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(Presented to you by the Staff of the Genetics Department)

NO. 29

1943-44

-THIS ISSUE'S STAFF

Faculty Advisor:

Dr. L. J. Cole

Senior Editor:

Howard E. Heggstad

Junior Editor:

Arthur D. Stewart

The L. J. Cole Reprint CollectionA Tribute

An important aid to the investigator is a well stocked working library, conveniently near his laboratory and containing the material to which he frequently refers. Such a library will carry on its shelves standard reference books and the more important journals. Its usefulness will be greatly enhanced if it also contains a rich collection of easily accessible reprints. The literature in his field is then as close at hand to the investigator as the equipment in his laboratory, and can be as freely employed. Many generations of students in Genetics at Wisconsin know that Dr. Cole has been building such a library for many years. Perhaps it is not as clearly appreciated that the library is furnished with material considerably beyond that provided by the University. The quality and extent of the collection, in fact, is due largely to the inclusion of many of Dr. Cole's own books, periodicals, and the numerous reprints he has acquired over many years. He has generously made these personal items as readily available to others as are the University's books and journals. Dr. Cole has never collected books to pay them homage, much less for the sake of merely owning them. He is inherently fond of books, to be sure, and possesses a fine sense of the value of a biological publication. It is the good fortune of his associates that he has always envisioned the library as a functional unit in the departmental organization and has taken pride not only in working steadily to that end but also in contributing liberally to its growth from his own resources. In conformity with a desire which he has often expressed to his colleagues, Dr. Cole has now advised the Administration of his intention of presenting his reprints to the University. It will be a generous gift. The University has already bound part of the separates into 470 volumes which now stand on the departmental shelves under the imprint which appears at the head of this note. The Genotype desires to pay its tribute to the donor. May the beneficiaries of the L. J. Cole Reprint Collection, in long succession, associate the gift with the fine spirit of a man of science who has assembled and conserved the record of a generation of genetics and now hands it on to them.--By a Colleague

We wish to apologize if we have overlooked or otherwise omitted information on any service men or alumni that should be included in this issue. The addresses and other information given in the Genotype represent the latest we have, but may not be up-to-date in all cases. We realize that particularly addresses of some service men change frequently; however, if you are interested you may write to the departmental secretary, Miss L. A. Dietrich, to get our most recent ones. It is our plea in order that the information be included in future Genotypes that you keep us informed as the changes take place in regard to new addresses, new positions, recent births, marriages, etc. Miss Dietrich will keep it on file for the editors. Remember, as we hear from you, so will you hear from us.--The Editors

(Continued from page 1)

Big Events

In October, the Agricultural College faculty, students and friends joined in celebration of the centenary of the birth of S. M. Babcock, well known former professor of the college. Former Dean H. L. Russell, now Director of the Wisconsin Alumni Research Foundation, gave the principal address at a program which included short speeches by certain members of the faculty and state agricultural leaders.

* * *

Dean Chris L. Christensen resigned to accept a position in private industry. E. B. Fred, Professor of Agricultural Bacteriology and former Dean of the Graduate School, was chosen as his successor.

* * *

G. W. Beadle, Professor of Genetics at Stanford University, visited the campus last April. He gave a lecture in the afternoon to the plant science group on studies made with certain strains of the fungus Neurospora in relation to their ability to synthesize certain growth hormones. In the evening, the Linkage Group gathered at the University Club for an informal meeting at which Dr. Beadle answered numerous questions on the above subject.

* * *

The Genetics picnic was held last June 3 at Sunset Point. This is the time for eats, play, and annual observations on the next generation.

* * *

The Genetics Christmas party was held December 14 at the University Club. Not only did we have delicious rabbit but sweet corn, potatoes and honey furnished. Guess who provided? The fuses blew while the group picture was being taken and the fuse box couldn't be located. Fortunately Burl Winchester had long enough cord and sufficient bulbs with his photographic equipment so the stunts, musicals, etc., by departmental talent could go off as scheduled.

* * *

The Department will soon have a much needed general work shop and tool room. This was made possible by partitioning off a corner of the basement near the rear door. Dr. Rieman, who is supervising these changes and improvements in the way of neat large lockers in the old storage room, says the rats sure hated to leave their old homes.

* * *

Dr. Norman R. Neal was promoted from Associate Professor of Genetics and Agronomy to Professor of Genetics and Agronomy--effective July 1, 1943. Since printing of the last Genotype, Dr. Neal has returned from a trip in South America. He spent six weeks advising on corn breeding problems in Uruguay.

* * *

Dr. V. M. and Mrs. (Isabel Buntin) Watts, Horticulture, University of Arkansas, sent at Christmas a picture of their "synthetic" twins (David Martin and Mary Elizabeth Watts, age 16 months at that time), whom they acquired during 1943. One is prompted to ask whether they could have done better!

* * *

War-time activities have restricted the peregrinations of our faculty. Dr. Neal attended the Corn Conference at Purdue, and with Dr. Andrew, the American Society of Agronomy Conference at Cincinnati. Dr. Neal presented a paper on post-war planning at the Agronomy meetings. Dr. Chapman attended the Regional Swine Conference at Iowa, to which he was appointed Collaborator. Others of the animal men found time to visit Chicago with the excuse of the Animal Production Society meetings. Those attending were Drs. Cole, Chapman, Casida and Irwin. Dr. Casida spoke on the effects of pituitary gonadotropins upon cystic ovaries.

Men in Service

Pvt. Lewis Ausherman, 17147003, AST (Vet.) SU #4763, Colorado State College. Former student in Plant Genetics, is now training to be a veterinarian.

Lt. S. H. Barker, 0542-383, School of Aviation Medicine, Randolph Field, Tex. Former student of Dr. Casida.

Pvt. Worthie Elwood Briles, Base Weather Station, Mitchell Field, New York. He and Mrs. Briles were former assistants of Dr. Irwin. Mrs. Briles is in Texas with their young daughter.

Lt. R. W. Cunley, McCaw General Hospital, Walla Walla, Washington. Former Research Associate with Dr. Irwin, is now with the Medical Corps on sanitation problems. Recently on temporary course at Carlisle, Pennsylvania.

Lt. Ray H. Dutt, USMC, Marine Barracks, NOB, Navy #117, c/o Fleet Post Office, New York, New York. Ray, a former student of Dr. Casida, was most recently located in the Carribbean, probably off the coast of South America.

Lt. (j.g.) Wm. B. Ennis, NOB, Navy 132, c/o APO, San Francisco, California. Former student of Drs. Neal and Brink. Recently stationed in New Zealand recuperating from a recurrence of malaria contracted in the Solomons. Bill met Mrs. Roosevelt on her tour in the Southwest Pacific area.

Capt. L. C. Ferguson, 0319019, 19th Medical General Laboratory, Ft. McPherson, Georgia. Former student in Dr. Irwin's lab. He is getting further training in food sanitation and expects to be sent overseas in the next few months.

Col. Pete Hogg. Instructor with Armored Engineers, Camp Chaffee, Arkansas. Former student in Agronomy and Plant Genetics. Prior to entering the Army, Pete was with the Department of Agronomy, Alaska. Visited Department in March.

Ensign Robert W. Hougas, USNR, c/o Com. Cen. Pac., Fleet Postmaster, San Francisco, California. Former assistant with Dr. Rieman. Latest word Bob is communication officer in South Pacific.

Art J. Kuchni, T/5 of the Infantry, Hq. Co., IRTC, Camp Wolters, Texas. Formerly employed in Genetics Greenhouse. Visited Department in February.

Lt. Harry H. Laidlaw, 01547690, FSC Laboratory, Jamaica Plain, 30, Mass. Advisory to Camp sanitation officers in matters of insect and rodent control.

Pvt. Harry P. Levine, Med. Det. T.O.--Water Division, APO #868, c/o Postmaster, Miami, Florida. Former assistant of Dr. Irwin.

Lt. (j.g.) Isadore Ludwin, USCGR, USS Corpus Christi, c/o Fleet Post Office, San Francisco, California.

Ensign E. Leon Moore, USNR, c/o Com. Des. Pac., Fleet Post Office, San Francisco, California. Former student of Drs. Neal and Brink. He visited Madison in August following a tour of duty at Ohio State University. He also spent some time undergoing special training at a Sub Chaser School at Miami. Latest word is that Leon has been assigned to duty at the Hawaiian Islands.

Ensign R. L. Murphree. USS President Hayes, c/o Fleet Post Office, San Francisco, California. Former student in Animal Genetics with Dr. Casida. Latest word Bob was on active duty in the South Pacific.

Lt. and Mrs. Bill Pouden, now at Ft. McPherson, Georgia. Lillian, former member of the secretarial staff, has in past years helped prepare several Genotypes.

Ensign Richard M. Shackelford, USS Howard (DMS-7), c/o Fleet Post Office, San Francisco, California. Max was a former student of Dr. Cole. Following a Midshipman course at Columbia, he went to a Sub Chaser School at Miami. Latest word is that Max is on sea duty somewhere in the Pacific.

Missing in Action

S/Sgt. Anthony A. Pankratz, missing in action in the North African area since November 10, 1943. He had been in service as a radio operator and gunner on a Flying Fortress. Formerly employed as a laborer by Drs. Cole and Casida.

Translocations and Notes about Alumni

T. Donald Bell (Ph.D. 1939) - From New Mexico State College to Texas Agricultural Experiment Station, El Paso Valley Substation No. 17, Ysleta, Texas.

Warren Black - Former assistant to Dr. Irwin, has been teaching radio work at Truax Field, Madison, for the past two years.

Marian Buchanan (M.S. 1937) - Department of Animal Husbandry, University of Idaho, is now on leave of absence.

Nicholas Cuthbert (Ph.D. 1941) - Former student of Dr. Cole, is now Biology Instructor at the State College, Jonesboro, Arkansas. Since graduation both Nick and Mabel were teaching at Mt. Pleasant, Iowa.

A. E. Darlow (Ph.D. 1942) - Former Professor of Animal Husbandry at Wisconsin, is now Head of the Department of Animal Husbandry at Oklahoma.

Rose Frisch (Ph.D. 1943) - Former student of Dr. Cole, is now in New Mexico. Her husband has a war job in physical research. Rose is working part-time on Dave's project. Their present address is Post Office Box 1663, Santa Fe, New Mex.

Willard Hollander (Ph.D. 1937) - Former student of Dr. Cole, is at Cold Spring Harbor, Department of Genetics. He is working with Dr. Riddle on inheritance studies with pigeons, as well as physiological characteristics of pigeons and doves.

John McFarlane (Ph.D. 1942) - Has been appointed Assistant Horticulturist at the University of Hawaii. After waiting around Madison anxiously for several weeks, he secured passage. He writes: "Hawaii is all the tourist guides have claimed, at least as far as climate and scenery are concerned. Temperatures are in the seventies during the day and pleasantly cool at night. - - - We saw potatoes being planted, just coming up, half grown and being harvested. The crop and cultural practices are disappointing. - - - It will apparently be socially necessary to learn to eat with chop sticks. - - - Had a nice visit with Leon Moore."

Andrew Nalbandov (Ph.D. 1940) - Former student of Dr. Casida, is now Assistant Professor of Animal Husbandry at the University of Illinois and is interested in physiology of egg production and endocrinology of chickens.

John Porter (Ph.D. 1942) - Formerly in Plant Genetics and Biochemistry, is at Purdue Agricultural Experiment Station working on some chemical aspects of a tomato breeding program designed to increase content of vitamins A and C.

A. R. Saunders (M.S. 1924) - Is Senior Research Officer, Division of Animal and Crop Production, Potchefstroom, Transvaal, South Africa. He has recently published a comprehensive summary of the field experiments conducted at Potchefstroom during the period 1903-1940.

E. W. Shrigley (Ph. D. 1937) - Has been teaching Bacteriology and Immunology at Yale Medical School for the past year and a half. He is now father of four children, the latest, a boy, born last January.

John R. Shuman (Ph.D. 1938) - From College of Agriculture, University of Georgia, Athens, to c/o Evans & Co., 10a Calle Oriente No. 7, Guatemala City, Guatemala, Central America.

H. B. Sommerfeld (M.S. 1922) - From Animal Husbandry Department, Manitoba Agricultural College, Winnipeg, Canada, to Farm Manager, Colonization Finance Corporation of Canada, Ltd., 460 Main Street, Winnipeg, Ontario, Canada.

Everett J. Warwick (Ph.D. 1943) - Former student of Dr. Casida, accepted a position as Instructor in Animal Husbandry, Washington State College, Pullman, Wash.

Burl Winchester (M.S. Okla. A. & M. 1938) - Former assistant with Dr. Chapman, is now Instructor in Animal Husbandry in charge of sheep husbandry, and is spending some time with cattle. Burl is still carrying on his doctorate work.

Louise Wipf (Ph.D. 1939) - Former assistant in the Veterinary Science Department, is now assistant in cytology to Drs. Brink and Cooper.

Our Faculty

R. A. Brink, Professor and Chairman of the Department, is continuing his research in alfalfa breeding with reference particularly to bacterial wilt and winter survival. The work is in a relatively advanced stage and there are good prospects for the synthesis of a new strain possessing the desired characteristics. This work is being carried out with others in the institution and the U. S. Department of Agriculture.

In addition, Dr. Brink has, in cooperation with Dr. Cooper, continued work on the behavior of the endosperm in relation to the development of the seed. They recently sent to press an account of seed failure following a wide cross in the Gramineae which throws new light on the barriers to interspecific hybridization in this group. L. E. Ausherman, former student in Plant Genetics here, participated in one phase of this study.

Dr. Brink is often called upon to act in various university activities. He was re-elected Chairman of the University Committee this year, and is also a member of the Steering Committee on Post-War Planning. For you who may be curious, the last statement may be worth noting.

L. J. Collo, Professor, is continuing work on pigeons. He is also making considerable progress in the more recently added line of investigation, that of the genetics of fur animals. In the latter connection, he made a tour of the state last fall visiting several of the more important fox and mink farms.

D. C. Cooper, Associate Professor, is very busy as usual. Recently he has been preparing a paper in cooperation with Dr. Brink, namely, "Role of the endosperm in the formation of the seed." Dr. Cooper often has cytological preparations which he shares with the seminar group. His most recent discovery, to show how plant men do branch out, was a beautiful demonstration of sex chromosomes in one of the leaf hoppers. Dr. Cooper and family will be moving April 1 from University Park to 2749 Kendall Avenue.

M. R. Irwin, Professor. The blood lab. under Dr. Irwin's direction is still finding more blood groups in cattle (there are now over forty). In addition, Dr. McGibbor of Poultry Husbandry is studying similar phenomena in chickens. Dr. Irwin is also testing the duration of immunity to contagious abortion induced by vaccinating calves with a strain of the pathogen of low virulence. An endeavor is being made to determine if differences in animals to combat a virulent strain of the pathogen is associated with properties of the serum.

The work with species crosses in pigeons and doves is continuing.

A. B. Chapman, Assistant Professor. This year Dr. Chapman was sole instructor in charge of the twelve students in Genetics I, which was, by the way, one of the largest classes on the Ag. Campus. After one or two false starts with contaminated stocks the class succeeded in making studies of *Drosophila*. As one student put it, his flies were intent on double-crossing him. Dr. Chapman has four research projects: The genetic improvement of swine and cattle; progeny testing of rams; and systems of mating in rats. E. J. Warwick, A. B. Chapman and Burr Ross have recently published on inherited anomalies in pigs. Another publication about to appear is by a former member of Genetics I, who was inspired to make a study of a family pedigree of hereditary deafness.

L. E. Casida, Associate Professor. Main problems are endocrine factors affecting pregnancy in cattle, sheep and rabbits. In cattle he is concerned with cystic ovaries and nymphomania; the causes, experimental production, and treatment of this condition. In sheep the attention is directed to ovulation and fertility of eggs produced experimentally at various stages in the ♀ reproductive cycle. The rabbits are being used as pilot work for the other species. Lila Boyarsky is assisting.

N. P. Neal, Professor, is active in hybrid corn breeding. The war has forced a reduction in the scope of the program. Another fire in the new seeds building destroyed some of the first harvested breeding material but was of minor importance, being confined to one drier.

G. H. Rieman, Professor, is devoting his full activities to breeding disease resistant potatoes. He is leading a discussion in Genetics 210 on disease resistance.

W. K. Smith, Assistant Professor, is breeding coumarin-free sweetclover. He has some interesting results also with variegated progeny following species crosses and has developed a method of securing seed from albinotic seedlings by grafting them on normal green plants. Since coumarin-free sweetclover is relished by rabbits in the field, he is planning to equip his plants with warning devices to scare off these pests.

R. D. Owen, Research Assistant, is jointly employed in immunogenetics with Dr. Irwin and with the American Guernsey Cattle Club and the Holstein-Friesian Association of America. He and Clyde Stormont are making parentage analyses in cases of questionable parentage for these cattle associations and at the same time collecting valuable research data.

R. H. Andrew, Assistant in Agronomy, is working on the hybrid corn program with Dr. Neal. An attempt was made to "evict" him from his old office in the Genetics Building, but Bob seems to want to hold on and is still in partial possession.

New Students

Robert I. Brawn (B.S. Penn State) is working with Dr. Brink.

William C. Roberts (M.S. Louisiana State Univ.), also Instructor in Economic Entomology, is studying inheritance of body color in honeybees.

Eleanor E. Smith (A.B. Hunter College) is assisting Dr. Chapman in studying mating systems in rats.

Arthur D. Stewart (M. Agr. Sc., New Zealand), formerly in training with the R.N.Z.A.F. in Canada, now working with Drs. Brink and Cooper on male sterility in alfalfa.

Austin B. Williams (B.S. McPherson College, Ks.), who was a W.A.R.F. Assistant with Dr. Cole during the first semester, decided he had no flair for genetics and left in January for Kansas University to become a palaeontologist.

Other Graduate Students

R. W. Allard, assistant to Dr. R. G. Shands. Is studying cytogenetics of Triticum vulgare x T. timopheevi crosses.

Mrs. Lila H. Boyarsky, research assistant with Dr. Casida. Working on different phases of fertility in hormone-treated animals. Husband teaching now in Physics Department at Purdue University.

E. J. Britten, research assistant with Drs. Brink and Cooper. Working on a cytological problem dealing with influence of growth substances on endosperm development in corn.

H. E. Hegstad, major in Genetics and Plant Pathology with Drs. Brink and Keitt. Working on tobacco breeding with Dr. Johnson, Horticulture.

J. A. Jackobs, graduate assistant in Genetics and Agronomy. Working on sweet-clover breeding project with Dr. W. K. Smith.

E. A. Kerr. Working with Dr. Brink and Dr. Cooper on development of the endosperm in blackberries. Ernie hopes to complete his Ph.D. in June.

C. W. Schaller, minor in Department. Assistant with Dr. H. L. Shands in Agronomy. Studying inheritance of resistance to barley smut.

Clyde Stormont is assistant to Dr. Irwin in the blood lab. Gave interesting seminar on inheritance of blood groups in cattle. We hope he can work it out.

W. J. (Tip) Tyler, assistant with Dr. Chapman. Tip has been working on "Translocation as a probable cause of semisterility in rats." (Master's thesis). He is now studying effects of inbreeding in cattle.

New Assistants

Mrs. Noel G. Britten (B.A., U. Sask. 1940)
Assistant to Dr. Brink.

Miss Doris L. Plummer
Assistant to Dr. Cole.

Miss Geraldine C. Paltz (B.S., U.W., 1944)
Assistant to Drs. Casida and Chapman.

Miss Mary K. Warren
Assistant to Dr. Irwin.

Milestones Passed

Ph. D. Degrees Granted Genetics 1943

Rose E. Frisch

Everett J. Warwick

Master's Degree Granted Genetics 1943

Lila H. Boyarsky

Prolims Passed

Robert W. Allard (June 7, 1943)
Agronomy and Genetics

Howard E. Hoggstad (June 9, 1943)
Genetics and Plant Pathology

Wilber J. Tyler (Jan. 24, 1944)
Genetics

Congratulations

Sarah Crouch, assistant in Dr. Irwin's lab., recently married John Kirby, who is in the ASTP advanced language program.

Vital Statistics

Susan Marie Briles	- born December 26, 1943
Arnold Anderson Hoggstad	- born June 19, 1943
Paul Jordan Hollander	- born October 23, 1943
Charles Andrew McGibbon	- born March 4, 1944
John Willard Porter, Jr.	- born September 25, 1943
Beverly Ann Roberts	- born March 6, 1944
Michael Clyde Stormont	- born December 11, 1943
George Aitchison Woolley	- born November 18, 1943
Timothy John Zwettler	- born November 28, 1943

(Son of Mrs. John Zwettler - Cora - former assistant of Dr. Cole on the pigeon project)

Visitors in Department

Old Wisconsinites who signed the Visitors' Book recently included:

L. F. Chao (Ph.D. 1928) - Ministry of Agriculture, Chungking, China. Visited us following his attendance at the International Ford Conference at Hot Springs, Virginia. Dr. Chao was one of a party of five that the Chinese Government sent to the conference. He has been engaged since return to China in teaching at the National Central University and has had charge of the rice breeding program. Attended genetics picnic at Dr. Brink's farm and spoke of problems in China.

Ensign Leon Moore, USNR - (See notes about men in service).

C. R. Burnham (Ph.D. 1929) - Professor of Cytogenetics at the University of Minn.

J. W. Boyce (Ph.D. 1939) - Former student in cytology and genetics. Now research engineer with Ontario Paper Co., Thorold, Ontario.

Mrs. R. L. Murphree, nee Alice Picriek. Visited the Department in December following a visit with her husband's folks in Mississippi. She was accompanied by her daughter, Carol.

Sanford Atwood (Ph.D. 1937) - Plant Breeder with U. S. Regional Pasture Lab., State College, Pennsylvania.

Sgt. R. F. Krohn, C.A. (Am) Camp Edwards, Mass. Former employee at Genetics barn.

Cpl. Pote Hogg (see men in service for address) - Visited the Department during the first week of March.

W. A. Craft (Ph.D. 1932) - Director, Regional Swine Breeding Lab., U.S.D.A., Ames, Iowa, spent a couple of days discussing the swine breeding projects of the Wisconsin Station conducted in conjunction with the Regional Laboratory.