for the consumption of earlier stores by bringing in larger amounts of dandelion and fruit bloom honey.

Those large crops of honey we have come to expect—the 100 and 200 pound averages, are not obtained by "let alone" be keeping. They are obtained only by caleful, constant attention to details, alm st every month of the year. The only two or two and one-half months during with beekeepers need not pay any atte tion to their bees are the last part of N ember, December and January. Janue v is our coldest month, but very few comiss die at that time. It's during Februity and March that they starve—and th t could be prevented. In this issue we publish a statement from a beekeeper in Alberta, to the effect that he could not "freeze his bees to death". This again points to the fact that the only cause of a normal colony dying in winter is by starvation.

In our April issue we published articles from several beekeepers giving their method of swarm control. They all practice "reversing" brood chambers. If you have had trouble in controlling swarming, study this method. It is effective if done correctly and requires much less work than any other method we have ever heard of. Three brood chambers must be used for best results.

Swarming not only cuts honey production during the early honey flow in half, but may reduce it by two-thirds. If a colony of 30,000 bees can produce 40 pounds of honey in the month of June, a colony of 15,000 would only produce about 15 pounds of honey. Also a colony of 45,000 bees could produce about 90 lbs. of honey.

SOME FACTS ABOUT BEES FOR POLLINATION

The honey bee is the only insect that can be brought into the orchard in any desirable numbers. One colony may have as many as 30,000 individual bees—though in weak colonies it may drop to as low as 15,000 or less. When young bees are hatched after the queen lays the eggs they first become inside workers or "nurse bees" for about three weeks. After that they become outside workers.

Bees do not fly in the rain and even cloudy days will decrease flight. Full sunlight is best for flight and a temperature of about 65 degrees F. is necessary for full flight. Bees are easily buffeted by the wind and strong winds will reduce the flight considerably. It does not require very many hours of ideal weather conditions for a plentiful supply of bees to pollinize an orchard because they are very active, visiting many flowers in a short time.

In bringing in package bees for pollination, remember that there is a daily, normal death rate of almost 2% of the bees. Therefore a package brought in three weeks before full bloom will only have about 50% as many bees as it did on the day the package was installed because no new bees were born during this first three week period. It is therefore best to purchase large packages such as five pounds and install them only about three to four days before bloom.

In renting bees to be brought into the orchard the price paid is based on several factors—the number of miles they must be hauled and the strength of the colonies or bee population. Very weak colonies have little value. To protect the beekeeper they should not be brought in until full bloom if arsenate of lead was used in the pink spray and there were any blossoms open at that time. They should be removed before the calyx spray is applied.

A farmer, disposing of his produce and finishing his purchases in town, piled into his wagon and set out for home. Once or twice the feeling came over him that he had overlooked something but, upon checking up, he dismissed the idea and went on his way, rejoicing in the thought that the day's errands had all been attended to. As he turned in at the farmyard gate, however, the children came trooping out of the house, crying: "Why, Father, where's Mother?"—Orlando Sentinal.

THINGS TO DO IN MAY Marvin W. Kosanke

There are a number of very necessar things that should be done during the month of May that will enable the bekeeper to become more efficient and secure a larger crop of honey.

One of the most important things s to find the queen and clip her wing if this was not previously done during the past year. The beekeeper should try to do this as soon as possible because as the population grows larger it becomes more difficult to find the queen. Some years when we have very favorable weather it can be done in April. If one clips the queens during dandelion and fruit bloom a great many bees will be absent from the hive thus making it easier to locate the queen. In addition, if there happens to be a minor honey flow in progress the bees are apt to be more gentle and easier to work with.

Making Increase

During fruit bloom is a good time to make increase if one is inclined to do so. If a beekeeper has some unusually large colonies at this time he may remove two or three frames of brood and an additional frame of honey with the adhering bees and place them in a nucleus box with a caked queen. The removal of the bees and brood from the established colony will not harm it and the nucleus will build up rapidly with little attention and probably produce a substantial surplus of honey if there is a fall flow of any consequence.

If the beekeeper is producing comb honey, May is a good time to select colonies. Colonies kept for comb honey production should have good young queens and be of the highest morale of uny of the colonies in the yard. The queens should be observed particularly for egg laying ability as it is of utmost importance to have a large force of worker bees present for comb honey production when the flow starts in June.

Painting

It is during this month that I like to paint the hive bodies that are on permanent stands. Usually it is too cool and damp in April and the paint does not dry readily. As a rule the bees are not flying excessively at this time, particularly late in the afternoon. They do not cluster on the hive body and interfere with the painting.

Control Weeds With Salt

I find the last week in May a good time to cut grass and weeds growing around the hives that may hinder the bees when entering. To kill the grass I spread two or three handfulls of salt on the ground in front of the hive. This will be adequate for the entire season and sometimes the next one too.

If you do not have a permanent supply of water near the yard such as a spring or a stream it is well to provide one so that the bees will become accustomed to it and will not become bothersome at some nearby farmers livestock tank later on.

Adolescence is when daughter knows best.

والمراجع والمراجع

A COLONY OF BEES SURVIVES FREEZING

From W. G. LeMaistre, Provincial Apiarist, Edmonton, Alberta, Canada comes this interesting item in regard to the survival of a colony of bees to very low temperatures. He states, "You might be interested in an observation I made on a colony that was due to be killed in the fall. The queen was destroyed in August in order that there be no brood at the time of killing the bees. The bees were not killed by the beekeeper. He thought he would freeze them to death by removing the entrance block and placing the hive cover cornerwise on top. They did not freeze though it was a colony of average strength only and the temperature for one three-week period never rose above 40 below zero (minus 40 degrees Fah.) and went as low as 62 below zero . . . "

A gossip will not tell a lie if the truth will do as much damage.



FINANCIAL CREDIT FOR BEEKEEPERS

Some years ago the Wisconsin Beekeepers Association had as a topic for discussion at spring regional meetings, the question of "Credit for Beekeepers To Purchase Bees and Supplies". At that time a banker stated that everything was being done that could be done to help beekeepers.

However, when a young man today wants to get started with bees, he finds it impossible to get credit, unless he has as security some other form of property. A case of a young man of very good character - a veteran of Korea with about 5 years of experience working for beekeepers, has just come to light. This young man wanted to buy an outfit that would put him into the bee business. He found that no one would give him credit, even though they all expressed the desire to help him. He tried the Production Credit Association and says. "They were afraid of the word bees". A large honey cooperative association had at one time expressed the hope they could "do something" when he went into the honey business. However, when he asked for help, he was informed that the "Board of Directors would not allow them to go along on such a venture."

Local banks refused to help. The Veteran Association would do nothing.

About the only way a young man today can start with bees, is to have some relative help him out or find a seller who is willing to stake him instead of a regular credit organization.

It's too bad, but it's probably one reason why more people aren't in commercial beckeeping.

PRICE SUPPORT FOR HONEY

The U.S, Department of Agriculture announced on March 21 that honey prices will be supported during the 1956 marketing season at 9.7 cents per pound. This is seventy per cent of the current parity price adjusted to the 60-pound container level. For the 1955 crop the support level was 9.9 cents.

The 1956 program is the same as the one in effect last year. It provides for farm-storage loans and purchase agreements on U.S. Grade C or better extracted honey which is stored in 60-pound or larger containers in approved storage and is not objectionable in flavor. Beekeepers should contact the Agricultura Stabilization and Conservation (ASCcounty offices.

WHEN TO GET PACKAGE BEES From Canada

Tests by the Alberta Dept. of Agriculture at Edmonton, published in the Canadian Bee Journal and sumarized in the Bee World (England), states as follows:

The flow in Alberta begins between the 20th and 25th of June, and an estimated field force of 30,000 bees is required by that time. A mean of 37 days from the laying of an egg to the commencement of foraging was used in calculating the date for installing packages; average egglaying, over a period of years, ranged from 286 to 1.071 from the 1st to the 5th week. It is shown that in order to secure the required field force, package bees should be installed by April 6th. In two different apiaries 20 two-lb. packages were installed on April 5th, and 20 others (controls) on April 25th. It was found that a 35% higher yield could be harvested from the packages installed earlier.

According to Dakota Horticulture, the atom has been graded into 3 sizes: big, tremendous; and where is everybody?

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HOW TO PRUNE LILACS

Lilac flowers are produced at the tips of stems grown during the past year. Then the plant produces side shoots, which will produce flowers the following yea:.

When the flowers have faded, cut off the old flower heads because it will give the young shoots a boost for better flowers next year.

On young plants this will be about all the pruning you will need to do. On older plants however, remove all weak stems that have made but few flowers and if the plant is real old cut out some of the oldest wood entirely. Cut back the top only to control its shape. Prune it to the shape that harmonizes best with its surroundings.

Small Bobby had been to a birthday party, and knowing his weakness, his mother looked him straight in the eye and said, "I hope you didn't ask for a second piece of cake?"

"No," replied Bobby. "I only asked Mrs. Smith for the recipe so you could make some like it. She gave me two more pieces."

The dangerous age for a boy is when a girl takes notice of him.

WISCONSIN HORTICULTURE

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Apple Maggot Control

Control In Relation To New Tolerance Regulations

By C. L. Fluke, Dept. of Entomology, U. W.

After last year's warm July and August it was noted that many of the apple maggots were actually killed by the heat in the fruit, or at least the eggs failed to develop. This would indicate somewhat of a lessening of this pest. But it must be remembered that many of the flies do not emerge during a hot dry period but remain in the soil until the following year. The fly will always be with us.

For two years in a row the first flies appeared the last week or so of June in the vicinity of Madison and these flies escaped somewhat the later hot weather. Early varieties of apples were generally infested in orchards with apple maggot troubles.

This early emergence shows the real importance of always using the bait pails as traps to determine spray times. The value of DDT or methoxychlor is also best if applied as soon as flies are found.

Bait Traps

Bait pails or traps as they are called are readily prepared and cared for. Dry sticky traps are not so satisfactory. All that is needed to do is prepare three or four "five-pound honey pails" or similar containers that can be conveniently hung on limbs, about eye high and on the sunny sides of the trees. Fill each pail lipping full with water, add a pinch of detergent and a tablespoon of household ammonia.

It is best to strain the pails daily to remove all insects including the maggot flies. The water should be changed when it becomes too dirty and ammonia must be added every four or five days and especially at each change of water. The traps are very valuable if looked at daily.

Start Traps In June

In the southern third of the State put up the pails the 20th or 25th of June. If this season looks like a very late one



The apple maggot fly lays its eggs underneath the skin of the apple. From mid-July through August and into September it is a constant menace.



Bait trap for catching apple maggat flies. Fill with water and add 1 tablespoon of household ammonia. Hang on sunny side of trees.

Wisconsin Horticulture

the first of July may be early enough. At this date it looks like a very late year.

Methoxychlor Is The Best Control

DDT and **lead arsenate** have lost some of their effectiveness in control of this pest. We have found that **methoxychlor** (two pounds of 50% in a wettable powder form to each 100 gallons of spray) is almost a perfect control. Put it on as soon as a fly is caught in the trap. Repeat within ten days.

Because of new tolerance regulations DDT cannot be used later than **30 days before harvest** and the same applies to lead arsenate. Methoxychlor can be used within seven days of harvest. It is not only safer to use, it gives better control of the maggot.

Remember that the maggot lives over winter in the soil as a pupa and emergos as a fly beginning about July 1st and continuing for nearly two months. The great majority of the flies are out within four weeks. The greatest numbers can usually be found following a warm rain period. There is only one generation a year under Wisconsin conditions.

Keep Spraying Records

Remember to keep a good record of your sprays; the times you sprayed, the materials you used, and the strengths you used.

It should be remembered that DDT, lead arsenate (total lead) and TDE all have tolerances of seven parts per million (p.p.m.) and none should be used closer than 30 days of harvest; (arsenicals) (total arsenic trioxide) 3.5 p.p.m. Methoxychlor has a tolerance of 14 p.p.m. and can be used up to seven days of harvest. Malathion on the other hand is safe three days before harvest with a tolerance of 8 p.p.m.; parathion 21 days and .3 p.p.m.

Dieldrin has now been accepted for petal fall spray on apples with 35 days and .25 p.p.m.

A race track is the only place to find windows that clean people.



Box 231W

South Haven, Mich.

June, 1956

GROWERS HAVE NOTHING TO WORRY ABOUT FROM THE MILLER PESTICIDE AMENDMENT

by W. B. Rankin Food and Drug Administration, Washington, D. C.

Condensed from "Virginia Fruit" Magazine.

The Pesticide Chemicals Amendment to the Federal Food, Drug and Cosmetic Act—commonly known as the Miller Bill—became law in 1954. At that time, there were no formal Federal tolerances for spray residues and the only mechanism for setting them was the old public hearing procedure.

Much progress has been made in the 16 months since then;

A workable procedure has been developed for setting tolerances under the Miller Bill;

Numerous tolerances and exemptions have been established. Some are based on the old 1950 spray residue hearings, some result from the new procedure;

ORDINARY PRUDENCE NEEDED

But the necessity for ordinary prudence in use of pesticides should not alarm the consuming public or the growers. There are three cardinal principles which we should remember and they are: Where a tolerance is issued by the Federal Government, it means.

(1) that residues up to the tolerance level are safe; this has been established by adequate experimental studies on animals;

(2) that the pesticide can be employed usefully in agriculture without leaving excessive residues; this has been established by the certificate of usefulness furnished the Food and Drug Administration by the Department of Agriculture, and

(3) that when the pesticide is used according to proper directions, it will leave residues that are within the permitted level; we will not issue a tolerance unless there is evidence that it can be met.

GROWER'S SITUATION SUMMARIZED

Let's see if we can summarize the growers' situation under the new law:

1. The purpose of the law is to permit growers to use pesticides in the production of food without hazard to consumers.

2. Growers have nothing to worry about from the Miller Pesticide Amendment if they follow approved label directions in applying sprays and dusts to their crops.

3. This does not mean that growers can afford to be careless in applying pest control materials. They must not have excessive residues on crops at time of harvest.

4. Growers who deviate from the label directions should do so only on the basis of reliable advice that the deviation will not leave excess residues.

5. An easy rule for growers to follow is: Use sprays according to label directions—on the crops specified, in the amounts specified and at the times specified.

WHY DELICIOUS MAY NOT SET FRUIT

In recent years much of the pollen used on Red Delicious has been wasted. Perhaps not because of poor application, but because the bloom wouldn't set even though it was cross-pollinized. Why is that? You may ask. Well, it is a fairly well acknowledged fact that the young vegetative Delicious tree from 5 to 8 years of age and even up to 10 or 12 years of age, will not readily set fruit. Pollination is not always the solution.

From tests run last year by Dr. L. P. "Jack" Batjer and others, it was noted that Delicious limbs girdled soon after the blossom period, set more fruit than limbs that were not girdled. This indicated that the problem was more of carbohydrate concentration than pollination. The object of the test was to encourage fruiting the following year, but the current year's crop was also affected.—Ev Bill Luce, "Next Month in the Orchard" Better Fruit Magazine, Portland, Oregon.



New Developments in Farm Apple Storages

By D. H. Dewey Department of Horticulture, Michigan State Univ.

The storage capacity for apples in Michigan is approximately two-thirds of the yearly production of apples in the state. Approximately 4½ million bushel of apples can be stored in farm-operated buildings; whereas, the rest, or 1 million bushel, can be stored in city or terminal refrigerated facilities. Of the present farm storage space, 3½ million bushel capacity is mechanically refrigerated and 1 million is common or non-refrigerated. The amount of refrigerated storage space on fruit farms has been increasing at the rate of 300 to 400 thousand bushel yearly.

Modernization

There has been modernization of buildings, equipment and handling methods with the construction of many new farm storages. Most new storage buildings are designed for pallet handling and stacking of the fruit with electric or gasoline fork lift trucks. The floors are concrete and constructed on the same level with packing rooms and outside handling yards. Ceilings are high, 18-22 feet above the floor, and supported in many instances by roof trusses resting on pilasters in the wall or bar joists resting on the wall. Posts are used sometimes to support the roof, but are carefully located for minimum interference with pallet stacking. The doors are of adequate width and height of lift trucks and pallet loads; many doors are 4½ x8 feet.

Double walls of concrete block, cinder block, or glazed hollow tile are a common method of construction. Fill insulation, 5 or 6 inches in thickness, is used in the walls. The materials used are shredded redwood bark and coarsely ground expanded polystyrene. Some growers build single block walls with 4 inches of board-form insulation, such as expanded polystyrene. Ceiling insulation methods vary; some are 4 inches of board-form insulation, others 8 to 12 inches of fill insulation and still others, blanket types of insulation. Many new storages have built-up roofs without ventilation space between the roof and the ceiling insulation. Experience shows that floor insulation is unnecessary so long as the fruit does not rest directly on the floor and good air circulation is provided.

Refrigeration

Freon 12, a non-toxic and odorless refrigerant, is used almost exclusively for farm refrigeration. Cooling is accomplished mainly by ceiling-mounted dry coil units with forced air circulation. Many units are defrosted automatically using the off-cycle method.

Single compressors are used in some new storages; whereas, two compressors were universally installed several years ago. A single compressor means savings in original cost, may be operated economically, and if the storage is located near a source of dependable repair service or replacement, offers no great

(Continued on Page 330)

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risk because of mechanical failure. An important new development in refrigeration equipment for farm storages is the use of air-cooled instead of water-cooled condensers. The modern air-cooled condenser, when properly designed and balanced to refrigeration needs, has proved ideal for apple storages. Such difficulties with water as a source of supply, pipe and tubing corrosion, and freezing in cold weather tare eliminated with air coolers. Although maintenance cost is less, the original cost of air-cooled condensers is higher than for water-cooled condensers.

Storage Temperature

Most growers maintain a storage temperature of 32° F. for Red Delicious, Golden Delicious and Northern Spy apples, and 36° for Jonathuns. Another important storage variety, McIntosh, is stored usually at an intermediate temperature of 34°. A relative humidity of approximately 90 percent is desired for all varieties. The crates and apples are sprayed with water frequently during the loading and cooling-down period, and the floor is kept wet throughout the storage period to aid in achieving and maintaining a humid atmosphere.

The modern refrigerated farm storage in Michigan provides ideal conditions of temperature and humidity for apples. It is constructed and equipped to provide economical and practical service for a number of years.

WISCONSIN APPLE INSTITUTE TO HOLD SUMMER MEETING

Members of The Wisconsin Apple Institute will meet at the Hasslinger Orchard at Nashota on Tuesday, June 26 for a 1st summer meeting held by the organization. The meeting was arranged by the Board of Directors and Mr. Hasslinger has kindly consented to make his facilities available for the meeting.

The program will be varied including a talk by Dr. C. L. Fluke on Changes in The Insecticide Spray Schedule due to the new residue law, a trip through the orchard and discussion on apple promotion.

NEW APPLE FOR BREEDING PURPOSES DEVELOPED BY U.S.D.A. SCIENTIST

Reviewed By Malcolm Dana

Recently announced by the United States Department of Agriculture was the development of a new apple that may be useful in apple breeding programs. The apple has four sets of chromosomes in each cell, i.e., it is a tetraploid. Most commercial apple varieties are diploid, having only two sets of chromosomes in each cell.

A tetraploid apple crossed with a standard diploid apple would produce seedlings with three sets of chromosomes, triploids. About one-fourth of the good commercial varieties are triploids selected for special characteristics from the infrequent triploids produced by nature's random genetic procedures. Apple breeders have felt that if they could produce large numbers of triploid seedlings the chances of finding superior selections would be increased. This new apple may prove to be a valuable tool for the production of improved varieties of apples.

Apples with tetraploid tissue have been known for some time. Unfortunately the tetraploid tissue was not in those regions of the plant from which the reproductive cells arose. Therefore, such selections could not be used to produce triploid seedlings when crossed with diploid varieties.

The new apple was produced from a Winesap selection by Dr. Haig Dermen of the U.S.D.A. By the use of special procedures applied to a partially tetraploid selection, Dr. Dermen was able to induce a fully tetraploid shoot which has been propagated to produce a tree that will develop tetraploid reproductive cells. The orchardist must wait upon nature's show processes before new varieties can become available from the use of this new development. — (From Agricultural Research, United States Dept. of Agri.)

Lots of people would do less worrying if it were as hard to borrow money as it is to pay it back—Amherst Advocate.



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MOORESTOWN, N. J. . MILWAUKEE, WIS.

The Nation's Largest Orchard

Our members have heard of the Byrd Orchards in Virginia. However, we were impressed with the extensiveness of the operation from a recent article in Dakota Horiticulture reprinted from an article in The New York Times.

The manager of the orchard is Beverly Byrd of Berryville, Va., one of Senator Harry Byrd's three sons and production manager for H. F. Byrd, Inc.

While their apple plantings are the biggest in the U. S. under one management this Appalachian 4-state belt averages the biggest orchards by a wide margin. There are at least ten orchards of 2,000 to 1,000 acres of apples, and many over 500 acres. Apples are Big Business in Appalachian.

Among the statistics noted by Beverley Byrd were these: almost 5,000 acres comprising 210,000 trees in apples on 11 orchards located from Charles Town, W. Va., to New Market, Va. Eighty per cent of the trees are under 18 years of age.

Present production $1\frac{1}{2}$ million bushels. Within 5 years, they expect $2\frac{1}{2}$ million. Red Delicious make up 20% of their crop.

PAYROLL: \$20,000 a day during the harvesting season and \$2,700 a day for the rest of the year. That would add up to an annual payroll of about \$1,600,000. **EMPLOYEES: 300** year-around workers plus 1,500 during harvest. PROPERTY: Eleven orchards, five packing houses, one cannery, three cold storage units with a total capacity of 550,000 bushels and five camp houses accommodating 100 transient workers each. EQUIP-MENT: Sixty 2-ton trucks, 23 orchard wagons and tractors, 53 high-pressure sprayers, 400,000 bushel-picking boxes, 750 picking baskets and 750 ladders, 22 busses ranging up to fifty-passenger capacity, 12 pick-up trucks and 25,000 smudge pots.

DAILY CAPACITY: An average of 30,-

000 bushels a day during the picking season. That is 3-to-4 million apples. October 13 was a record day, when 61,000 bushels were picked. Of these, 24,000 bushels were packed for the "fresh" market and 19,000 cases of canned products were processed. The remaining 18,-000 bushels went into cold storage for future handling.

PLANTING: 15,000 trees set out last year and 16,000 scheduled for this year.

About 1,000 cases of canned sauce and sliced apples are processed in the three months of cannery operations. From the trimmings and cores are pressed 750,000 gallons of vinegar stock and 50,000 gallons of apple juice concentrate for jelly. What's left is dried into 600 tons of pomace for sale to dairy farmers as livestock feed.



June in the

Berry Patch

With George Klingbeil

STRAWBERRY RENOVATION

Strawberry renovation is the process of renewing the planting in preparation for another year of fruit production. The value of renovation is dependent on several factors, namely: the condition of the planting, prevalence of weeds, and other strawberry pests, and the planting and rotation plan the grower is following. If the planting is in poor condition and weedy, the value of renovation and holding the planting for another year is questionable.

Several studies have indicated that renovation of some plantings even in good condition will **actually reduce yields** the second fruiting season when compared with comparable plantings not renovated and held for fruiting the second season. The reason can be related to age and size of plant. Unless new plants of good size can be obtained by the end of the season a reduction in yield may be expected.

Many of the improved or virus-free varieties have increased plant vigor which generally results in more runner plants; thus some form of renovation may be necessary to reduce plant numbers.

In Wisconsin most strawberry plantings are fruited more than one season and with the aid of chemicals for weed control, improved pest control materials and more knowledge about strawberry fertilization this practice should be encouraged. Some form of renovation, however, will probably be necessary.

1. WHEN SHOULD RENOVATION BE DONE? As soon as possible after harvest. The success of renovation depends on the earliness that new runner plants can become established.



2. WHAT SHOULD BE DONE WITH THE MULCH ON THE FIELD? Remove the coarse material if necessary. Work the finer remaining material into the soil in the renovation process.

3. SHOULD PLANTS BE MOVED BE-FORE RENOVATION? If insect and disease pests were severe, mowing the tops and destroying them may be of some value; however, with the pest control materials available today severe pest infestations should only be the problem of the careless grower. Destroying the foliage of a plant reduces the working portions of the plant so naturally will retard plant development.

4. WHAT IS THE BEST WAY TO NARROW THE ROWS? Rows are generally narrowed to about 12 or less inches in width. Narrowing can be done by several methods, shallow plowing, cultivation, or with several rotary type tillage machines. Plowing down a part of the old row is most common. The soil must be cultivated back toward the remaining row as soon as possible.

5. IS CROSS-ROW TILLAGE NECES-SARY? If plants are thick in the rows it would be a good practice to reduce the stand. This can be done by hand hoeing, criss crossing the field with a rake, harrow, or springtooth. Sometimes discing crosswise may be necessary.

6. ARE CHEMICALS FOR WEED CONTROL PRACTICAL WHEN RENO-VATING A PLANTING? Chemical weed control at renovation is certainly practical. 4 pounds of Crag plus ½-1 pt. 2,4D amine per surface acre of area is recommended. A minimum of 50 gallons of water per acre should be used. Use a low pressure sprayer with fan type nozzles and apply the spray mixture as soon as renovation is complete.

7. IS IRRIGATION NECESSARY AF-TER HARVEST? Any practice that will aid to establish strong runner plants early is profitable. Supplemental irrigation after harvest in most seasons is practical.

8. SHOULD FERTILIZER BE AP-PLIED WHEN THE PLANTING IS RENOVATED? Fertilization at this time is essential. On most Wisconsin soils an application of 500 pounds of 10-10-10 per acre would be an average application.

HOW TO TREAT FENCE POSTS

SIMPLE METHOD FOR TREATING FENCE POSTS DEVELOPED FOR HOME OWNERS-Home owners can treat their own fence posts against decay and termites by a simple soaking process developed by USDA's Forest Products Laboratory. By standing the round green posts first in a water solution of copper sulfate and then a water solution of sodium chromate, the two chemicals diffuse into the post and combine to form copper chromate. This combination is toxic to fungi and insects, practically insoluble in water, and will not leach from wood placed in a damp soil. Of 100 pine posts thus treated and set in 1942 in Mississippi (a region of high decay and termite hazard where the average life of untreated pine posts is about 3 years), only one has decayed. The average life of hardwood posts also has been extended considerably by this treatment. Equipment needed to carry out this treatment is commonly found in most homes: A scale to weigh the chemicals or a 1-lb. coffee can, a 10-qt. pail, and two barrels, one of which must be wooden or concrete. The 25 lbs. of copper sulfate crystals and 25 lbs. of sodium chromate powder needed usually can be ordered through a local hardware store or farm supply store acting as agent for a spray chemical manufacturer. If not, the laboratory at Madison, Wisconsin has a partial list of companies handling the chemicals.-Thanks To Maryland Fruit Growers News-Letter.

THE FUTURE OF STRAWBERRY PRODUCTION By Harry K. Bell, Michigan State University

Michigan is the largest producer of strawberries east of the Pacific Coast States. California, Oregon and Washington-in that order-rank first, second, and third in production of this fruit. These three states account for two-thirds of the total commercial strawberry tonnage in the United States. Acreage of strawberries in the West has expanded considerably during recent years, and sharp increases are reported for harvesting in 1956. It is estimated there will be 19.000 more acres of strawberries harvested in the strawberry producing areas of the United States in 1956 than during 1955.

Despite the expansion in other states, acreage of strawberries continues to increase each year in Michigan. The possibility of overproduction has been considered by our growers, but most of them view the future with the optimism that always has been so typical in Michigan. This confidence is based upon apparently sound economic trends evolved during recent years. Although per capita use of most fresh fruits, such as oranges, peaches, and pears has declined considerably during recent years, consumption of fresh strawberries has held steady. In other words, each person now eats as many fresh strawberries as he did several years ago. With our rapidly enlarging population, this means a general total increase in the use of fresh strawberries. This, however, is but half of the picture, for each person uses just as many frozen as he does fresh strawberries. This means total consumption of strawberries has about doubled during recent years .-- Condensed from Annual Report of the Michigan Horticultural Soc.

Young Mother: "Nurse, what is the most difficult thing for a young mother to learn?"

Nurse: "That other people have perfect children, too."



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VISIT STRAWBERRY VARIETY TRIALS

Pennisula Branch Stations Sturgeon Bay, Wisconsin

The strawberry harvest at the Pennisula Branch Stations at Sturgeon Bay will probably not start much before July 1, this year, according to Dr. F. A. Gilbert. Superintendent. The peak of the picking may be about July 12.

Growers who are interested in the experimental work going on at the station, especially the strawberry variety trials, are invited to visit the station at anytime during the season.

Meeting To Inspect STRAWBERRY SEEDLING SELECTIONS Horticulture Department, **University of Wisconsin** Two Saturdays, June 16 & 23

1:30 p.m. Location: Small Fruit and Garden area. Turn North from University Ave. on Walnut St. It is just east of the U.S. Forest Products Laboratory and across the street from the new University Greenhouses.

Dr. R. H. Roberts will be on hand to show and explain the new crosses and possible new strawberry varieties which have been selected for freezing qualities, productivity and berry type.

Everyone is welcome to attend.

Believe it or not, France in 1953 produced 24 million bushels of pears for juice purposes alone, compared with the entire U.S. Crop of 29 million bushels.-American Fruit Grower.

MAKE FRIENDS WITH YOUR LAND By Miss Frieda Schroeder, Loyal, Wisconsin

Paper presented at Spring Meeting, Wisconsin Berry and Vegetable Growers Assn. (Condensed)

Some years ago I worked in a canning factory where each year we analyzed soil samples from 1200 acres of land. We found that humus was our determining factor in quality. I think of one farmer who always planted just 8 acres and he had one program; he would plough under a clover and alfalfa crop and said it was necessary to pasture this land for one or two years. He never had a failure and during a drought period his land always had enough moisture.

So it was only natural that when I came to Evanston, Illinois I started watching the fruit store windows for strawberries. Premier was the only berry on the market at that time-in March. They came from Louisiana, then Tennessee, and later from Indiana, Illinois, Michigan, and Wisconsin. Some berries were beautiful-others just junk. This took me to South Water Street market at 2:30 A.M. to watch the berries come in. I contacted some growers whose quality was always high. Buyers struggled to get their fruit. When some berries sold as low as \$1.75 per crate, others brought \$9.00 and \$10.00. When I asked why, the answer was lack of humus in the soil caused the poor berries.

I have been told that in Michigan they feel that the cause of some poor yields and poor quality is not virus but nematodes. I have already cancelled one order I had placed and found that they were not nematode free. I am starting this year with virus-free and nematode

June, 1956

free plants—plants that have had the hot water treatment for nematodes besides being grown in fumigated soil. I have selected the following varieties: **Sparkle**, **Robinson, Plentiful.** Also Dr. R. H. Roberts is sending me some of his seedlings for testing. The variety Plentiful really did well in my nursery last year.

FUTURE OF STRAWBERRIES

At the Annual Convention of The New York State Horticultural Society last winter, Mr. W. Lee Allen, Salisbury, Maryland, made the following statement in regard to the marketing and future position of strawberries. Mr. Allen is a well known strawberry plant grower. His paper in full, was published in the Annual Report of the New York Society.

Markets

Except for a brief period of ceiling prices, the strawberry crop has never been subjected to government regulations. Supply and demand have usually regulated the markets. The rapidly increasing population provides an ever expanding market for strawberries as well as other crops. In addition to this the increasing use of roadside stands for marketing berries has given improved local distribution and use: frozen food lockers provide a means of year-round consumption for the individual family and the processing industry in general has become a tremendous factor in the marketing and distribution of strawberries. The over-all demand has been stimulated by the use of strawberries, often in color, in ads for cereals and other food crops in the national magazines. This advertising, if paid for, would cost the industry many thousands of dollars yearly.

Financially strawberry growers are in a favored position compared with the growers of most other crops. With the increased productiveness due to improved methods and varieties, strawberries may not sell for as high prices in the next five years as they have during the past five. However, with economical production methods and full use of all the information available strawberries look like a good crop for the future.

BLUEBERRIES NEED MULCH

It has been found that blueberries may be successfully grown on the high pH mineral soils of Kentucky by using special methods. A good yield of blueberries was recorded on plots mulched with 8 inches of sawdust, irrigated when needed, and heavily fertilized with ammonium sulfate. Plants mulched with sawdust and fertilized with ammonium sulfate, but not irrigated, gave good yields, but plants irrigated and fertilized but not mulched, produced low yields, indicating the great need for a heavy sawdust mulch.

From Bulletin, Michigan Dept. of Horticulture.

HOW TO HARVEST ASPARAGUS

Asparagus should not be harvested until the plants have grown for two years in the field. Light harvesting on the third and fourth year will pay off in yields in succeeding years. Recent results in Essex County, Ontario indicated that an extension of the harvest period by only one week after size declined reduced the yield by 250 pounds per acre. Stop cutting in time to allow a vigorous, heavy fern growth to provide sufficient food to the roots to insure a heavy crop the following year. A little restraint in harvesting during the early years will pay off in larger dividends later on. Don't harvest after spear diameter becomes less than one-half inch.

By R. L. Carolus in Bulletin, Michigan, Dept. of Horticulture.

HOW TO FERTILIZE NEW STRAWBERRY PLANTINGS

When the plants begin to form runners, a side dressing of nitrogen will help produce strong plants. One to two pounds of 33% nitrogen per 100 feet of row should be enough. In the hill system, use one teaspoonful per plant. Be certain that all fertilizer is brushed from the leaves. A second sidedressing of nitrogen should be applied in early August at the same rate.

Growing Better Vegetables

By John Schoenemann

The 1956 insect control recommendations have just been published by the College of Agriculture, University of Wis. These include recommendations for use of insecticides on commercial vegetable crops as well as home gardens. These recommendations are prepared annually by staff members of the Department of Entomology. This year's information has been delayed somewhat, due to the provisions of the Miller Bill or Public Law 518 under the Food and Drug Act which specifies that "food shipments bearing residues of pesticide chemicals in excess of established tolerances will be contraband and subject to seizure as adulterated." Careful checking and clearance information for various pesticides had to be obtained before issuing these recommendations to growers. The purpose of the law is to permit growers to use pesticides in the production of food without hazard to consumers. Growers should certainly take this law seriously but have little fear of it if, they follow approved label directions in applying dusts or sprays to their crops.

With tolerance amounts being placed on pesticide (herbicides, insecticides, fungicides) residues on or in foods, growers would be wise to keep accurate records of all such pesticide material used, the dates applied and the amounts applied to their vegetable crops. Such records are for the growers own protection and may prove helpful in the event their produce is checked by FDA inspectors in market channels.

Below are some timely recommendations, taken from Circular 520 "Insect Control", for controlling insect pests on



some of the more commonly grown vegetable crops. Copies of the complete circular on insect control can be had by writing to the College of Agriculture, Bulletin Mailing Room, Madison 6, Wisconsin.

CARROT LEAFHOPPER

Six-spotted Leafhopper—These insects cause considerable damage in quality and yield of carrots by their transmission of carrot yellows disease. DDT will greatly reduce the leafhopper populations and consequently control the disease, particularly if applications are begun when carrots are not more than 2 or 3 inches tall and continued at 7 to 10-day intervals. Three to six treatments of DDT spray at 2 lbs. per acre or a 5-10% dust are needed to control this pest.

Potato Insects

Potato Leafhopper, Potato Flea Beetle, and Colorado Potato Beetle — DDT gives excellent control of these insects and by a reduction in their population, more vigorous vine growth and greater potato yields are produced. Sprays of $\frac{3}{4}$ lb. of actual DDT per acre or dusts of 3 to 5% DDT should be applied at 7 to 10-day intervals from the time the plants are 6 inches high to the end of the growing season.

Vine Crop Insects

Striped and Spotted Cucumber Beetles —These beetles are controlled by light applications (10-15 lbs. per acre) of 1 to 3% DDT dusts. Cucurbits are particularly susceptible to DDT injury and consequently excessive deposits on plants should be avoided. Dusts of 3% purified

(Continued on Page 348



Wisconsin Nurserymen's Ass'a. DIRECTORS: M. A. Haller, Oshkosh: Leland Jens, Wisconsin Rapids; Kenneth Altorfer, Madison; K. W. Greaves, Milwaukee; Robert Gleringer, Milwaukee; Ralph Petranek, Milwaukee.

The Root Nematode

By E. L. Chambers, Madison

Question: Is the Root Nematode a serious problem in Wisconsin? We read articles in magazines from other strawberry growing states that they are using various treatments to control Nematodes. Will we have to adopt such treatments here in the near future?

Answer: Root Knot Nematodes while established in Wisconsin are not very widely distributed and seldom are found doing the serious damage they cause in other states where the climatic conditions are more favorable for their development. There are a number of species of these miniature roundworm parasites which attack strawberry plants including the Root Knot Nematodes, the Meadow Nematode, and the Strawberry Nematode. Since these so called eelworms are prevalent in a number of eastern and southern states which makes large numbers of shipments of strawberry plants to this state, it is uncommon to find an infestation of the pests on the roots.

Question: What is being done to keep Root Nematodes out of Wisconsin to protect our future strawberry plantations?

Answer: Every effort is being made by the Wisconsin Department of Agriculture to require certification of only such strawberry plants consigned to Wisconsin as were either free of Nematode infestation or adequately treated to eliminate such infestations. Last year one eastern firm delivered over 100 shipments to our growers, and our inspectors intercepted Nematode infestations in several lots that they had an opportunity to inspect. The situation has been so bad that the Federal Government issued a warning that many sources of so called virus-free strawberry plants were originating in nurseries having Nematodes and advised hot water treatment before shipping out. Prospective buyers and individuals were urged to insist on clean plants and advised to examine the roots carefully for any evidence of this pest before accepting such shipments.

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Question: If we buy strawberry plants from nurseries in eastern states would it be advisable to treat them before planting and if so what is the best treatment?

Answer: Strawberry plants infested with Nematodes can be freed from infestations by hot water treatment, and several soil fumigants show promise in controlling the infestation in the soil. Only dormant strawberry plants should be immersed for 2 minutes in water at 127 degrees F. or 7 minutes in water at 121 degrees F. Chloropicrin applied to the soil at the rate of 200 pounds per acre is an excellent miticide and insecticide. The 98% methyl bromide fumigant applied at the rate of 1 or 2 pounds for each 100 square feet gives good control of nematodes and soil insects. Planting must be delayed for about two weeks after treatment.

I think that I shall never see along the road an unscraped tree, with bark intact, and painted white, that no car ever hit at night. For every tree that's near the road has caused some auto to be towed.

CHEMICALS FOR SOIL INSECTS Grub Worms Controlled by Chlordane

The chemical control of soil insects (grub worm, cut worm, wire worm, aphis, ants, etc.) is our latest improved commercial cultural development in Kentucky. We mix chlordane with the fertilizer and apply broadcast or with a distributor, then thoroughly disc into the soil in advance of setting the field.

At Lexington on the Experiment Station Farm we set a 2-acre plot of ground to strawberries in the spring of 1953 using a 15-year-old, heavy bluegrass sod that had been in orchards for 25 years. When plowing this land the tractor driver observed that the furrow slice was literally white with grub worm. We treated this land with chlordane (8 lbs. actual chlordane per acre). In this case we used the 40 per cent strength wettable powder chlordane-20 lb. per acre- dissolved it in an orchard sprayer tank, applied with a spray gun, and then disced it into the soil before the berries were planted in March. From 11.000 plants started we had only three plants die.-Paper by W. W. Magill, Kentucky in Annual Report of Michigan Hort. Soc.

MORDEN GLEAM AND MORDEN ROSE LYTHRUMS

These new varieties of Lythrum were developed by crossing the popular Morden Pink, which is an almost self-sterile mutation of Lythrum virgatum, with select forms of native Lythrum alatum. Both these varieties are superior to Morden Pink in color and plant form but they tend to heavy seed production which shortens somewhat their flowering season.

Morden Gleam—The vigorous plant grows to four and a half feet, is spreading and bears the largest spikes seen in any of the Lythrums. The color is deep rosy-pink, fading slightly in hot weather. Many side branches produced from the main stems prolong the season of bloom and give to the plant a graceful appearance.

Morden Rose—This variety is more compact than either Morden Gleam or Morden Pink. The foliage is broad, abundant, dark green and glossy. The flowering season is a week or so later than any of the Lythrums tested at Morden: the color, considered the brightest yet seen in Lythrums, is a rich rose-red, durable through periods of heat and drought.

All three varieties are obtainable from prairie nurserymen at reasonable prices and home-owners will be well advised to patronize reputable firms rather than be led away by the colorful and often exaggerated claims made in some magazine advertisements.

Plants are increased readily by means of softwood cuttings. Seed from open pollinated plants produce a diversity of poor colors.—From Newsletter of the Morden Experiment Station, Manitoba. (Condensed).

DO YOU WANT A RAIN GAUGE?

Recently I had a request for a rain gauge, and in looking this matter up, I find that Nasco Supply House, Ft. Atkinson, Wisconsin, Catalog No. 27, lists two styles of rain gauges, the first being E76, "Tru-Chek" rain gauge at \$4.95. This unit has a plastic face and it is claimed that it will not be injured by freezing. Comes complete with mounting bracket.

There is also a cheaper rain gauge called "Victor" E77, which sells for \$2.85. It is made of rustproof aluminum with a plastic tube and you read the amount of rainfall up to 6 inches as you would a thermometer.—By C. L. Burkholder in News Letter, Indiana Hort. Soc.

Hardie Irrigation Equipment Represented by ERIC FRANKE Route 5 (County Trunk "U")

Sturgeon Bay, Wisconsin Now offering complete repair service for Rainbird & Skinner Sprinkler heads.

Frequently have good used

systems available

One tractor-drawn Holland Transplanter to plant one acre strawberries. Can't be told from new. Priced to sell fast.

m the Editor's Desk

OUR COVER PICTURE

What is more beautiful than a rose? This month we show Tiffany, a 1955 All-American Hybrid Tea Selection. Tiffany is an origination of Robert Lindquist of Howards of Hemet, California, who also originated Lilibet, winner of the 1954 American Rose Society award for floribundas.

Tiffany is truly beautifuly from bud through full bloom. Deep pink coloring shades to golden yellow in striking contrast to dark green foliage. It has a remarkable fragrance.

WE'LL BE WITH YOU AGAIN IN AUGUST

It has been customary for some years to omit the July issue of Wisconsin Horticulture in order to balance our budget.

You will therefore not receive a copy of this magazine in July. We will be with you again in August and hope that you will have a very pleasant summer.

WELCOME BADGER STATE DAHLIA SOCIETY OF MADISON

The Badger State Dahlia Society of Madison affiliated with The Wisconsin State Horticultural Society in April. The Society plans to furnish interesting articles on Dahlia culture, Dahlia shows, etc. each month. The Wisconsin State Horticultural Society welcomes the organization to membership. The officers are Mr. Max Freudenberg, Pres., Mr. Otto Sell, V. Pres., and Mrs. L. W. Amborn, Secretary, all of Madison.

LETTERS FROM OUR MEMBERS

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"Your magazine is very informative and worthwhile," by John C. Jung, Jung Seed Co., Randolph, Wisconsin.

"I surely enjoy the articles in Wisconsin Horticulture and believe that the Society is doing a lot for its members," by W. F. Sonneman, Vandalia, Illinois.

BOOK ON ROADSIDE MARKETING

"Profitable Roadside Marketing" is the title of a new book written by R. B. Donaldson and W. F. Johnstone, Extension Service marketing specialists at Pennsylvania State College.

The book sells for \$2, and is available from College Science Publishers, State College, Pennsylvania. It should be of real value to those interested in roadside marketing.

BULLETIN ON RED RASPBERRIES

Wisconsin Red Raspberries (Circular 515) has just been released by the Extension Service, University of Wisconsin, College of Agriculture, Madison. Send for it to the "Bulletin Mailing Room".

The bulletin was written by Prof. George C. Klingbeil and contains chapters on varieties, sites, soil preparation, planting systems, fertilizers, cultivation, pruning, everbearing varieties, and disease and insect control.

NEW FUNGICIDE FOR APPLE SCAB CONTROL

Now that you have become familiar with such words as Captan, and Ferbam and the various kinds of sulfur for apple scab control you might add another new name to the list—Thylate.

This new chemical is light colored and controls both apple scab and cedar-apple rust. It is put out by the Du Pont Company. The fruit has a smooth, glossy finish at harvest time.

Thylate has been tested in several states and will probably be on the market soon.

An elderly maiden aunt received this note from her 10-year old niece: Dear Aunt: Thank you for your nice present. I have always wanted a pin cushion, but not very much.

THE DOLGO CRAB APPLE

The Dolgo crab apple was somewhat popular about 15 years ago and quite a few people planted it. At first there seemed to be a market for the crab apples; however this seems to have changed.

In the January issue of Dakota Horticulture, we find this statement: "I would estimate mature trees to produce 15 bushels per year. With well formed large trees maybe more. Suppose we plant 60 trees to the acre; at 5 cents a pound they would bring us a neat sum. But now the question is this: Is there a market for them? I find there is not, at the present. There is always a demand for a few bushels, but that is as far as one would get."

This article was written by Russell Wodarz, who writes a column, My Experience In Horticulture.

Now if the crab apple no longer sells in Dakota, where good varieties of apples are difficult to grow, then it is not strange that growers in Wisconsin also state the fruit does not sell. Add to that the cost of picking a bushel of these somewhat small crab apples and you have the reason why we do not recommend planting them.

In these modern times it seems that everything in the home is controlled by a flick of the switch, except the children.

THURLBY'S HYBRID IRIS GARDENS 1434 Northport Dr. Madison 4, Wisconsin AMERICA'S FINEST IRIS SEE OUR GARDENS LATE MAY—EARLY JUNE

HOW MUCH OF AN ACRE IS YOUR GARDEN OR LAWN

Quite often directions for applying fertilizer, weed killing chemicals, or lawn seed are based on a certain number of pounds or gallons per acre. One acre is 43,560 sq. ft.; ¹/₄ of an acre is 10,890 sq. ft. Just pace off or measure your plot and divide into the number of square feet per acre and you have it.

WISCONSIN IRIS SOCIETY HOLDS ANNUAL SHOW

The Wisconsin Iris Society held its Annual Iris Show at Mitchell Park Recreation Room in Milwaukee on June 3. There were two classes at the show, the Horticultural or Specimen class and the Artistic Arrangement classes. Both had about 21 divisions.

Officers of the Wisconsin Iris Society are: Pres.: Mrs. Howard Goodrich, 16610 W. Pepper Lane, Milwaukee 14; V. Pres.: Mr. Arthur Bodgett, Waukesha; Treasurer: Mr. Alfred Mueller, Elm Grove, and Secretary: Miss Nadine Yunker, P.O. Box 8, Taycheedah.

FOR YOUR SMOKING PLEASURE

For smoking, beside the little cultivated tobacco which was raised by some of our North Dakota Indians, the bark of the red dogwood or kinikinek, Cornus stolonifera, was most esteemed. The young smooth bark was peeled, dried in the sun, and is used now largely in a mixture with tobacco. Besides the dogwood, the leaves of the bearberry were much esteemed, as were the fall leaves of the sumac.—By W. R. Leslie, Manitoba, in Dakota Horticulture.

MOULTON IRRIGATION COMPANY Represented by H. D. Roberts



WISCONSIN GLADIOLUS SOCIETY

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7TH CENTRAL INTERNATIONAL GLADIOLUS SHOW

World Famous Gladiolus Hybridizers and Growers Will Congregate at the U. W. Field House Aug. 15-16th

Many world famous gladiolus personages will gather and exhibit their newest creations at the 7th Central International Gladiolus Show to be held in the U.W. Field House, Wednesday and Thursday Aug. 15-16th. The first of the Central International shows was held here in 1950 and was an outstanding success as it was one of the largest glad shows ever staged, both for the number of entries and total attendance.

Since that date the show has traveled to Lansing, Chicago, Rochester, Minn., Sioux City, Wabash, Indiana and now will return to Wisconsin.

Wisconsin Ranks High in the **Gladiolus World**

Wisconsin has held a top position for the past ten or twelve years for the number of outstanding gladiolus hybrid originated by the many men working in this field in Wisconsin. The early hybridizers included Dr. Scheer, of Sheboygan, noted for originating the famous variety White Gold. In the same era Walter Krueger, of Oconomowoc introduced Miss Wisconsin and Variation. The work of these two men was soon followed by a succession of Wisconsin hybridizers famous for many of our recent introductions Among them are the Melk's of Milwaukee whose originations include Golden Crown, Margery, Skippy, Red Radiance and Paul Bunyan. At Madison we have the present active team of John

Flad and Prof. Jim Torrie known for their introductions of Traveler, The Prince, Edgewood, Jubilee and others. The introductions of Ted Woods, also from Madison have nation wide distribution. His best known varieties are Connie G. Rosita, Larchmont, Wax Canary and others.

Other hybridizers are John Bayliss and Mrs. Archie Woodcock of Two Rivers, Wm. Himler and John Kleinhans of Fort Atkinson; Ralph Burdick of Edgerton and many others.

The most famous of the modern gladiolus were introduced by the Cosmopolitan Glad Gardens of Milwaukee who marketed the originations of several hybridizers. Best known of these are Spic and Span and King David which have topped all show records for the past five or six years.

The creations of all these Wisconsin men will be much in evidence at the Madison show this year. In addition there will be many other famous hybridizers from other sections of the United States and Canada. Included will be Carl Fischer of Minnesota, Glen Pierce of Illinois who specializes in miniature varieties, men from Iowa, Indiana, and Michigan. Others will come from Ontario and British Columbia and the Pacific Coast states. The creations of Winston Roberts, of Boise, Idaho, who specializes in heavily ruffled varieties will be in evidence, as will be some of the newly developed double varieties.

You are invited. There is no admission charge.-By Dave Puerner, Milwaukce

Wisconsin Horticulture

Early Summer Gladiolus Culture

By James H. Torrie, Madison

During early summer several things can be done in the glad path. One of the most urgent problems is keeping weeds under control. Those which come up between the rows can be best controlled by cultivation with a wheel hoe in the small garden or by a rotary tiller in a large planting. It is important not to cultivate more than two inches deep. otherwise the roots of the gladiolus may be disturbed. Weeds in the row, especially if you get at them when they are small, can be smothered by hilling. It is important that the weed foliage be completely covered with soil. This is easily done in plantings of large corms.

Fertilizers

Top dressing with a complete fertilizer such as 5-10-10, 6 to 8 weeks after planting will often improve the bloom. Apply the fertilizer in a shallow trench close to the row at a rate of about 1 pound per 100 feet of row. The shallow trench is covered with soil and the patch thoroughly watered to dissolve the fertilizer. Care should be taken not to allow any of the fertilizer to touch the plants.

Gladiolus require lots of water especially during the 4 to 5 weeks prior to blooming. Apply at least 1 inch every 7 to 10 days if rainfall does not occur. Light waterings do more harm than good. When water is applied be certain that the soil is well soaked to a deepth of 7 to 8 inches.

Mulch

When possible I mulch between the rows about the middle of June. Marsh or clover hay applied 3 to 4 inches deep makes an excellent mulch. The purpose of the mulch is threefold—to conserve moisture, to keep down weeds and to keep the soil cool during hot summer days.

Control Thrips

During late spring and early summer thrip control is important. Thrips may be controlled by applying, during early morning when dew is present, A5 to 10% DDT dust. Spraying with a 50% wettable DDT or chlordane powder at the rate of 1 tablespoonful per gallon of water is the method I use to control thrips.

(Continued on Page 344)

GLADIOLUS SHOW DATES-1956

July 29—Southern Wisconsin-Northern Illinois Gladiolus Society, Seedling and Recent Introduction Show, Elementary School, Jefferson, Wisconsin.

August 10-11—Lake Geneva Gardeners & Foremen's Association, Horticultural Hall, Lake Geneva, Wisconsin. Annual Flower Show.

August 12-13—Waterloo Gladiolus Society, Masonic Temple, Waterloo, Iowa.

August 15-16 — Central International Gladiolus Show, University Field House, Madison, Wisconsin.

August 18-19—Illinois Gladiolus Society, Chicago Regional Show, Garfield Park Conservatory, Chicago, Illinois.

August 20-21 — Southern Minnesota Gladiolus Society, Freeborn Co. Fair (floral hall), Albert Lea, Minnesota.

August 31, Sept. 1, 2, 3—Southern Wisconsin-Northern Illinois Gladiolus Society, Walworth Co. Fair, Elkhorn, Wisconsin.

WISCONSIN CHAPTER SHOWS

August 11-12—Fox River Valley Gladiolus Show, Appleton, Wisconsin.

August 18-19-Marathon County Gladiolus Show, Wausau, Wisconsin.

STATE FAIR GLADIOLUS SHOW

The Wisconsin State Fair Gladiolus show will be an open event this year, it was announced by David Puerner, Milwaukee, a member of the show committee. The show was formerly limited to Wisconsin entries. Information can be secured by writing to the Wisconsin State Fair, Milwaukee 14, Wisconsin.

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This should be done every 7 to 10 days during June and July. Red spiders can be controlled by dusting with rotenone. Leaf diseases may be partially controlled by applying a fungicide such as parzate or dithane at the rate of 2 tablespoons per gallon of water. Since the strength of this material varies it is important to check and follow the manufacturer's directions. The fungicide may be mixed with DDT and applied in one application. An addition of 1 teaspoonful of a detergent, such as dreft, will help the spray to adhere to the leaves of the gladiolus.

FOX RIVER GLADIOLUS SOCIETY NEWS

The Fox River Valley Gladiolus Society is planning to put on their Show, August 11 & 12 at the Masonic Temple, 330 E. College Ave., Appleton, Wis. Committees for the Show will be appointed at a meeting on May 20th. Members enjoy these get together meetings followed by Potluck suppers.

A page entitled, "A Word of Welcome from The Fox River Valley Glad Society" is being included with bulbs that are sold by our members. We hope this information will be helpful to new growers and hope also to increase our membership.

Our Society had several programs on TV prior to our bulb auction which realized our Society \$150.00.—By Mrs. Carl Knoll, Sec'y

TWIN CITY GLADIOLUS CHAPTER NEWS

A Twin City Gladiolus Chapter met every other month during the winter in members homes. Plans for a gladiolus show are in the making and we will again furnish bulbs to 4-H mmebers with Garden and Home improvement projects. The members will be requested to report to us on the production of spikes and bulbs and also show at the County Fair or at our Chapter Show. — By Arnold Sartorius, Porterfield

Friendship is the only cement that will hold the world together.—Pure Milk Products News.

LAKE GENEVA FLOWER SHOW Horticultural Hall—August 10-11

On Friday the hours will be from 12 noon to 9:30 p.m. CST. and on Saturday. from 10:00 a.m. to 9:00 p.m. The booths will be open until 6:00 p.m. Admission tickets are \$1.00 each.

The theme of the show this year is "Southern Accent". The emphasis will be placed on gardens and flowers of the South, especially of New Orleans. Members of the Garden Club and Lake Geneva Gardeners and Foreman's Association are expecting it to be a very interesting and beautiful show.

Information sent by Mrs. Howard Adams Vaughan, Winnetka, Ill.

MANITOWOC CHAPTER NEWS

The Wisconsin Co-ordinating Gladiolus Council will hold an annual picnic on Sunday July 22 at Pampern Park in Green Bay. There will be a pot luck dinner at noon. Everyone is invited. Bring your friends and invite them to join. We should all bring a new member to join our Society at this picnic.

In spite of cold weather, our members The Touheys of The Touhey Gardens planted 160,000 bulbs the first week in May. It seems that if we are real glad growers we are always anxious to get started early. The Touheys are sure to make our shows more beautiful pictures of gladiolus.

Some of the Manitowoc County Gladiolus Society members had a house warming and pot luck supper in honor of Mrs. John Bayliss and family, in their new home on the shore of the creek at Mishicot, Wis. on Saturday, May 5.

The Manitowoc Chapter had a box social at a meeting held on Sunday, April 29. In spite of the snow storm there was a good turnout. Plans were made to help with the Central International Show at Madison.—By Mary Rezek, Sec.

Flattery, a great help in getting along with neighbors, is nothing more than ability to describe people as they we themselves.

Garden Club News

OFFICERS res.____Mrs. A. J. Wiesender, 217 Park St., Berlin ice_Pres.___Mrs. C .H. Brimmer Pres. Wausau

Wausau Treas.....Mrs. John Kiesling, Sr., Route 1, Ft. Atkinson Sec...Mrs. H. Buerosse, Milwaukee Central Region: Mrs. C. H. Brimmer; Mrs. C. H. Braman, Wausaca. Milwaukee Region: Mrs. Ray Luckow, Milwaukee; Mrs. H. B. Buerosse, Winnebagoland Region: Mrs. Carl Peik, Chilton: Mrs. A. J. Wiessender. Farlimentarian-Mrs. Roy H. Sewell, 7841 N. 76th St., Milwaukee. Mr. H. J. Rahmow, Madison, Exec. Sec. Ex-officio.

ANNUAL CONVENTION **Garden Club of Wisconsin** Baptist Colony, Green Lake, September 11-12

The program for the Annual Convention will be published in the August issue of this magazine. In the meantime, we suggest that you write to the Baptist Assembly, Green Lake, Wis., and ask them for a rate card for rooms. Make your reservation as early as possible.

A full two day convention is planned for this year and it should be most interesting for everyone. Rates for rooms include all meals and are quite reasonable. Plan to come and stay overnight.

WANTED: FLOWER SHOW DATES

Wisconsin Horticulture will not be published in July. Our next issue will reach members about August 12.

We will appreciate if garden clubs will send us information about any flower shows or meetings open to the public which will be held after August 12 for publication in the August issue.

Information should reach The Wisconsin State Horticultural Society by July 10-15.

AWARD FOR GARDEN CLUBS WITH THIRTY YEARS OF SERVICE

The Board of Directors of The Garden Club of Wisconsin at the April meeting voted to continue awards to member garden clubs with 30 or more years of service, based on length and value of services.

The motion which was passed provided that any member club of The Garden Club of Wisconsin will be eligible for an award after thirty years of continuous service. Selections for the award, to be presented at the Annual Convention in September, will be based upon the years of service and value of services to members and the community.

If your garden club has passed its 30th birthday send the information as to when the club was organized and something about its accomplishments. Selection will be made by the Board of Directors and only one award will be given in any one year.

CONSERVATION CONVERSATIONS

Should there be a Conservation section in a Flower Show? Why not? Gardening is Conservation on a small scale, and Conservation is Gardening on a large scale-which means they have much in common. Usually, Conservation should be an educational display; but it could be scheduled. In a display, thought should be given to the phase of Conservation to be stressed, taking into consideration the time of year and the room and facilities available. The most common error is to attempt to cover conservation as a whole in one display, which results in a confused, rather than an interesting, feature. Following are a few suggestions:

Spring Show: Two subjects might be of interest-Bird Houses and Wild Flowers. A list of the seven protected wild flowers could be shown in picture form: also a list of the wild flowers which are not protected but which should not be

(Continued on Page 348

FLOWER SHOW

Blackhawk Region

Elementary School, Jefferson, Wisconsin Sunday, June 17

This will be an outstanding show. Everyone is invited to attend.

June, 1956

Some Iris That Are Different

By Mrs. Robt. Holly, Waupaca

June, they say—is the month of roses, but I would like to tell you about some iris. How many different types of iris do you grow? Not over one or two, I feel sure, so may I introduce to you about a dozen that can be grown and will do well here in our Wisconsin climate.

A Native

First there is the tiny Lacustris, which sort of creeps along the ground. This is one of Wisconsin's own natives, and a real gem. The blooms are small, usually about the size of a quarter, and darker than its close relative Cristata. One can find acres of this in spots along the shores of Lake Michigan and various other sandy places in the state. Cristata has a lighter blue bloom and sometimes can be found in a white form; both of these are crested—have no beards.

Then we have the "dwarfs", sometimes called Pumila, which is a distinct specie. Some dwarfs have no pumila strain, so now we include all of those early low growing bearded iris under the head of "dwarfs."

Next are the intermediate, which come into bloom between the dwarf type and the tall bearded ones and range in height from about fourteen to eighteen inches. They have a wonderful range of color, sometimes clearer and cleaner than the next type, the tall bearded iris. I won't try to describe these, for I am sure you are all acquainted with them. Then we have the Siberian, which are also beardless and their stiff tall stems and beautiful coloring makes them most useful for arrangements. The Orientalis comes in here also; the two are so similar they are usually confused and all called Siberians, but the Siberian is a taller plant and the bloom of the Orientals is broader.

We have also the Pseudacorus, a yellow flowered iris, that loves to have its feet wet and is often called the "English Water Iris". One can sometimes find them in a white and yellow combination of colors.

Japanese Iris

The Japanese Iris is in a class by itself, in such varying and combination of shades as to make it seem almost exotic. I have seen them so large that they resembled a huge floppy hat, and to me these were unattractive. Grown in the size that nature intended them to be, they are most beautiful and striking.

I have an unusual one called foliosa, the foliage of which grows ten to fifteen inches in height. Its beautiful rich blue blossoms grow well down in the foliage; a really beautiful plant.

Now go out and look over our native wild blue iris which grow in damp places. You will be surprised at the many shades and colorings and might be fortunate enough to find a clump of white ones. These are uncommon but not too rare, and while they grow in wet spots. they do well in our garden soil.

One more, the Dichtoma, or Vesper Iris. which usually blooms here in August which to me resembles the blackberry illy, especially in its foliage. It is an iris with small blooms, mostly in shades of lavender and white. This completes the twelve kinds. There are others but these I know will grow here, and as June is a good month to see them (all but the last) why don't you go iris hunting and maybe find something new for your own garden. I am sure you will enjoy them so best of luck in finding them.

PLANTS FOR MAKING SYRUP

Just as the Indians further east were discoverers of the process of producing sugar and syrup from the maple, so our great plains tribes used the same methods with the **box elder**, and even yet tap and make sugar from its sap.

The wild grape vine was also tapped and its sap, said to taste like grape juice, was used as a beverage.—By W. R. Leslie. Manitoba, in Dakota Horticulture.

Wisconsin Horticulture is not published in July. We will be with you in August.

Our Arrangement For June

By Mrs. G. L. Lincoln, Madison

PEONY ARRANGMENTS CAN BE DELICATE

The perfection of color, form and texture in the new peonies is shown most readily in an arrangement where they do not crowd each other for attention.

The lovely white Japenese peony, Isano Guidi, has a center of golden petalloids that resemble a florist's chrysanthemum. It is highlighted in the picture against material of completely different form and color. Because of its size, it is possible to reverse the usual rule of "light flowers high, dark ones low", for the peony is so much larger than the other flowers used that it gives visual stability at the focal point, and the darker lupins create a subdued background for its beauty.

Material Used

The highest and most delicate sprays are saw grass, a weed grass which grows in wet ditches. It is delicate green in color. The green stems of the four purple Russell lupins blend the green of the grasses toward the green and brown container. Two green peony leaves and the single white peony form the focal point, extending over the rim of the container to break the straight line. The base, a bread board from the variety store, repeats the brown in the mottled container.

Asymmetry Again!

The arrangement is set far to the left of the base to cover the hole bored there, but it is also placed that way for more interesting balance in the whole composition. Imagine how clumsy it would look if the container had been set in the center of the board!

Variations in Material

Note that none of the other material used with the peony is round. Roses bloom at this time, but when fully open would be too similar in form. Delicate Siberian inis leaves might be used for the high line, and a cluster of broad



leaves, or the white-edged-with-green leaves of hosta variegata.

Grow Lupins From Seed

Russel lupins are difficult to transplant when large, for they have a series of long, thick tap roots. I like to grow them from seed for they can be moved easily when small, the seeds are large and easy to germinate, and new plants can be given away, or grown on to replace the older ones that die out. I leave the bottom three or four pods on a choice variety, cutting off the rest of the old flowering stalk. When ripe, these can be dropped near the mother plant, or sown in a small box. With my simple method I usually find clusters of baby plants near the older ones ready to transplant in the spring.

They grow into large bushy plants about 18 inches tall, and seem untroubled by most diseases and pests, except army worms, which can devour a

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planting in a day or so. Methoxychlor or DDT will defeat the worms if it is in place before they arrive.

NEW BOOKS ON LAWNS AND LANDSCAPING

Thomas H. Everett has written a new book, Lawns and Landscaping, which shows house dwellers how to plan, plant, landscape and maintain their yards and gardens.

There are 273 photographs and 30 drawings. The author answers many basic problems and gives step by step directions of the right and wrong ways of doing things.

Mr. Everett is Curator of Education and Horticulturist of the New York Botanical Gardens. The book may be obtained from Arco Publishing Company, 480 Lexington Aveue, New York 17, N.Y. (Price \$2.00).

GARDEN PROTECTION FROM RABBITS

The tender shoots of many garden plants seem irresistible to rabbits at this time of year. Many gardeners have viewed with dismay the long rows of peas and beans neatly clipped and eaten during a night's foray by rabbits.

What to do? Nicotine sulfate is a fairly good repellent to rabbits and it is readily available. Spray it on plants in the late afternoon or evening. A light application every few days to cover the new growth, until the plants are fairly well grown, will give moderate to good protection. A more effective repellent also in powder form is sold under the trade name of No Nib'l (distributed by Hydroponic Chemical Co., Copley, Ohio). This is applied in the same fashion as the nicotine. —From U.S. Fish & Wildlife Service.

Paratroopers were aloft for practice. Last man came forward. "Hold it!" shouted the commanding officer. "You're not wearing your parachute!"

"That's all right sir," said the recruit. "We're just practicing, aren't we?".--Capper's Weekly.

A farmer doesn't ever have to go to work. He just wakes up—and there it is.

CONSERVATION CONVERSATIONS (Continued from Page 345)

picked; and a list of those which may be freely picked. A few simple arrangements using the latter would add beauty and interest to the show. By sending ten cents (10c) to the Wisconsin Conservation Department, Madison, and asking for Publication 601-52 (Wisconsin Wild Flowers) you may obtain all this information plus the laws of the State covering the subject.

Summer Show: Beneficial and Destructive Insects could be stressed. Your County Agent would be glad to help you plan this display.

Fall Show: Display of branches of shrubs and trees especially attractive to birds and fairly free from disease. Again, either the Conservation Department or your County Agent can help you.

Holiday Show: Featuring winter feeding stations for birds. This could be a real project for an entire club.

With the above few suggestions, I am sure others will occur to any committee, adding much interest and color to any flower show-By Mrs. J. W. Dooley, 7724 Rogers St., West Allis 19, Wis. Conservation chm.

VEGETABLE INSECT CONTROL (Continued from Page 337)

DDT, 1% rotenone, and 3% methoxychlor have also given good control of these insects with little injury to cucurbits.

Squash Borer—For the control of this insect 3 or 4 applications of materials should be applied at about 10-day intervals to the crown of the plant and the base of the runners, beginning when the plants begin to vine out. Three per cent dusts of TDE (Rhothane), or DDT have all given very efficient squash borer control.

Spuash Bug—A 10% sabadilla dust gives the best control of this insect but if it is not available, 1% parathion can be used.

Sign on a car in a no-parking 20ne: "Official U.S. Gov't. Taypayer."—Markesan Herald.

Dahlia Insect Pests

By C. L. Fluke, Madison

The succulent dahlia plant is a haven for many insects. The bloom is particularly subject to attack and this prompts many growers to use screening to prevent plant bugs and corn root worm adults from taking the life out of the petals.

With the advent of the newer insecticides controls are now much easier than they were with the older materials used ten to fifteen years ago. Leaf attacks are easily prevented but insects that infest the blossoms are difficult to stop.

The most common pests in Wisconsin are: the potato leafhopper, two-spotted mite (red spider), tarnished plant bug, plant lice, and stalk borers.

Control

DDT is still the best control of the leafhopper but regular applications at weekly intervals are necessary to protect the new growth. All dahlia growers are well aware of the hopper's preference for the tender growing shoots and leaves. Use a 50% wettable powder, about two tablespoons to a gallon of water.

The spider mite is always a problem and will be more of a pest near fence rows and near untreated plant growth. The phosphate insecticides are some of the best materials, namely parathion and EPN-300. These insecticides are poisonous to man and care must be used in spraying but if they are properly handled they do a good job. Malathion, another phosphate is much safer, but does not give the results of parathion or EPN. Generally a 10% wettable powder is available and should be used at the rat. of 11/2 to 2 level tablespoons to each gallon of water. If emulsions are used follow the manufacturers direction !.

The phosphates also keep aphids and other like insects in control, but tarnished plant bugs are difficult to kill with any material. For blossom treatments I use my own dust mixture, made up of 50% dieldrin and 50% DDT, both a wettable powder but applied full strength as a dusting powder. A good "puff" duster is used and only enough powder is blown at the opening buds to drive away or kill the tarnished plant bugs. This is not always successful but best results are secured by dusting in the morning or evening, every two or three days.

This rather strong powder will not injure the bloom and if dusting is carefully done only a very light film of powder will reach the petals. It has not so far left an objectionable visible residue, especially on the paler varieties.

Testing of many of the newer miticides and insecticides, especially the systemics will be continued this season and we will be glad to report to you on the results at a later date. At present some of the latest systemics appear to have considerable promise, the only objection to their use seems to be their poisonous qualities to humans.

Control of Mites

Genite EM-923, a miticide was used last summer and gave excellent control of two-spotted mites on dahlias. It has been advertised in this magazine for red mites on apple trees but the material is not yet available in small quantities suitable for dahlia growers. It comes in gallon cans. We are testing also Hercules miticide No. 528 but cannot give recommendations at this time.

It appears to me that the dahlia grower should be prepared to spray with DDT and parathion or EPN. If he does not care to use the parathion, he should use aramite or some other good miticide for the red spider. Don't wait for spiders to build up before treatment. They are easier to prevent than to control.

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How To Preserve Flowers In Borax

This interesting article was found in the May issue of "Green Thumb", published by the Colorado Forestry and Horticulture Association, The article mentions unusual and beautiful dried arrangements including dried flowers that the Home Garden Club of Denver exhibited at the Denver Museum of Natural History. The information in this article was given by the expert who made these arrangements.

1. Pick your flowers on a warm sunshiny day so that the material is dry. (Or fresh cut flowers from the florist may be used.)

2. Gather the flowers when they first come into bloom as this will help prevent the petals from falling after the flowers have been dried.

3. Strip all foliage from stems unless you plan to cover stem and all in the borax. Always dry more than you feel you need since there will always be some failures.

"Tools" Needed

About 20 pounds of dry, sifted borax. For flowers of the same texture such as zinnias, small marigolds, etc., have the boxes about six inches deep and as large as can be handled easily. Other boxes that can be used are milk cartons cut down, cheese boxes and any small, shallow container for individual flowers such as roses, lilies, dathlias, etc.

Method

Pour borax powder about one-fourth inch deep into the container. (Do not wet the borax.) Stand the flowers with heads (such as zinnias, marigolds, etc.) upside down in borax, gently wroking the powder around the petals. Be sure to keep the petals smooth. Keep working the powder around the flower head until it is completely covered. Put only enough powder on the flowerhead to cover it. It is not necessary to cover the stem.

Cupped flowers, such as jonquils, tulips and others should first either have a mound built from borax to place the cup over, or the cup should be filled with borax before covering the rest of it with powder.

Long sprays of euonymous, spiraea, peach, and plum should be placed lengthwise in borax and the entire spray covered with powder. Foliage may be left on the above sprays if desired.

Some flowers take as long as from two to three weeks to dry, while finer textured flowers, such as Iceland poppies and jonquils require much less time, usually two days will do. The only sure way to know if flowers are ready to remove from the borax is to remove one flower after a reasonable length of time and examine it for dryness. When removing flowers from borax be sure to work them out gently to prevent the petals from falling. Many wild flowers dry as well in borax as our garden varieties.

Plan Arrangements

Plan the type of arrangement you wish to make before drying your flowers because you must fasten the stems to a rather heavy wire bent to the shape desired before the flowers are placed in the borax. Coat hangers are good for this purpose. For flowers with small stems run a wire through the heads of the flowers and down through the stem before drying. Medium corsage wire is right for this. Iceland poppy blossoms are heavy and stems are small so the wire helps support the blossom. Jonquils' stems become flat and very brittle so the wire helps hold blossoms and stems together.



Wisconsin Horticulture

Garden Club Reports

BROOKFIELD GARDEN CLUB NEWS

The Brookfield Garden Club sponsored a Flower Show and Garden Tour on Saturday, June 9. It was open to the public and some very beautiful gardens were visited including those of Flora and Adela Harlos; Mr. and Mrs. Joseph Hinton; Mrs. L. A. Keller; Mr. and Mrs. George Trupke; and Mr. and Mrs. Henry Weil.

The club has just elected officers as follows: Pres.: Mrs. Gordon Holz, 2400 Buena Vista Dr., Brookfield; 1st Vice Pres.: Mrs. Gilbert Hartmann; Recording Secretary: Mrs. William Seer, Rt. No. 5, Waukesha.—By Mrs. Gilbert Hartmann.

IKEBANA GARDEN CLUB MEETING (MILWAUKEE)

The Ikebana Garden Club will meet on June 14 at the home of Mrs. Herbert D. Hentzen at 10:30 A.M. Mrs. Illma Koch will lecture on: "Geometric Design Applied To Flower Arrangements". Every member will do an arrangement with "Blossom Time" as the theme.—By Marie Hentzen, Secy.

THE CLARA LARSON GARDEN CLUB OF IOLA

One of our most interesting 1955 programs was a talk, with colored slides by Mrs. A. Langeland on her trip to Norway. The pictures of the Norwegian homes and gardens were especially interesting and instructive as was the illustrated talk by Mr. H. J. Rahmlow in April, 1955.

This spring we have had two special programs. One was the slides showing the wild flowers of Alaska. Thes pictures were taken by a former Iola young man stationed in Alaska.

On May 3, our club had a joint evening meeting with the Conservation Club with Mr. W. Seybold, County Forester as speaker, with slides and films of Wisconsin Trees.

At each meeting we have a bird study and flower arrangement and in June we will have our flower show. Our August meeting will be a tour of local gardens followed by a lawn picnic.

We always sponsor and care for the large circular flower bed at the cemetery.—By Mrs. Carl Krause, Sec'y

MANITOWOC MEN'S GARDEN CLUB NEWS

We have just added four new members to the club. We now have a total of 84 members.

During 1955 our club started a rose garden in Lincoln park, also a bed of peonies to which we are adding plants this year. Members took care of these beds during the year and prepared the rose bushes for winter; they wintered well.

Our club committee put on a series of seven weeks broadcast over WOMT every Thursday night 8:00 PM; to 8:30 PM. It was concluded with a public clinic at "Town Hall", at the request of the Manager of WOMT. It was well attended. Our radio program was one of the outstanding activities of the club; the question and answer created considerable interest.

Our outstanding club event was the awarding of a Bronze Medal to Mr. G. H. Thompson for his outstanding contribution to Horticulture and to Community service. Our annual club "Ladies Night" with H. J. Rahmlow, Madison as the speaker was voted our best program of the year.

Our 1956 projects will introduce the "Lawn of the Year" at the close of the season. A committee has been named by the President to make plans and select judges to select the outstanding lawn in the city. A plaque will be awarded to be posted by the owner in a suitable place in the yard.

The club has members who are carrying out a testing program on ROSES, TUBER-OUS BEGONIAS, CHRYSANTHEMUMS, IRIS and GLADIOLUS.

By Jess L. Hamilton, Sec.

June, 1956

GREEN THUMB GARDEN CLUB (Jefferson County)

Green Thumb Garden Club members look forward to a tour every year. Last year we enjoyed a tour to the Honey Bear Farm and Pottery Plant and this year we will be touring places of interest at Waupun.

Mrs. Lois Sandvig of Sullivan gave a most interesting talk about native Australian birds and flowers. We are concentrating on Wisconsin Song birds this year. We are looking forward to seeing and hearing Betsy Clark of Ft. Atkinson give her interesting demonstration on Christmas lighting. In October Mr. H. J. Rahmlow of Madison will talk on Winterizing and show colored slides of flower arrangements. In November, members will demonstrate making plain and fancy candles.

By Mrs. Wm. L. Pinnow, Sec'y.

PRODUCE YOUR OWN COMPOST Most Soils Lack Organic Matter Which Is Hard To Obtain

We all know that organic matter makes heavy soils lighter and gives light soils greater water holding capacity. We also know that organic matter is a limiting factor for best plant growth in most soils.

Here are some suggestions for making a compost pile: 1. Use leaves, grass clippings, weeds without seed heads, and canning waste. Don't use garbage. 2. No need of adding ground rock, earthworms or an "activator". Ordinary garden soil sprinkled over the material will do just as well and a few handfuls of fertilizer will help break down the material. 3. Build the pile in a shady place and keep the top slightly depressed to retain rainfall. 4. Chemical fertilizers should be used in addition to compost of leaf mold or peatmoss used as organic matter. These materials usually do not contain the mineral elements, nitrogen, phosphorus and potash in any quantity and are not a substitute for them. However, without organic matter we cannot get best results no matter how much mineral plant food is applied.

AZALEAS FOR THE GARDEN

The Missouri Botanical Garden. 2315 Tower Grove Avenue, St. Louis 10. Missouri, publishes the Missouri Botanical Bulletin. The April issue is devoted to "Azealeas for St. Louis Gardens". and will be of great help to anyone wishing to grow the hardier types of azalets in northern gardens. It is written in a very practical way and by following its recommendations, Wisconsin gardeners might achieve success with this plant which has been so difficult to grow here.

A few quotations from the bulletin will be of interest especially along the line of soil acidity and organic matter for the soil. We quote: "Alumnium sulphate has been used to acidify soils, but its continual use may produce aluminum toxicity in plants. Powdered sulphur is much safer and can be used at the rate of 1 pound to 100 square feet per application on light soils and 2 to 3 pounds on heavier Regardless of which inorganic soils. chemicals are used to increase acidity it will not be possible to grow good azaleas unless the soil is well supplied with organic matter.

The Soil

In creating such soil our aim is to duplicate woodland conditions in which the yearly growth cycle provides a continual supply of decaying leaves. We would be fortunate if we had partially decayed oak leaves to mix with the soil. but since this seldom is the case, our best substitute is commercial peat.

Soil removed from a hole 2 feet in diameter and 1 foot deep equals approximately 3 bushels. By mixing from 1 to 1^{1_2} bushels of peat with the soil we have approximately a 50 per cent soil-peat mixture. At that rate a 6-cubic-foot hale of pest will be sufficient for four azaleas.

If good leaf mold or old manure is available either one or both could he used to replace half of the peat. As the soil and peat are being mixed, add a cupful each of sulphur and super-phosphate; and if the soil is inclined to be stiff, add about a bucketful of sand per plant.

News And Views About Gardening

The Siberian elm (Ulmus pumila) was severely damaged during hurricanes in eastern states. Its wood is much more brittle than the **true Crinese Elm** which is Ulmus parvifolia. Unfortunately what we often call the Chinese elm is actually the Siberian elm which Nurserymen are selling in northern states because it is hardier than the true Chinese elm. The Chinese elm lost a few leaves but otherwise came through unhurt in the hurricanes. Then again it may not be hardy in many parts of Wisconsin.

DDT is not as poisonous to the human race as calamity howlers have claimed. In a recent test 51 experimenters ate 35 m.m. of DDT daily for one year. This is about 200 times as much as one could possibly pick up from fruits or vegetables sprayed with DDT. At the end of one year it is found that those who had eaten the DDT had no more of the poison in their body fat than those not on the test. It indicates the body capacity for DDT storage is limited. This test was reported by Dr. W. J. Hayes, Jr. at the American Association for the Advancement of Science meetings. Another scientist of the U.S. Food and Drug Administration reported that medicinal drugs, cleaners, gases and cosmetics caused more accidental deaths than pesticides.

A NEW LETTUCE has been introduced by Michigan State College. It is produced by crossing Bibb lettuce with Grand Rapids and it produces better crops than either one. It has a rich, dark-green color.

STORE YOUR TULIP BULBS IN THE SOIL

It is unnecessary to dig up the old tul.p bulbs in the garden this spring and store them indoors during the summer A better place to store them is in the soil where you wish them to bloom the next year.

The bulbs should not be dug up until

the leaves have turned brown. If the bulbs have not split and the plants bloom satsifactorily they need not be dug up at all. However, if a number of small plants have appeared indicating the bulb has split you may wish to divide the clump, remove the smaller bulbs, and plant the large ones in a permanent place for the coming year. There is no reason at all, for storing them indoors during the summer; unless you are experienced in caring for them they may deteriorate. The leaves may be removed as soon as they turn brown.

TO PREVENT RUST ON MERION BLUEGRASS

Mr. Foster Taylor, of The Taylor Grass Company, Wauwatosa, writes that Dr. Frank Howard, R. I Experiment Station suggests trying nitrogen in the form of urea on Merion Bluegrass to prevent rust. He quotes this statement by Dr. Howard: "On the experimental plot of Merion where we were studying rust and where an assistant applied high nitrogen in the form of urea, we have been unable to get infection. Therefore it would seem that the application of nitrogen, as urea will suppress the incidence of rust on this grass."

"We hope that Merion growers will find this helpful and suggest trying it".

NEW BOOK ON ROSES

The complete book of roses by Dorothy H. Jenkins has just been published as one of the "Bantam" books at \$.35 by Bantam Books, 25 W. 45th Street, New York 36, N.Y.

It has fifteen chapters. The book covers such topics as: tree and miniature roses; old roses; where, when and how to plant them; pests and diseases; pruning; winter protection; where roses come from, and others.

Whitnall Park Botanical Gardens at Hales Corners is listed as one of the rose gardens for everyone to see.

Jun 1956

How To Water The Lawn

By Robert W. Schery Missouri Botanical Garden Bulletin

In general, soils of our area are low in absorptive organic matter, tend to puddle, and become rather impervious to water penetration. Where the soil surface cannot be worked, as where insufficient organic matter was incorporated originally or was not applied later as top-dressing, deep water penetration becomes possible only with gradual and prolonged sprinkling. On slopes particularly, water runs off almost completely under a system of short violent sprinkling-a manifest waste of water and conducive to soil wash. Rainfall, of course, cannot be controlled, but if the hose is allowed to run for several hours in one place with a gentle spray the water will generally penetrate several inches. Canvas seepage hoses have in some places proven effective, but "root feeder" jet devices (tapered metal tube thrust into soil with perforation at bottom and hose connection at top) are of little utility on our soils of high clay fraction.

Watering is best done infrequently but thoroughly on established lawns. Chief effort should be directed towards getting deep water penetration uniformly over the area, even if this can be accomplished only once every two weeks during drought periods. Light daily sprinklings merely moisten the soil surface, and a good portion of the water evaporates. Light sprinkling is detrimental to deeprooted bluegrass that is normally approaching semi-dormancy during the dry summer periods: its roots tend to grow toward the temporarily moist surface, and are subject then to the next day's drying out that adapted crabgrass readily takes in stride. Hot weather and high soil temperatures will keep bluegrass relatively inactive in late summer, no matter the amount of sprinkling practiced Such sprinkling is helpful to bluegrass only in so far as it prevents complete drying out of the soil and root kill, and temporarily reduces soil temperature a bit. Usually rainfall provides adequate moisture during autumn and spring, when bluegrass growth is active, and sprinkling is only necessary then on newly seeded areas.

Water New Seedlings Often

Withholding water in the summer will catch the weed seedlings at their most susceptible stage, just after seed germination, and may effect rather heavy kill. By the same token lawns newly seeded to grass in autumn or spring should never be allowed to dry out. One of the most critical times in the establishment of a new lawn is after seed has started to germinate. With only an incipient root system to draw upon, the young seedlings will quickly wilt if the upper soil layer dries. Gentle sprinkling is thus a necessity for newly seeded sites.

Although fungus diseases of turf grass ordinarily receive little attention in the home lawn it is well to remember that moisture tends to increase their damage. Often, the only practical means to prevent a disease becoming epidemic is not to water. Thorough drying-out of bluegrass and fescue turf is recommended when leaf-spot or melting-out (Helminthosporium spp.) occurs (usually in cool, moist weather). Prevention of over-lush growth by avoiding high-nitrogen fertilization will also aid in its control. This disease, the only one at all common in the average lawn, is characterized by the grass leaves developing brown spots or patches which may eventually extend completely across the lawn.

Raspberries planted between apple trees—Not too good an idea. When you want to spray the trees for apple magot, the raspberries are ripe and you cannot use an insecticide because of the danger of poisioning the ripe berries. Professor J. D. Winter, Minnesota Newsletter.



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Views About Beekeeping

WE LEARN FROM EXPERIENCE Looking Back Over The Spring Months We Now See What We Should Have Done

April and May were months to test the patience of the beekeeper. Spring losses were heavy in many apiaries. Inspectors report: "4 out of 8 colonies dead"; "3 out of 5 colonies dead" etc. All of this is due to the "let alone" method of beekeeping practiced by so many beginners. In a way we blame those who keep repeating, "wait until warm weather before opening your colonies". By the time warm weather comes the colonies are dead from starvation

In May we heard many reports that brood rearing almost stopped in April and colonies were weak. This is due to the lack of available pollen for continuing brood rearing. Even where soy bean flour alone was fed this year it did not give best results but where soy bean flour mixed with 25% natural pollen was fed directly on the brood combs, brood rearing continued actively. Colonies consumed an enormous quantity of the material. Beekeepers who fed their colonies liberally this spring now have strong colonies.

Package Bees Die From Starvation

A serious problem which we must call to the attention of southern bee breeders is the fact that some amateurs lost their package bees this year from starvation as a result of following directions sent by the breeder with the pack-

ages. For example, one man in Northern Wisconsin lost all of his package bees because he established them on combs of foundation and then, following directions, he fed them with an entrance feeder using a quart jar. After the bees were installed, the weather turned cold, in fact there were 4" or 5" of snow shortly afterwards. The beekeeper hesitated to examine the bees because he had been told not to open the hives when it was cold. When he finally looked at them, he said they were all "very quiet". They had died from starvation.

Again, we repeat, inspect your colonies when you feel they need it, regardless of the temperature and don't let them starve. Give them the food where they can reach it in cold weather. The best way in early spring is to sprinkle hot syrup into drawn combs. Beginners should try to buy some drawn combs from another beekeeper in order to feed this way instead of establishing them entirely on comb foundation. Of course, if you wait until May or June when it is quite warm and there is a honey flow, package bees may be installed on foundation and fed with an entrance feeder, but then of course, you cannot expect a honey crop that year.

> **78TH ANNUAL CONVENTION** WISCONSIN BEEKEEPERS ASSOCIATION VIROQUA, WISCONSIN-OCTOBER 24-26

This is also National Honey Week.

Labeling and Grading Honey

By John Long, Madison

Q. I have purchased the bees and equipment of a former beekeeper. He had Packer's No. 611. Can I use this number?

A. It is no longer permissible to use a packer's number when selling comb honey. Each section and each case of comb honey, and each container in which comb honey is sold or offered for sale, shall declare the name and address of the packer, and the net of the contents. The net weight should appear on each of the above-mentioned, within one-half ounce of the correct number of ounces.

Q. What are the colors for extracted honey and what must appear on the label.

A. The color of honey for Wisconsin Fancy and Wisconsin No. 1 shall be as follows: White, golden and dark. On the label with the color of the honey must appear the name and address of the producer or packer, the words, Wisconsin Honey, and the grade; that is, either No. 1 or Fancy.

Q. Is there an easy way of determining the color of honey?

A. Generally speaking, if you can read the fine print on a label through a 1 lb. jar, of honey, it is white in color. If you are unable to see the letters, the honey is dark. However, if you want to be sure that you have the correct color, submit a sample to the Bee and Honey Section, 315 North Carroll Street, Madison 3, Wisconsin. The sample should be approximately 2 ounces in weight.

Q. How can I keep my honey from granulating?

A. Liquid honey stored at temperatures below zero, will remain in liquid form for a year of more. However, if you are going to store the honey at ordinary room temperatures, it should be first heated to a temperature of at least 160° Fahrenheit for at least five minutes. One should not over-heat the honey; that is, to go above this temperature for more than five minutes may darken the honey. If you wish to sell your honey unheated to stores, you should explain to the storekeeper that the honey will granulate if not removed from the shelves within from 4 to 6 weeks.

Q. Will the honey be improved if left on the hive until fall so that it will ripen better?

A. Generally speaking, honey will not improve if left on the hive to ripen. Once a strong colony of bees begins to seal the honey in the comb it is probably ready for extracting. Allowing honey to remain on a hive during periods of excessive rainfall, in August and September, may cause considerable thinning of the honey.

Q. What are the rules covering the extracting of honey and processing of the same?

A. First, if honey is being processed and offered for sale, on the wholesale level, then a food processor's license is required for such operation. This means that the operation would be governed by the provisions of Section 97.26 of Wisconsin Statutes, which states that it shall be unlawful to manufacture or prepare food for sale unless in the process of its manufacture or its preparation, it is securely protected from filth, flies, dust or other contamination or other unclean, unhealthful or unsanitary conditions; it shall be unlawful to store or offer or expose for sale or sell food unless it is securely protected from filth, flies, dust or other contamination or other unclean, unhealthful or unsanitary conditions. Beekeepers wanting complete information on honey standards should write to the Bee and Honey Section. 315 North Carroll street, Madison 3, Wisconsin for a copy of Special Bulletin No. 50 "Apiary Inspection Laws and Honey Standards."

"Best advice I ever received was to marry the girl I did," declared J_{0} ." I got it from her."

Treating Bee Diseases

By Dr. C. L. Farrar, Madison

Editor's Note: This article on treating bee diseases with chemicals is condensed from the April issue of Gleanings in Bee Culture.

We congratulate Dr. C. L. Farrar and "Gleanings" on this fine article. It should converge the widely separated viewpoints which prevail among beekeepers throughout the United States on this important subject. The next step should be to teach beekeepers how to properly and successfully treat colonies to prevent disease. There is great need for such instruction.

It would also be valuable to check a program of "prevention with chemicals" in one county as against burning in another county as a long range project to solve this program.

Be sure to read the complete article in "Gleanings". The following is a condensed article in Gleanings:

The use of medicinal agents in the treatment of bee diseases has become common procedure in the last 10 years. The bee diseases take a heavy toll of the industry's resources, and beekeepers can ill afford to deal lightly with disease problems.

Currently Used Medicinal Agents

Sulfathiazole is specific against American foulbrood, being ineffective against any of the other bee diseases. Sodium sulfathiazole is preferred, since it is about 680 times more soluble in water than plain sulfathiazole. Dosages of 0.5 to 1. gram per gallon of sirup have been used satisfactorily. Higher dosages have indicated toxicity to the colony and should not be used. The dosage required to give control and avoid toxicity depends on the manner in which it is administered. Sulfathiazole is not subject to deterioration.

E.F.B.

S eptomycin sulfate and dihydrostre-tomycin sulfate are highly effective against European foulbrood. Both materials are water-soluble, fairly stable, and apparently nontoxic to the colony. Minimum dosages of these antibiotics have not been determined because of differences in the percentage of active streptomycin and methods of application used by various workers. Dosages of 0.2 to 0.6 gram per gallon of sirup have been recommended.

Terramycin, another antibiotic, hag been recommended principally for use against European foulbrood, but it is reported to be active also against American foulbrood. It is available commercially in a product called Terracon-TM-5, TM-10, and TM-25, the figures indicating the grams of terracon generally is mixed with powdered sugar and used as a dust, as it is quite stable in dry form but deteriorates rapidly in solution. Weekly applications of 0.1 to 0.2 gram of active terramycin per colony appear to give good control of European foulbrood. To administer these dosages, use 20 to 40 grams per colony of one of the following mixtures: 1 pound of TM-5 to 1 pound of powdered sugar; 1 pound of TM-10 to 3 pounds; or 1/2 pound of TM-25 to 4 pounds.

Methods of **Treatment**

The sulfa drugs and antibiotics have been most commonly fed in bulk sirup. Bulk feeding is satisfactory for small colonies in one-story hives or packages or in the feeding of fumagillin, which requires a long period of treatment. Colonies that occupy several hive bodies tend to store sirup just below the feeder. Thus, this method of feeding does not insure immediate use of the treated sirup in brood rearing, which is necessary to eliminate the disease. There is also danger of its being carried into the supers and removed with the surplus honey. Sirup fed in bulk feeders may result in some reduction in disease but not always complete eradication.

Dusting the tops of the frames with a sulfa drug or antibiotic mixed with powdered sugar is widely used because it requires a minimum of labor and apparently has given good results. However,

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a method that requires only the lifting of the hive cover and making a few shakes with a duster may cause the careless operator to become overconfident and neglect all inspection. The dusting method provides little control over the dosage received by each bee. Poor dosage control can injure the colony when a toxic substance such as sulfa is used. and the method is costly when the more expensive antibiotics are used. The relatively cheap terramycin products probably are best suited for dust applications. In large colonies good distribution of the medicinal agent is more likely to be obtained where the dust is applied to the top bars of all brood chambers than when it is fed in sirup supplied from bulk feeders.

Spraying

The most effective method of application is to spray or sprinkle all the bees in the hive until they become gorged with the medicated sirup. If the bees are thoroughly wet with the maximum amount that will not run out of the hive, they will become gorged with the sirup as they clean each other. With all the bees gorged at one time, the treated sirup will be distributed throughout the brood nest, where it will be consumed immediately.

The addition of one or more of these materials to the sirup used in mixing cakes of pollen supplement (trapped pollen and soy flour) has theoretical merit in disease prevention. Pollen supplement is eaten principally by the young bees just emerging and the nurse bees engaged in the feeding of brood.

Sulfathiazole, streptomycin, and fumagillin have been added to the pollen supplement fed at the Madison laboratory, with apparently beneficial results. However, one apiary in 1947 and another in 1952 showed a high percentage of colonies in an early stage of American foulbrood infection. The infection in both apiaries was brought under control by gorging the bees three times with sprays of sulfa sirup or sulfa in water. (We have used a water spray successfully but prefer the sirup.) In subsequent years each colony has received about 10 pounds of pollen supplement containing 0.6 gram of sodium sulfathiazole (1 gram per andlon of sirup used in preparation) between March 1 and April 15. Since the initial outbreaks not a single cell of disease has been observed in either apiary.

(Concluded in our next issue)

Bees cannot damage fruit. Structure of mouth **parts** make it impossible for honeybee to damage grapes and figs. This was first observed for grapes about 700 A.D. Bee can and does suck juice from damaged fruit.





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