

A U R O R A S P O R E A L I S

Vol. VI, No. 4

July-August, 1930

A Journal

Wherein are recorded the recollections, the ruminations,
and the respirations of those who have drunk from the foaming
fount in the Department of Plant Pathology of the University
of Minnesota and who now spout forth in divers ways.

Let the fount foam and never run dry,
Let the spout squirt and never lose power.

Published by the Editorial Committee, aided and abetted
by many others.

The Committee: J. G. Leach

Clyde Allison

Helen Hart, Chairman

EDITORIALS

THE IMPORTANCE OF BEING SKEPTICAL

We scoff at Dr. Coue's "Day by day in every way...." and go along serenely feeling sorry for those who simply by repeating a formula with sufficient regularity believe it to be a fact. Yet I sometimes wonder if we are not frequently guilty of the same type of folly. Some one makes a few hasty observations or performs a few superficial experiments and draws a conclusion and publishes it (perhaps as a theory only). We read it and accept it at its face value - we copy it into our lecture notes, we put it in our extension bulletins, and it may find its way into our manuals and textbooks. We ask it in our quizzes, we teach it, we preach it, and we believe it. "Bacteria never decay wood" "Pycnia are spermatia which have lost their function" "Loose smuts can infect only thru the blossom" "Morphology is of no significance in rust resistance" "The pathogene does not survive in the soil" "Bacterium tumefaciens is strictly an intracellular parasite" "Plowing under rye controls scab

by making the soil acid", and so on ad infinitum. But fortunately now and then along comes a skeptic with curiosity enough to want to find out for himself - and he makes us all feel foolish.

I believe that skepticism is a virtue that many of us can well afford to cultivate. We should not, however, confuse skepticism with stubbornness. It is easy to sit back and criticize and say we are not convinced - refusal to be convinced may appear to be skepticism, but it is frequently only mulishness. We should examine the facts critically, but with an open mind. If we are not convinced of the validity of the conclusion this should be our cue to get busy and learn the truth.

J. G. Leach

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Hoo's Hoo and Y
C. Allison - Editor
Buy 'em and read Hoo's Hoo

In the last issue (let me see when was that) dear Aurora published an "up to date" address list. Was everything O. K.? No! All right, we will proceed with a few corrections and additions. . . . Again for your edification we present.

Anderson, C. George (Big Andy). Box 991, San Juan, Porto Rico. Andy's new address since the fatal step was taken. Details later.

Barsing, Hazel ("Queenie") c/o J. C. Winston Co., 623 South Wabash, Chicago, Ill.

Carran, Gordon C. (alias Alexander Botts). 600 California Avenue or Sales Dept., Caterpillar (Earthworm) Tractor Company, Peoria (Earthworm City), Illinois. More intimate details may be found in the personal section.

Kaufert, Frank. Der trinkt beer und isst Wurst. Ludwig Wircherer Str. Halle a/ Saale, Germany. c/o Prof. Dr. Roemer.

Ostrach, Leo. 6 Mergentheimerstrasse, Wurtzburg, Germany.

Sarmiento, V. Where is he?

* * *

Visitors of Note

(J. J. Christensen - Correspondent)

Chris says there are too many visitors so he won't write up any in detail, although he wanted to.

June

J. E. Kotila, Pathologist, Office of Sugar Plants, U. S. D. A. (In charge of root rots of beets) Washington, D. C.

Christine Buisman, Phytopathological Laboratory, Baarn, Holland

Kathleen Curtis, Chief, Mycology Department, Cawthron Institute, New Zealand

July

H. B. Humphrey, Principal Pathologist in charge of Rust Investigations, Office of Cereal Crops and Diseases. U. S. D. A., Washington, D. C.

G. J. L. Burton, Plant Breeder, Scott Agricultural Laboratory, Nairobi, Kenya Colony, East Africa

O. S. Aamodt, Plant Breeder, Edmonton, Alberta, Canada

F. C. Meier, Principal Pathologist in Charge of Barberry Eradication, U. S. D. A., Washington, D. C.

N. N. Kuleshov, Institute of Applied Botany, Leningrad, Russia

August

Lytton W. Boyle, Office of Cereal Crops & Diseases, U. S. D. A., Fargo, N. D.

G. H. Coons, Principal Pathologist, Office of Sugar Plants, U. S. D. A., Washington, D. C.

L. E. Melchers, Head, Department of Botany and Plant Pathology, Manhattan, Kans.

A. G. Johnson, Senior Pathologist in charge of Cereal Disease Investigations, U. S. D. A., Washington, D. C.

C. O. Johnston, Associate Pathologist in charge of Leaf Rust Investigations, U. S. D. A., Manhattan, Kans.

H. C. Murphy, Assistant Pathologist in Charge Crown Rust Investigations, U. S. D. A., Ames, Iowa

PERSONALS

(C. Eide - Correspondent)

HOCHZEIT!

Mr. and Mrs. O. S. Obertson
announce the marriage of their daughter
Florence
to
Mr. C. George (Big Andy) Anderson
on Saturday, August Sixteenth,
Nineteen hundred and thirty
at The Little Church Around the Corner
New York City

At Home
After September first
San Juan, Porto Rico

* * *

ANOTHER HOCHZEIT!

Mr. and Mrs. William Friedman
announce the marriage of their daughter
Lucile Marie
to
Mr. Gordon C. Curran
on Tuesday, the third of June
Nineteen hundred and thirty
Princeville, Ill.

We understand Gordon and the Mrs. (Gadget) spent their honeymoon in Europe. Now we know who writes those stories for the Saturday Evening Post. Gordon got his M. S. in Business Administration at Harvard last June and will be employed by the Caterpillar Tractor Company in Illinois.

And not only that but -

Miss Mary Larson and James W. Walter were married Friday, June 13, 1930. Mrs. Walter returned to Kentucky in September where she will teach school. Jim is still investigating the affairs of Ustilago zeae and playing soccer.

Well, well, the little brave boy with the bow made quite a few hits among the disciples this summer but got only one on the home grounds. He has been seen hanging around once in a while but is very cautious in the vicinity of the Tottering Tower.

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FIELD TRIPS
(J. J. Christensen - Correspondent)

Take it or leave it - as near as I can find out there have been no Departmental field trips during the summer of 1930. (The Department is slowly dying.)
(Sez you! Editor)

BUT THERE IS STILL
A SPARK OF LIFE.

DEPARTMENT OF SCIENTIFIC EVENTS

J. G. Leach - Editor

PUBLICATIONS

(L. M. Hamilton - Correspondent)

In addition to the publications mentioned in the second number of this volume of Aurora, the following have been issued this year:

Leach, J. G. Sources of potato-blackleg infection. Amer. Potato Jour. 7:59-64. March.

Lovine, M. N., and E. C. Stakman. Black stem rust of cereals has more than 60 physiologic forms. Yearbook Dept. Agr. 1930: 137-140. (Separate No. 1135)

Rodenhiser, H. A., E. C. Stakman, and A. C. Army. Flax Facts. Minn. Ext. Bul. 128. February.

Stakman, E. C., and Lee H. Person, Jr. Wheat protected from black stem rust by dusting with sulphur. Yearbook Dept. Agr. 1930: 547-548.

Two of our present day staff members are authors of a paper prepared while they were cooperating in Germany.

Allison, C. C., and K. Isenbeck. Biologische Spezialisierung von Puccinia glumarum tritici, Eriksson und Henning. Phytopath. Zeitschr. 2: 87-98. January.

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PUBLIC SERVICE ACTIVITIES

(L. W. Melander - Correspondent)

The Section was represented at the State Fair this year. Mr. Eide assisted with the fruit pest control demonstration in the Horticulture Building. Melander had another barberry exhibit in the Agricultural Building. Tolaas judged county exhibits and potatoes. The usual pass difficulties among the other section members were encountered.

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FIELD TRIPS

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DEGREES

(J. G. Leach - Correspondent)

Since the last report the following faithful foam fighters have drunk their fill at the foaming fount and have found their reward as follows:

	<u>Degrees</u>	<u>Year</u>	<u>Thesis subject</u>
Delia E. Johnson	Ph. D.	June, 1930	The relation of the cabbage maggot and other insects to the spread and development of soft rot of cruciferae
E. M. Johnson	Ph. D.	" "	Virus diseases of tobacco in Kentucky
Thorvaldur Johnson	Ph. D.	" "	A study of the effect of environmental factors on the variability of physiologic forms of <u>P. graminis tritici</u>
I. W. Melander	Ph. D.	" "	The effect of temperature and light on the development of the uredinial stage of <u>Puccinia graminis Pers.</u>
E. M. Nelson	Ph. D.	" "	Experiments with bluestain fungi in southern pines.
Clyde Allison	M. S.	" "	Sex relationships in some of the cereal smuts.
Clyde Christensen	M. S.	" "	Physiologic specialization and sal-tation in <u>Pestalozzia funerea Desm.</u>
Lee Hines	M. S.	" "	Physiologic specialization of <u>Puccinia graminis tritici Erikss.</u> and Henn. in relation to the develop-ment of epidemics of stem rust on wheat.
Frank H. Kaufert	M. S.	" "	Experiments on the control of damp-ing-off of conifers.

HONOR SOCIETIES

We are proud to announce that the following inhabitants of the Tottering Tower were elected to membership in Sigma Xi.

Delia E. Johnson, Clyde Allison, Clyde Christensen, Frank Kaufert, C. J. Eide

The honor society of Agriculture, Gamma Sigma Delta, has added to the strength and quality of its membership by electing the famous Johnson trio.

Delia E. Johnson, E. M. Johnson, and Thorvaldur Johnson.

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DEPARTMENT OF FEATURE ARTICLES

H. Hart - Editor

Sugar Cane in Louisiana

Introduction

An article on sugar cane in Louisiana is a timely (the darn article was three days late) contribution to the Aurora for several obscure reasons. In the first place this division needs sweetening and LeClerc hasn't the beet situation in hand as yet. In the next place several of the disciples of the Tottering Tower have made pilgrimages to the Cajon land to study sugar cane in its native haunts and get Southern Experience in general. There may be other reasons why they went. A couple of them are guilty of having been born and raised there. The author of the "contribution" below has had first hand information and probably knows less about the situation than any one else who ever sucked the pith of *Saccharum officinarum*.

Everyone in Louisiana is interested in sugar cane. When a banker in Louisiana rides past a large field of sugar cane he gets that same comfortable feeling that his brother in Minnesota gets out of a big wheat field before it is rusted. It is a feeling that he might get the interest on his money in the fall. When any one says cane in Louisiana the first thing they think of is sugar cane. Next in order come Helen (Boopa Doop) _____, _____-bottomed chairs, and walking _____s. Down in Louisiana the girls don't know how to raise Irish potatoes, but they do raise a lot of cane. (At least one so confessed to H. W. Johnson.) And when the moon and all the little nooks about the campus are full, tradition hath it that the L. S. U. summer-school students walk hand in hand among Dr. Edgerton's P. O. J.

People of Louisiana have been raising sugar cane for a long time. In fact, ever since 1795 when Bore learned how to make sugar out of the molasses. A great many of the natives do not seem to realize that this has been done because they still eat the molasses. (It is usually served with a few baking-powder biscuits floating in it.) Nevertheless, if you go over to the old University Campus on a Sunday afternoon you will see two or three pretty girls sitting on what you will recognize as a large iron kettle. (That is, if the girls scamper away; otherwise you will see only the girls.) But we will assume that they have left, and sure enough, it is not a rock or stump, but the kettle that old Bore used in granulating sugar. Nowadays they granulate sugar in large factories which are known as sugar houses. These sugar houses are the scenes of nocturnal "sugar parties" during the grinding season. The writer cannot speak first hand of these parties because they seemed rather anti-Baptist in nature and he is a Fundamentalist.

Sugar cane is often chewed or sucked in its natural state. To do this one has to have a special constitution and lots of practice. The tale goeth that Holton would leave a trail of bagasse that would cause the Celotex Co. to weep at the waste. All this while counting mosaic or doing whatever plant pathologists do in cane fields. Chewing sugar cane is highly esteemed by the colored population, and when one sees a nigger with a knife, a cane, and symptoms of the lump jaw, one may assure himself that he beholds a contented Ethiopian.

Sugar cane also gets diseases. It gets mosaic, red rot, and root rot. To avoid the ensuing embarrassments the plant pathologists recommend the growing of P. O. J. cane which resists mosaic and red rot and can grow new roots as fast as

they rot off. "P. O. J." refers to Java in a manner that is not convenient to explain. In spite of all their advantages, the P. O. J. canes are not an entire success. They are hard to chew.

The Totterint Tower has contributed nobly in men to assist Louisiana in growing cane. W. N. Christopher, an old timer, investigates the bacteria on cane between malaria counts and boil vaccine jobs. H. H. Flor labored and brought forth enough information to merit 10 pages in Phytopath. At present our representative is Lee (Teeny) Person. According to the latest reports Teeny was learning to be a good golfer, but was losing on the ponies.

C. J. Eide

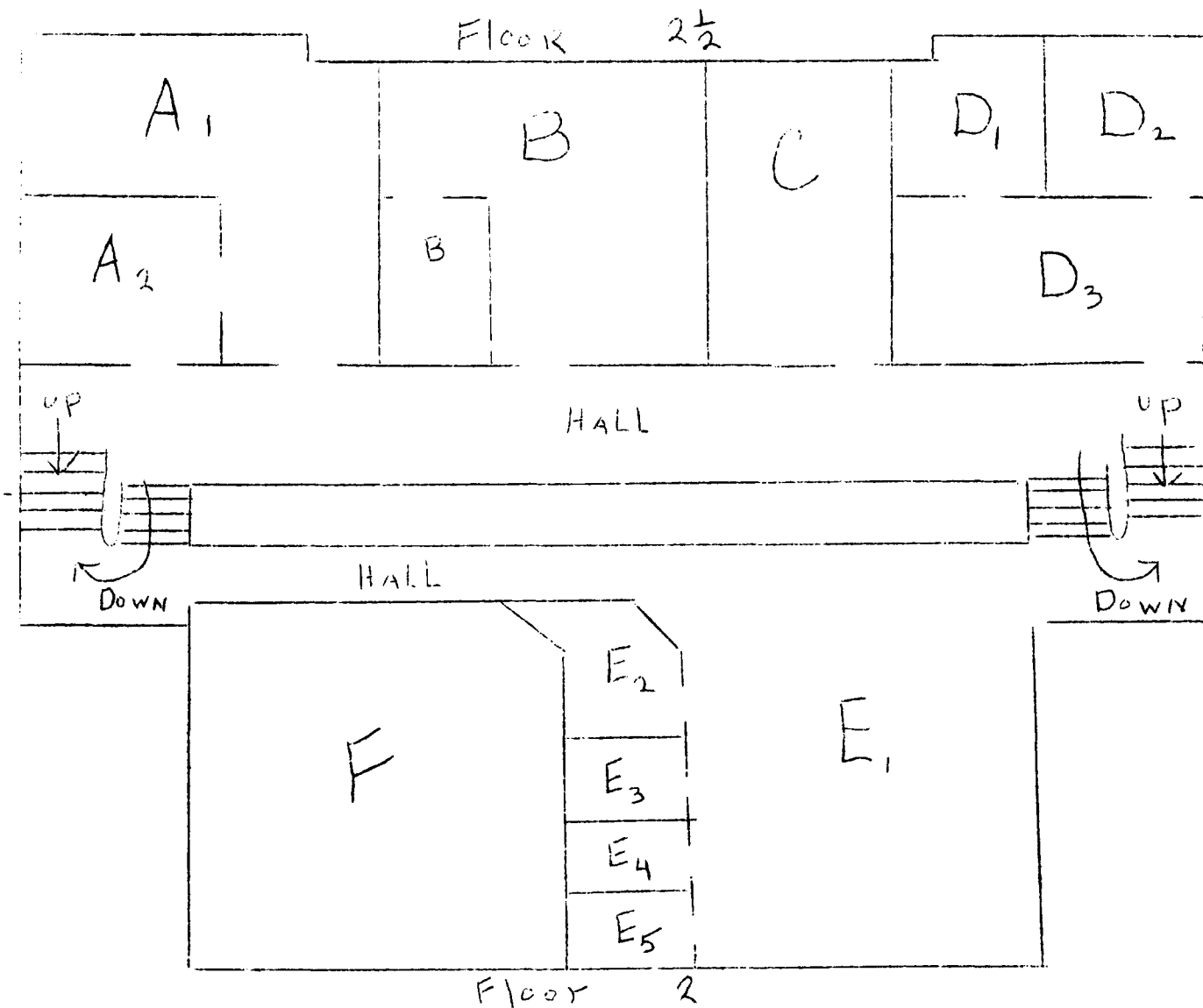
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GHOSTS

Far away from the crowded thoroughfares in a little shack surrounded by a few shade trees, things were beginning to happen. Nobody thought anything could happen in that secluded spot as would startle so the inhabitants of the neighborhood. For a quarter of a century this little-advertised but well known place had withstood all the onslaught of time and decay. A very strange place indeed. By day it was supposed to be inhabited by a nomad tribe. By night all around and within was dark and still as death. The inquisition visitors who peered through the cob-webbed windows saw only the dark interior. Yesterday, however, was different; something mysterious was happening. The rasping of saws, the screeching of screws, winding their way deep into the old timbers and the pounding from within denoted unusual activity - evidently the dead were burying their dead and the coffins were being sealed in the black silence of the underground passages. Passerbys who heard these sounds became panicky, they did not know what to do. They greeted each other with a silent nod like they do at funerals. Something terrible has happened. "At last!", shouted one, causing many others to almost jump out of their skins. "It's coming," said he, "there is no possible doubt about it now. Be prepared!" "What's coming," asked one, but he got no reply. On two occasions a big car drove up swiftly, a man went in, came out, sighed in relief, and away it went before the license number could be noted. It all seemed so mysterious. Things could not go on this way much longer, the strain was becoming unbearable. "Call in the Police," said one. No they would only bungle the whole affair. "Let's secretly investigate" whispers another. "We don't want this in the papers, and so it came to pass that on the morning of August 13 (always an unlucky number) in the year of our Lord, 1930, that a certain brave man acquainted with the surroundings had orders to investigate and when he was fully armed and had everything in readiness his investigation started. (Readers who turn a whitish hue when reading of gruesome discoveries need read no further) With a certain doubtful expectancy as to what was in store for him, he inserted his skeleton key, turned the lock smoothly and softly, and crept in on his hands and knees - nothing happened - all was quiet. He stood upright and stepped very gingerly into the northeast room. This was the room in which was seen the last living person - all was dark and quiet. He had only gone two paces and in the darkness was struck over the head with a stout cord with metal end covering from above. "Who's there?", he screamed. Nothing like this had ever happened to him before and he felt that he was doomed. Getting no reply he groped around for his assailant and Ah! he stopped dead in his tracks and with his right arm uplifted he felt the cord, grasped and jerked it, and low and behold, the room was flooded with a brilliant light!!!!
ELECTRICITY HAD BEEN INSTALLED IN THE FIELD HOUSE.

A.E.

SECOND FLOOR PLAN OF THE POTTERING TOWER.



A 1 and 2 are the outposts of Plant Physiology where Dr. R. B. Harvey and Al Larson hold forth.
In B you'll find the Minnesota Seed Lab. with its analysts working night and day to catch up.
C is a plant phys. lab and the source of all our distilled H₂O.
D 1, 2, and 3 are known to all the undergrads as the Dean's Office the place where E.M.F. seems never to be - it's a long way from the Seminar room and the nicotine aroma.
E is The Plant Phys. Lab. one of the best equipped in the U. S. The little cubby holes are store rooms, balance room, and offices.
F is a wide open space where we collect all the hot air of the Plant Path. lecture room. Remember?

FROM THE NOTE BOOK OF CLYDE CHRISTENSEN

(Answers to Forest Pathology examination questions)

Mycorrhizae are fungi that attack window sills, door casings, and general house finishing. Dry and cool climates are not readily susceptible to their attack.

New control of forest diseases - irradiation

Mycorrhizae are bacteria which attack all trees and increase the fire hazard.

Fungi has to have excess to certain foods before it can germinate.

If our forests were like those of Germany, we could form artificial boundaries to circumscribe diseases to relatively small areas, and in short time wipe it out.

Dead material in our forests proves a fertile bed to plant diseases.

The mistletoe derives the host of food.

* * *

PAVING BLOCKS

- T. N. E. - I've been thinking about writing to Aurora, and as soon as this cotton root rot baby is put to sleep, I'll do so.
- L. T. - I'd like to write to Aurora, but I have been so busy that there has been no time left for those things I'd like to do.
- J. J. C. - Yes, I'll write every few weeks.