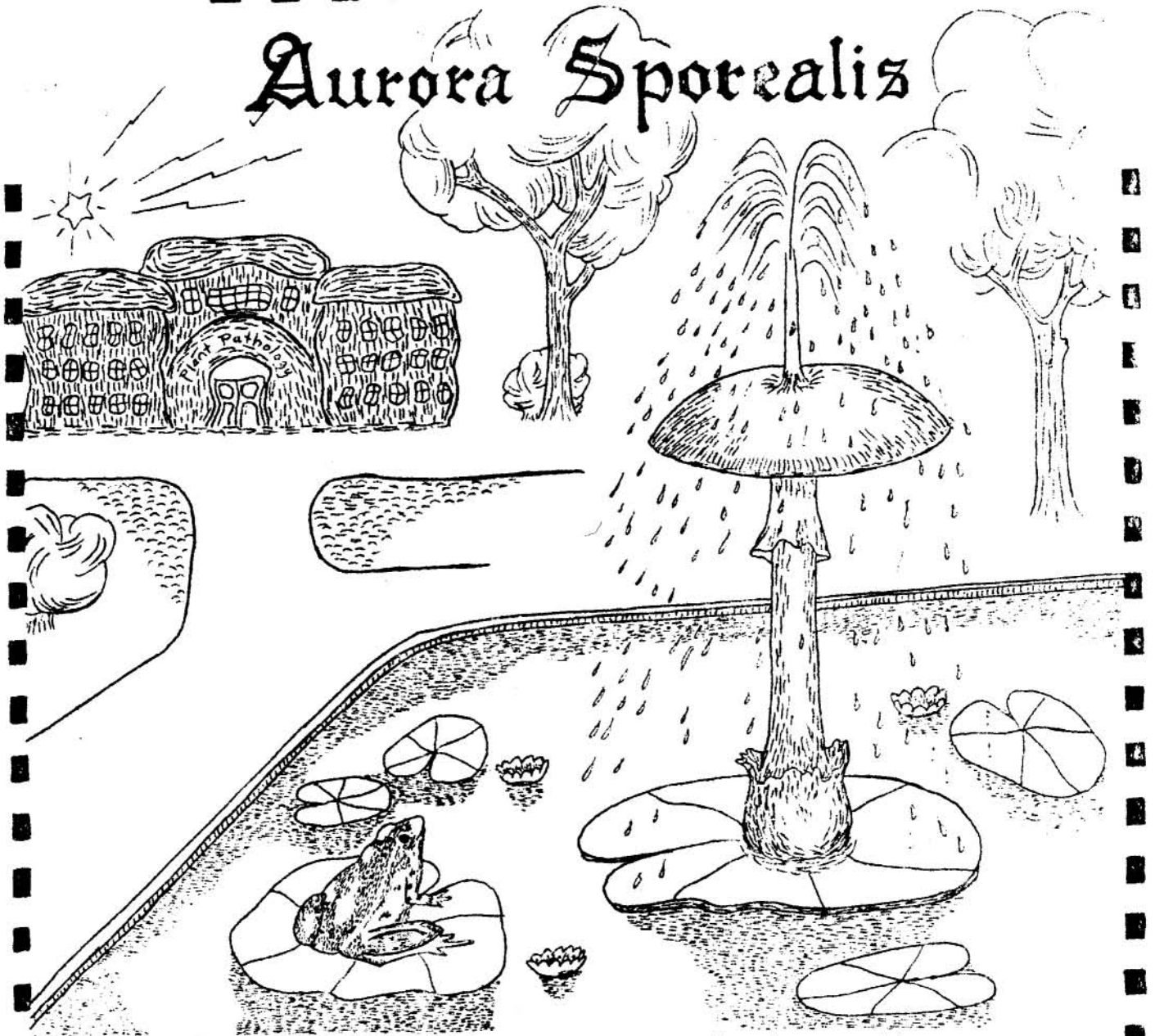


Aurora Sporealis



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

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



EXTRA-CURRICULAR ACTIVITIES AND ADULT EDUCATION

Cato, one of the greatest Romans of them all, said that a slave should be either sleeping or working. Although slavery has been abolished in most of the civilized world, the attitude that certain groups of people should either be working or sleeping still seems to persist in some minds. Some of these minds probably are antediluvian, but others ask honestly whether people in general have sufficient intellectual and emotional resources to enable them to keep out of jail or beer parlors when they are not working. This may have little to do with extra-curricular activities and adult education. On the other hand, maybe there is at least a tenuous sort of connection.

The feeling that many people would not do anything useful, either to themselves or to others, when neither working nor sleeping, may be an indictment of education, because an educated person should want to do so many things that he never would find time to do all of them. Isn't it perhaps true that too few college students, perhaps many graduate students and professional scientists also, fail to develop intellectual or esthetic interests outside of class or apart from the work for which they are paid?

An educated person wants leisure--freedom from assigned tasks, from tasks which one is obligated to perform--in order that he may do those things which he thinks may be of greatest value to himself and to society. And yet how many people develop really vital interests which make them want to live to be a thousand years old? We hear much about extra-curricular activities. Is it unreasonable to expect that some of a person's extra-curricular or extra-professional interests should be devoted to intellectual and esthetic pursuits? After all, intellectuals really have an obligation to furnish a certain amount of intellectual leadership. How can they do it unless they acquire facts and develop wisdom and ethics which enable them really to lead? Well, it can be done!

Recently, the writer participated in a recognition dinner for "eminent farmers and homemakers." These men and women, none of them college graduates, were being honored because of concrete attainments and contributions to community life. Some of these eminent farmers and homemakers had been brought up in families in which there was no tradition of college education; some were from frontier communities where the primary concern necessarily was making a living. Some of them came from regions in which making a living required intelligence, skill, and a tremendous amount of fortitude, and yet their very faces, their words, and their acts indicated that they had been eminently successful because they had availed themselves of every possible

opportunity; had created opportunities, and had an unconquerable spirit, even in the face of such adversities as would have driven many to despair. These people had developed a sound philosophy, not couched in the special language of formal philosophy, but nevertheless substantial and sound. They had acquired their education through their own efforts; they had used every device to improve themselves and their economic and spiritual status. By example, they had helped and stimulated others. After all, their accomplishments show to what extent adults can educate themselves extramurally. The avidity with which they considered new ideas and accepted new facts, even though some of them were approaching old age, was a splendid exemplification of the fact that a person is never too old to learn.

Maybe there is a lesson in the attainments of such people under such circumstances.

* CHRISTMAS PHYTOPATH. MEETINGS *
* COLUMBUS, OHIO *
* DEC. 27-30 *

THE PICNIC

On the evening of Thursday, October 12, scholars, scientists, pathologists, and others met at the Joyce Killmer Pow-Wow Ring for the annual picnic. The weather was cold but the spirit (Minnesota) warm and all went off with a bang. Seminar Committee Chairman Wright did a fine job on the preparatory work and Dr. Hart, chairwomaned the food committee with her usual efficiency. Judging by the activity of Physiologist of Plant Pathogens Eide no vitamins were lacking from the hamburger, hot dog, fruit, coffee and pop corn diet that had been so carefully planned.

Before a huge fire for which the wood cutters were responsible Melander and Don Fletcher acted as joint Masters of Ceremonies. Surprisingly fine talent was revealed by songsters previously unheard of in the Tottering Tower. We all knew "Chris" was a baritone, born not made, but his rendering of "Mary, Mary Mary Mary" was superb. Newly arrived McGill College Graduate F. S. Thatcher lead the Canadian unit and with the other Britishers supplied several numbers. Eide urged for his duet "When the roll is called up yonder" but as partner Clyde Christensen was not available the proposal lapsed.

Everyone fought to show their culture. The Big Chief's solo "Susannah don't you cry" had rather a rough passage out but apart from a few discords it was agreed to accept his contribution. Melander conducted the Swedish Choir. Misses Johnson and Saline were the sopranos and Hanson baritone.

On the completion of the musical program the chairman called on Archdeacon Christensen to pronounce the benediction. Before this was done the very reverend gentleman decided to make a presentation to a member who had recently announced his marriage. On bended knee and with all necessary dignity and grace J. J. faced Matt Moore at the side of his blushing bride. As the gift--remains of a box of apples--was being presented the choir sang "Here comes the bride". Matt was overcome. He gave a sprightly dance as a mark of appreciation.

The usual acknowledgements were made. No speech from Stak!! Eagle lead the Britishers in a raucous rendition of their National Anthem and we all sang "America". Finally "Chris" passed his blessings on the group and all left full of pep and hamburgers for another twelve months.

TEACHING

Teaching in the Department of Plant Pathology usually does not reach its peak, so far as number of students is concerned, until the winter quarter. If we consider the quality of the instruction or of the students, it would be difficult as well as injudicious to state that the peak had been reached or passed. There are those who believe that the quality of education has been steadily deteriorating for the last 2000 years or more, and they are at a loss to explain how the present generation could know enough to pound a plug in a rat hole, much less grasp the complex logic connected with physiologic forms, viruses, the application of fungicides and so on, but there seems to be little evidence around the Tottering Tower that would credit this view, the present generation of students and teachers being just as good as or better than the last.

Elementary plant pathology, taught by Ian Tervet and Matt B. Moore, has 22 students, two of whom are graduate students, three from the College of SLA, and the rest from the College of Agriculture; there is one young lady and one school ma'am in the crowd. Tervet often opines that students in this country could do with a little more botany. He also states that Matt is a very effective lab instructor, being able to enlighten the students on disease, fungi, bacteria, pathological anatomy etc. in such a way that they actually are interested.

Mycology, taught by Dr. Dodsall, boasts 12 students, classified by her as follows: five entomologists, two plant geneticists, one ag. economist, four plant pathologist, and a lady. So far they have been working on slime molds, and, judging from the angry mutterings sometimes overheard as one passes the door, there still are no perfect keys for the identification of slime molds; and the difficulties of separating "sporangia sessile or sometimes stalked" from "sporangia stalked or occasionally sessile" still drives students to the plasmodial brink.

Insects in Relation to Plant Diseases, taught jointly by Professors J. J. Christensen of the Tottering Tower, and A. A. Granovsky of the Division of Entomology, has 18 students, divided as follows: seven entomologists, four plant pathologists, two plant geneticists, five undergraduates, and one girl. Whether the girl of Insects in Relation to Plant Diseases is the lady of mycology the writer did not ascertain, but this will be investigated for the next issue.

Physiology of Fungi, taught by C. J. Eide, one time professional biochemist, is a new course, offered this year for the first time. It aims to make some of Dr. Eide's slowly accumulated and large fund of knowledge, and almost equally large bibliography, on the physiology of fungi available to at least a portion of the public, and it includes lectures, demonstrations, and experiments in the laboratory and greenhouse. Eide, with becoming modesty, refused to make a statement other than that it kept him busy. Of three students interviewed, one said it was a damn good course (he was standing outside Eide's office at the time, and shouted it loudly), the second said he had got a lot of new ideas but was way behind in his lab work, and the third swore violently, stared wildly around the room, grabbed up a liter flask of physiologic solution which he swung at your reporter's head, and dashed down the hallway shouting chemical formulae at the top of his voice. There are 20 students in the class, all of them graduates; four of them are plant geneticists, three are entomologists, and the rest plant pathologists; Eide also classified them as 20 males and 1 female. So far Eide has received four apples (wrinkled) and one cigar, which he is saving until Christmas.

The course in Methods in Plant Pathology is not being taught this year, all the new students apparently believing themselves sufficiently conversant with the technics of research to go right ahead and make their own mistakes in their own way.

When the 29 registered and about 10 non-registered attendants of the Tuesday afternoon seminar crowd into the seminar room they are crowded together closely enough to resemble a colonial flagellate, even to the numerous dormant cysts in the colony, and the activity sometimes partakes more of the cluster than of the cloister. Soon after class starts the pictures that adorn the walls become obscured by a definite haze through which even our brilliant lights shine but dimly. Of the members, there are seven from Agronomy and Plant Genetics, two from Entomology, and 20 from Plant Pathology, including one woman. The entertainment so far has consisted of papers left from last year, plus speeches, admonitions and exhortations by the Chief, some of these from last year also, but some brand new hard-riding 1940 models and some of uncertain but great age. As in the past, discussions range over a fairly wide field and occasional dissensions break out, most of these being settled amicably enough by finally putting the question to a vote. The majority win, that is they do if they vote on the same side as the Chief, otherwise they go look it up for next time. Everyone who is registered gets two credits, and from time to time as necessity demands, they are reminded as delicately as possible that for two credits they at least could look interested. As in the past few years each one writing a paper chooses his own topic, subject to ~~approval~~ by the seminar committee, the theory being that with such freedom each would choose a subject near and dear to his scientific heart, investigate it thoroughly, become somewhat of an authority on it, and thus enlighten not only himself but edify his fellow members as well.

Members of Q.C.F. (J. J. Christensen, M. B. Moore, and Ian Tervet) stated rather positively their conviction that Q.C.F. continues to be the foremost classroom in the building, in which are given supergraduate courses in practically all phases of natural and unnatural sciences. The method used is the classic one of Plato's Dialogues, with certain modifications, improvements and simplifications, particularly simplifications. Instead of all being students together, in Q.C.F. they are all teachers together. Everyone talks at once and the loudest wins. Sort of an academic Utopia where everybody teaches and nobody learns. It seems to work out fairly well.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

The old Tottering Tower is no longer the immaculate structure of yore--take it from the Chief--and probably this is the reason for the plague of pests that has been making life miserable for certain of its inhabitants.

In the forest pathology laboratory and environs the mites are doing right well, by themselves, but to the detriment of many cultures. Our old friend Archie the Cockroach, and his multifarious progeny (F-1,000,000 or thereabouts), is still with us. Periodically he is moved from the preparations lab to the smut lab, then to the canyon and the office. About the time he reaches the office he is moved back to the prep lab to start all over. This process will go on forever we suppose because the cockroaches only seem to die of old age.

There are plenty of aphids and some thrips in the greenhouses but another pest has come to the fore there: Camel crickets are wreaking havoc with the freshly planted grain according to Loegering and Eagle. There are a few that stoutly maintain that the trouble is caused by nothing but mice. Personally, we are neutral and are waiting for some "Scientific" proof significant to the 1% point preferably.

FOR THE BOOKWORM

In Trans. Brit. Myc. Soc. 23, July, you will find G. R. BISBY on Trichoderma viride. In Ann. Mo. Bot. Gard. 26, April, MARY GODDARD reports on variation in

Gibberella saubinettii. In the October Phytopath. VALLEAU and JOHNSON of Kentucky (with Diachun) appear on water soaking of tobacco, LEFEBVRE (with Weimer) on Choanephora, and BONDE presents part of his thesis material on bacteria and potato blackleg....Then if you are still looking for food, read LeCLERG on dry-rot canker of sugar beets in September Phytopath., or STAKMAN'S abs. on natural resistance in Third International Congress Microbiol. Abs. of Communications, p. 217.

EVENING SEMINAR

The twenty-five or so aspiring scholars have been convening these nights with a new vigor following a summer of comparative lassitude. Being the beginning of a new season, it was fitting to have Stak reiterate his ideas of the meaning and significance of Literature seminar.

He said that, in general, the purpose is twofold: both practical and educational benefits are to be derived. Practically speaking, the meeting is a place for the expression of individual ideas. This expression, and the consequent criticisms, stimulate more precise mental development and enlargement of a "repertoire", as well as teaching intellectual self-defense. Then, too, a seminar being of a more lengthy nature than 50-minute class intervals, uninterrupted thought and development of concepts is allowed.

Education is largely a process of repetition. In this Division the same information is presented repeatedly from different standpoints in nearly every course, and seminar allows further repetition on a larger scale. Fact and concepts through the eyes of those having had personal experience are of assistance both in orientation and evaluation and in furnishing a richer background.

Literature during this period has been particularly plentiful. J. J. Christensen gave papers on Helminthosporium, mushroom casing, and susceptibility of grasses to grasshopper damage; Kernkamp on the effect of ultra-violet irradiation on dermatophytes; Watson on ergot of Paspalum, possible correlation of self-sterility of self-fertility of host plants and resistance to nodular bacteria; Martin on sugar cane mosaic; Hanson on soil borne organisms; Cotter on chemical treatments and increased resistance to stem rust, and a new wheat species; Andrews told us of a plan to create a new genus for the Big Tree; Schaal held forth on ascorbic acid; Vaughn on the nature of scab resistance in potatoes; Darling on cellulose of potato vines; and Downie on Verticillium wilt of potatoes on Prince Edward Island.

In pursuance of a new policy by which the seminar may become better acquainted with the work of both the present members and those who have returned or are new, it is planned that at intervals of 2 or 3 weeks one of the members will give an informal summary of their work and results.

Cherewick was the first in line. After leaving here in the summer of 1938 he went to the Rust Lab at Winnipeg first to create rust epidemics for Miss Newton, later to work with Hanna on smuts, and finally to work with Peturson in studying the effect of temperature on the reaction of eleven Crown rust races.

* WE'LL SEE YOU *
* AT THE *
* CHRISTMAS MEETINGS! *

CLASS SEMINARS IN PLANT PATHOLOGY

October 3, 1939.--Henry Darling gave an illustrated talk on potatoes in Alabama. He traced the development of potato certification and the disease problems of potatoes peculiar to certain areas. Considerable interest was shown in his colored slides illustrating the experimental work in Alabama in attempts to develop Southern seed

sources. Ultimately this may be a little hard on Minnesota and North Dakota.

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October 10, 1939.--The meeting opened with a free-for-all discussion on the origin of potatoes and the validity of the specific name Solanum tuberosum for all cultivated potatoes. Lawrence Schaal gave a paper on "Psyllid yellows" of potatoes. Schaal claims that he and Daniels covered most of Colorado on their hands and knees looking for overwintering Psyllids. Colorado must be smaller than we had thought.

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October 17, 1939.--Before Ed Andrews could begin his paper on "Seedling diseases of trees and their control" the question--"What is a scholar?"--came up. No one seemed to know and none laid definite claim to being one. The chief then consented to clarify the situation and at the conclusion of the definition Downie asked for a show of hands----there still seemed to be no scholars present.

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October 24, 1939.--In a discussion of "seedling blight" versus "damping-off" Dr. Stakman explained by saying "If a person's life is blighted he is not necessarily killed". "But", said McIndoe, "if a man's enthusiasm is damped he isn't killed either." Bernard Shema gave his paper then on "Larch Canker" with considerable discussion on the nature of cankers.

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October 31, 1939.--This year it was stated the seminar papers are definitely to be short. The plans, at present, are to give two papers a session. Think it can be done? Phillip Schroeder, Entomology major, gave his paper "Some forest insects that disseminate pathogens causing forest tree diseases."

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November 7, 1939.--H. Gage Nicholson, another Entomology major, gave his paper, "The present status of fire blight", at this session. The paper was accompanied by numerous illustrations, a-la-Buller, by Thatcher taken from his own experience on the subject.

FOOTBALL

Mighty Minnesota has declined this season and has taken a series of defeats at the hands of Nebraska, Ohio State, and Northwestern, and played a tie game with Purdue. The season was started, however, by a 60 to 0 win over Arizona in an inter-sectional game.

The main trouble with the Gophers this year seems to be two-fold: firstly a lack of pass defense, and secondly a lack of spark and spirit which has characterized so many Minnesota teams in the past and enabled them to win over teams of superior strength.

Particularly noticable in the Nebraska game was the absence of the scoring "punch". This was remedied in the later games with Ohio and Purdue but the defense against passes and the lack of "spark" or generalship cost the game in the Ohio conflict and resulted in a tie in the Purdue game. Two weeks of practice following the Ohio game failed to improve the pass defense and Northwestern's ability in the air resulted in a decisive victory for the Purple team.

Still to be played on the 1939 schedule are games with Wisconsin, Michigan and Iowa. Michigan is probably the strongest of the three in spite of its recent defeat by Illinois. While neither Wisconsin nor Iowa are rated among the strongest teams in the Big Ten, Minnesota will be the "underdog" in both contests on the basis of previous performances.

The fact that Minnesota is no longer the tops in Big Ten football will no doubt be disheartening to its many fans. The institution is, after all, primarily an educational one, and although football is of great importance in the sporting world, it is just a game, and the Athletic department one of the departments of the University, performing useful services to the University and teaching other sports besides football.

PHYSIOLOGIC SPECIALIZATION IN THE GENUS PHYTOBRICKHAUS

During the first decade of the 20th century the scientific world was moved roundly, profoundly and permanently by the report by Freeman of the occurrence of a new genus Phytobrickhaus. Shortly after this initial report the new genus was designated by the specific name tremuloides, and the accepted terminology now widely used is "Phytobrickhaus tremuloides (Freeman). T. W. Grah."

Shortly after its official acceptance as a true genus, Freeman reported the isolation from one of the St. Paul high schools of a new form of this genus which he designated "Stakman type 1." This new race was maintained in pure culture for a number of years but around 1910 commenced to mutate freely and without cessation until at the present time the race Stakman must be considered as the type race for over 150 biotypes widely distributed throughout the world.

In 1934 the author left the investigation but recently returned at which time numerous changes in the genus Phytobrickhaus were observed. A discussion of the above genus (1939-40 strain) together with its attendant biotypes is herewith presented.

Generic description

The genus Phytobrickhaus, when originally isolated by Freeman, was an insignificant, microscopic entity, amorphous in outline with few aims in life other than a commendable youthful desire to attain a position of eminence. The organism was grown on several media but was transferred to its present medium in 1914. It grew well on this substratum and by 1934 had attained a definite and characteristic form flushed with the pride of "Fullness of living" and endowed with the strength of hybrid vigor. Observations made during the past few weeks indicate that several corrections must be made to the morphologic description of this genus published in 1934.

The original spore of this genus was light brindle to ochraceous red in color, smooth in outline, with well defined germ pores in the west, east and south walls. The spore now is dark buff to plain dirt color with outlines which tend to waver with every breeze, and festooned with long ciliate appendages of a saprophyte Ampelopsis quinquefolia. The germ pore in the west wall through which many biotypes have been extruded, previously was partly plugged by a clear transparent substance known as "glass". Careful observations over a number of years have firmly convinced competent investigators that "glass will break", with the result that the west pore is now semi-plugged by the less aesthetic but more durable substance known as "plywood". The basal cell of the Phytobrickhaus spore has laid down several new septa. The Federal biotypes occupy the basal west cell previously devoted to physiology seminar, and a transverse septum laid down in the east classroom has created a "Mezzanine floor". The ultimate cell (seminar), while morphologically the same, has acquired a specialized and much needed organ adapted to the expulsion of noxious vapor. While the Phytobrickhaus spore has not changed in fundamental structure the specialized tissues reported above warrant this revised description.

Description of biotypes

The constant change in old biotypes and the origin of new forms of Phytobrickhaus tremuloides would warrant a description of their cultural characters. The Stakman biotype remains extremely constant and is characterized by its cultural vigor and tendency to mutate freely, invariably having scrotiform inclusions, and, while genotypically the same, phenotypically it has undergone a few minor changes. The polar flagellae previously dark in color are now slightly schistaceous and this race as a whole is sensitive to the environment but is extremely vigorous, and the parent culture from which all of the Phytobrickhaus biotypes have developed.

Around 1917 a new strain was isolated from a saltation of the Stakman culture, characterized by its globoid, patulose or torose outline. This race designated Melander remains the same and is confined exclusively to Barberry.

Another early isolate, biotype Christensen var. JJ, a Danish race occurring on flax, although growing well in culture, appears to have lost some of its virulence and is distinguished from other biotypes by its smooth, ovoid spore with two polar flagellae, one of which appears to be about to absciss.

For a number of years the genus Phytobrickhaus has been recognized as heterothallic, with the notable exception of the Moore biotype which is noteworthy for its ability to grow readily on all types of equipment, glassware and chemicals rendering them useless. Recently a compatible strain for this biotype was discovered, differing from the - strain in its light buff to fawn color and tenellous morphology, thereby establishing beyond doubt the fact that this genus is truly heterothallic.

The Eide race, one of the most physiologically unstable strains in culture and distinguishable by its well developed penicillate paraphyses with a wide host range, has recently been found on the potato, and in common with the Tolaas race is peculiar in that it emits at indefinite periods throughout its diurnal cycle, sweet, seductive, moschate odors closely analagous to fumes of Nicotiana tabacum (var: revelation, life or bowl of roses).

The Tervet race indigenous to Scotland but well suited to the North American Continent, frequently occurring as a contaminant in classrooms, is characterized by the fact that the perfect stage as yet has only been reported when the bug is growing in its native soil. Numerous biotypes are constantly arising from Stakman strains of P. tremuloides but in their present immature stage must be classified as "soredes" and can not be described accurately at this time.

In conclusion it must be said that the genus Phytobrickhaus constitutes one of the most interesting of our phytopathogenic fungi fully justifying the high position it has earned in the Neogaen flora.

* 22 TOTTERING TOWERITES *
* AT COLUMBUS *
* HAVE YOU MADE YOUR *
* RESERVATION? *

VISITORS

COONS, G. H., Division of Sugar Plant Investigations, Bureau of Plant Industry, Washington, D. C.

BRIGGS, F. N., Division of Agronomy, Agricultural Experiment Station, Berkeley, California.

DYKSTRA, T. P., Division of Fruit and Vegetable Crops and Diseases, U. S. Horticultural Station, Beltsville, Maryland.

FLOR, H. H., Agricultural College, Fargo, North Dakota.

HELGESON, E. A., State College, Fargo, North Dakota.

KAUFERT, Frank, Pest Control Research Division, DuPont Experiment Station, Wilmington, Delaware.

LEFEBVRE, Camille, Arlington Farms, Rosslyn, Virginia.

NEBEL, B. R., Division of Pomology, N. Y. State Agricultural Experiment Station, Geneva, New York.

POPHAM, W. L., Division of Plant Disease Control, Bureau of Entomology and Plant Quarantine, Washington, D. C.

WEISS, Freeman, U. S. Horticultural Station, Beltsville, Maryland.

PUBLIC SERVICE

Rolland Lorenz recently spent several days at Cloquet, Minn. investigating diseases of Birch trees in cooperation with the Berst Forester Dicksfield Co. Dale Chapman finds that hunting deer in British Columbia on horseback is great sport.

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R. C. Rose reports that a Santa Claus Club at Red Wing, Minn. has been manufacturing the famous Moore Seed Treater. Work is done in the church basement, price is \$5.00 and the proceeds swell the community chest.

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Dr. Stakman and Dr. J. J. Christensen as well as Dr. Harold Flor (USDA, Fargo, N. D.) were active at the meetings of the Flax Institute of the United States at the Nicollet Hotel October 13th, 1939. Dr. Christensen spoke on the "Progress and Problems in the Development of Control of Flax Diseases." Dr. Stakman and Dr. Christensen were appointed to the Committee of Scientific Advisors for Coordination of Research of the Flax Institute. Dr. Stakman also traveled to Brookings, S. D. to speak at the Farm and Home Week Banquet and also to Ft. Collins, Colorado, Nov. 8th where he addressed the Colorado-Wyoming Academy of Science on "Variation of Plant Pathogenic Fungi".

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A. G. Tolaas attended the St. Louis County Potato Show and the Little Fork Potato Festival the middle of October. He reports that Late Blight in Koochiching County has reduced the yield to 25% of the normal output and that it is severe throughout much of the northern part of the State. Rains during September prevented spraying and contributed largely to the extent of the epidemic. He was accompanied by Mr. Rose while at the St. Louis County meeting.

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During October Dr. L. W. Melander represented the Bureau of Entomology and Plant Quarantine in a group from the Department of Agriculture. They made a three day "Land Use Planning Tour" of Minnesota inspecting resettlement projects. Dr. Melander also has been appointed Chairman of the Program Committee of the U. S. D. A. Club of the Twin Cities. The organization coordinates the local business and professional activities of the members of the various bureaus of the Department of Agriculture.

SIGNS AND SYMPTOMS

Dorothy Ann Johnson, blonde Swede secretary, has a ring with a large diamond "Strongly indicating" that she is engaged. She wouldn't tell us the name of the fortunate man, but says he is a Swede and definitely not a plant pathologist.

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During the last ten days of October notes on the bulletin board, personal exhortations, etc. to get abstracts, reminded ambitious young scientists that the Xmas meetings were not far off and that if they craved to perform in public, abstracts must be in before November 1. Typewriters clattered, extraordinary sessions of the editorial committee were held, and finally a respectable number of abstracts were duly shipped to the secretary.

Numerous other signs indicate that the meetings will be well attended. T. H. King took over E. L. LeClerg's job of unofficial representative for the railroads, and has announced that enough passengers have signed up from this region to assure low round-trip fares. King, who is also the last word in sartorial elegance, looks very much the part of a railroad executive.

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Here is just an indication that Dr. Stakman is still possessed of strong professorial characteristics (In case any Old-Timer wonders if he's weakening). The Chief started for Brookings, S. D. to make three speeches, taking Mrs. Stakman along. He got to New Ulm and found that he had forgotten his slides, had to phone Miss Hamilton to ship them.

* REMEMBER THERE'S A MINNESOTA *
* BANQUET AT COLUMBUS *
* WILL YOU BE THERE? *

MINNESOTA PERSONAL PARS.

"Man Mountain", after a successful prelim., made South in September for the Kentucky Experiment Station to begin duties as Assistant Agronomist. "Alex" (formerly piloted by Gemell) rose to the occasion and carried a valuable bouquet of bottled roses that Chilton had sent.

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F. S. Thatcher has joined forces with Towerites having been awarded a fellowship from the Royal Society of Canada. He is a MacDonal College graduate in pathology and physiology. Received his Ph. D. for studies on permeability and Osmotic pressure in relation to parasitism. He hopes to continue working on the nature of rust resistance and considers Minnesota the place to do it.

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R. C. Lorenz is back with us for the fall quarter. A knowledge of forest pathology helps tremendously during the duck season and when the birds are not flying, Rollo plans to do a little course work. He can still get 'em at sixty yards.

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M. F. Kernkamp is teaching "Conservation of National Resources" in General College, also Botany in the School of Agriculture. "Kerny" continues to extend the boundaries of knowledge of the corn smut organism.

-o-

D. J. deZeeuw and his wife visited their folks at Michigan during the latter weeks of August.

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Dorothy Blaisdell, previously here in 1938 (winter), has returned after being at Beltsville Horticultural Station. Her presence on the Mezzanine floor has made it imperative that the standard of funny stories improve. Like Stakman, Dorothy has been disappointed with the standard of Minnesota football.

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The Big Chief has had many demands to be met lately. Attended Third International Congress of Microbiology, and gave a couple of papers. He was out in the desert areas of the west and performed as guest speaker at the banquet of the Colorado-Wyoming Academy of Sciences. It is rumored that unlike the speeches he gives in the T. T., this one lasted quite a while. Further information indicates that the subject matter was Variability in Plant Pathogens excluding those causing corn smut.

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E. F. Darley from Colorado State has come to help Forest Pathology along. He was formerly with the Forest Service as C. C. C. foreman.

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E. G. Sharvelle at Minnesota in 1932-34 has since been to Kew, Rothamsted and East Malling, England. He returned to this side of the Atlantic in 1936 to work on fruit production (commercial) and fruit diseases in Nova Scotia. From there he went to Cornell, thence to Geneva and finally to New Haven. Previously a flax man, Eric this time will be fruit pathologist in the division and says he's mighty glad to be back.

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John T. Presley, authority on any subject from cotton to palms, returned from Sacaton, Arizona, to occupy the Better 'Ole. John joins the noble band of bacterial ring rot investigators and is continuing with his work on sclerotia.

-o-

H. M. Darling has been in and out of the Tower since 1931. He gave us a great movie show on potato diseases in Alabama.

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W. J. Cherewick bolsters up the Canadian Unit after a sojourn in the Dominion Rust Lab. He will probably be here six months and when not arguing with rustologists on the most effective means of creating stem rust epidemics will study root rot of sweet clover.

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Tommy Graham and his wife have returned from their October trip to Iowa, Missouri, and Louisiana. Tom visited his folks in Louisiana and elsewhere. Says crops are good, the country prosperous, so he's working hard for his prelin.

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Mrs. F. Mode replaces Lillie Mattson in the Potato Seed Certification Office.

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C. I. Shen of China, after getting his Ph. D. at the Imperial College, London, has come to the Division for a period of twelve months. Shen has been working with Brown on Fusarium and doubtless will find Minnesota people know quite a bit about the genus also.

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Miss Louise Rohrs from the Nebraska Barberry Eradication Office replaces Mrs. Stewart, formerly of the Minnesota Office, and who is now endeavoring to eradicate "Spike".

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Loss of another stenographer imminent. Dorothy Ann Johnson's engagement was announced during October.

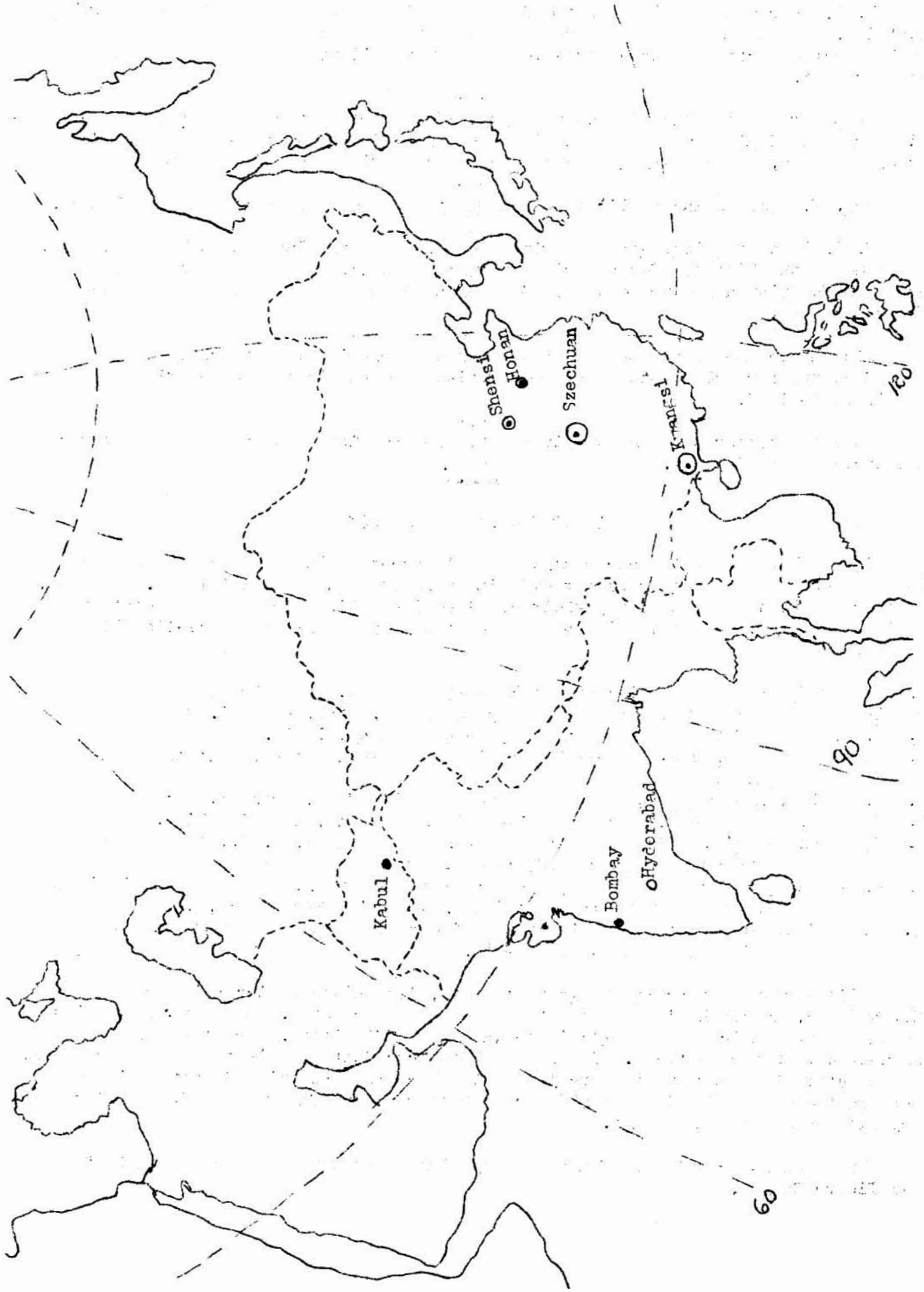
OLD TIMERS IN THE FAR EAST

Aurora hopes that the accompanying map is accurate but the war in China may have caused changes of address for Old Timers in the zone of hostilities. We hope, however, that, if this is true, their new locations will enable them to continue their researches. The following are the most recent addresses of Asiatic Old Timers.

1. Wilbur V. Harlan, c/o Ministry of Education, Kabul, Afghanistan.
2. Liang Hwang, Shatung, Linchow, Kwangsi Agr. Exp. Sta., Kwangsi, China.
3. M. N. Kamat, College of Agriculture, Poona, Bombay, India.
4. Lee Ling, The Szechwan Provincial Agriculture Improvement Institute, Chengtu, China.
5. T. C. Loh, Agr. Exp. Sta., Kwangsi, Sa Tong, Liu Chow, Kwangsi, China.
6. Chih Tu, Northwestern College of Agriculture, Wukung, Shensi, China.
7. Syed Vaheeduddin, Office of Director of Agriculture, H. E. H., the Nizam's Government, Hyderabad-Deccan, India.
8. C. S. Wang, Department of Plant Pathology and Agronomy, College of Agriculture, Provincial University of Honan, Chengping Huh, Honan, China.
9. C. T. Wei, Plant Pathology Division, University of Nanking, Chengtu, Szechuan, China (Add "please forward").

Bill Harlan is teaching Biology at Kabul, Afghanistan. According to Mr. and Mrs. Harlan he is enjoying the work and the country. Some of the stories we have heard indicate that Bill is having his difficulties. For instance the time he wanted to buy some tacks. It seemed that tacks just weren't to be had. However, at one store the clerk went searching in the back room and finally after digging through the debris found about 500 tacks which were carefully counted. Needless to say Bill made each tack count.

The present activities of Kamat, Ling, Wang, and others are reported in the Old Timers Column.



OLD TIMERS COLYUM

From Foreign Lands

In a letter to the Tottering Tower, Dr. LEE LING, of the Szechwan Agricultural Improvement Institute, Chengtu, China, intimates that the T. T. may not be so bad after all--at least the tottering is not caused by death-dealing missiles. LING states that Chengtu had been bombed three times shortly before he wrote. On a Sunday afternoon, LING was flat on the ground and watched a bomb falling about 30 yards away. Despite the bombing and almost impossible conditions for research, LING managed to send two articles for Phytopathology. Wheat and barley seed sent to him from this country was on the way just about a year. AURORA hopes that the bombs will be fewer in number and in future will fall farther away from the research institute.

According to LING, Dr. CHIH TU has been appointed Dean of the College of Agriculture of the University of Sinkiang. Congratulations, DEAN!

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From Dr. L. HWANG comes word that he and Dr. LOH are trying to develop plant-disease work in Kwangsi Province, China, by training college graduates to work under their supervision in various branch agricultural stations in the province. Both HWANG and LOH send their best regards to AURORA and the Tottering Tower.

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The spirit of cooperation apparently prevails in the University of Nanking, now located at Chengtu, China. According to C. T. WEI, he and LEE LING are cooperating in teaching a course in Principles of Plant Disease Control. WEI states that one of the most difficult things, aside from trying to keep alive, is to obtain chemicals and ordinary equipment. An order placed in the spring of 1937 had not yet been delivered on October 4, 1939. WEI also sends his regards to all the inhabitants of the T. T.

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Dr. C. S. WANG is still at the College of Agriculture, Honan University, China, but the University has moved to Tarn-Tour, Sung-Hsian. WANG states that they moved by foot and spent about five weeks moving to the hill country where nobody, even intrepid scientists, had been before. WANG was incapacitated from February to June because of an ailing eye, but he is still interested in the identification of certain fungi and is again working hard.

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Dr. ALAN GEMMELL is still at the West of Scotland Agricultural College but is not sure what work he will be called upon to do under present conditions.

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Dr. J. H. WESTERN, advisor in Mycology and Agricultural Botany at the University of Manchester, England, says that he hopes the U-boats will not torpedo any AURORAS. AURORA expresses the same hope, and also the hope that explosives soon will be used for peaceful purposes only.

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Dr. LARRY TYNER sends his best regards from the laboratory of Plant Pathology, Edmonton, Canada. It is not yet clear, according to Tyner, just how the European war will affect research work in Canada, although the cost of living apparently is going up, the price of coffee having increased about 15 cents a pound. It is suggested that the various chefs in the T. T. make coffee a little weaker.

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"The reprints should be addressed as follows: The Chief Biologist, Department of Agriculture, Box 36A, G.P.O., Sydney, N.S.W., Australia." This statement was the telial stage of a letter from the Department of Agriculture of New South Wales, Australia. Ordinarily it would be only an ordinary telial stage; however, the Chief Biologist is none other than DR. R. J. NOBLE, who has had the adjective Chief prefixed to the former title Biologist. Maybe a rose by any other name would smell as sweet, but when there is a change in designation there is likely to be a change in perfume also. The Eds are provoked to wonder whether the perfume of the Blue Room still lingers on the person of the Chief Biologist. Shadows of R. J. N.,

JIMMY SEAL, CHARLIE HURSH, and his mongrel pup still flit around the corners after all these years; and after all these years who knows whether the pup was pedigreed and worth \$125 or whether he just came into the world by accident. It's a safe bet that Hursh himself didn't know.

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Dr. W. L. WATERHOUSE, who occupied a desk in Q. C. F. long, long ago, is still working enthusiastically and effectively on the rust problem in Australia. Judging from the new and interesting results, nature has not settled down into an inept old age even in so distant a part of the world as Australia.

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The McINDOE family continues to thrive (all three), according to Dr. K. G. McIndoe, the intrepid leopard hunter and scientist of the Firestone Plantations Co. in Liberia. McIndoe asks to be remembered to all of his old friends.

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A recent letter from M. M. KAMAT, Assistant Mycologist, College of Agriculture, Poona, India, indicates that KAMAT is soon to have the use of a micro-manipulator and we may expect soon to see the results of sporidia and other small propagative parts of fungi doing their acts on the flying trapeze. KAMAT states that he misses the T. T. every time he thinks of it, and he says that he is doing some research, some extension work, and a certain amount of teaching. Apparently the experiment stations of the United States are not the only ones where multiple-ring circuses are run.

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In far-off South America ex-Minnesotans get together also: Recently Ing. VALLEGA, on his homeward trip to Argentina, conferred with Dr. G. GARCIA-RADA at LaMolina, Peru, regarding (1) rust problems and (2) the Tottering Tower. Dr. Garcia-Rada writes that they found both topics interesting!

Dr. and Mrs. VALLEGA have since arrived in Buenos Aires and are again at home, where there is good beef and many other good things. Vallega says, however, that they have not forgotten Minnesota, the T. T., and the many friends in Minnesota. Salud y Pesetas!!

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"Best regards and ALOHA to the gang!" from Chuck WISMER in Honolulu. Earle ANDERSON also sent a letter from Honolulu, which he stated was not to be a Seminar letter nor an AURORA letter. While ANDERSON shows commendable scientific caution in not committing himself too definitely regarding conditions in Hawaii, he does say that the climate and general environment please him and Mrs. Anderson very much.

Amid the profusion of flowers, underneath the blue skies, and among the balmy breezes, there occasionally lurk poisons, even in idyllic Hawaii. WISMER states that he contracted mango poisoning. How does a person get it, or give it? Statements heard recently indicate that somebody would like to send mangoes to somebody else. What's the dope?

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From the Southland

At some tobacco meetings in Greenville, South Carolina, W. D. VALLEAU, Clyde ALLISON and Huey BORDERS held an impromptu Minnesota meeting and sang a few songs-- according to Huey. After having completed a little tour around the T. T., Ye Ed opines that such a reunion at a tobacco meeting seems quite appropriate, assuming always that the tobacco is good. HUEY sends best personal regards to every one in the T. T. and expresses the fervent hope that the graduate students are not too aggravating. Parenthetically, he says, "God knows they must be bad enough at best."

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According to Dr. LeCLERG, the Louisiana State University football team traveled to Wooster, Mass., by air and surprised everybody, including themselves, by beating

Holy Cross at football. Maybe there is some value in soaring above the earth occasionally. The Minnesota team has gone up in the air occasionally also, but they don't seem to have brought enough footballs down with them. LeCLERG says that he misses the Seminars in the T. T. (Will the present inhabitants of the T. T. please take note?)

Evidently LeCLERG is not far away from home, for at a botany picnic he met FORBES, PERSON, LENZ, KREITLOF, LET ALLISON and his wife, and LeCLERG'S own wife and son Bob. Just to keep in the Minnesota atmosphere, LeCLERG drove to Washington and then to Arcostook County, Me., where he dug potatoes, and hobnobbed with REINER BONDE, who hasn't written us for quite a while.

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Also from Louisiana came news of Lew ALLISON, the expert on dew, peas, winds, including Chinooks, lams, and Yegen and Hesper. ALLISON states that there have not been any extremely heavy dews in Louisiana, and he is not too enthusiastic about the pipe tobacco, even in a tobacco country. Judging from the statement of his activities, the absence of good tobacco will hardly be felt. Maybe the tobacco gets too dry in a region where the dews are not so heavy as they are on the semi-arid plains.

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NICK PONOMAREFF is plant pathologist for the Southwest Nursery at Tucson, Arizona, and, according to Mick, the business is doing very well, as the people are greeting their efforts as if it were "an answer to a maiden's prayer." NICK says it seems too good to be true, but either with design or by mistake they managed to satisfy customers by reviving plants in gardens and now a lot of people are demanding their services. "Demand = economic want + purchasing power." In an experiment station, demand = want and want-it-quick.

Milton PETTY paid NICK a visit. Lastly but not leastly, NICK expresses the hope that the T. T. still tolerates the "friendly discussions of national and international affairs." He sends his best regards to everybody.

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From the Midlands (extending from Delaware to California)

North Dakota is a place where body and soul have room to expand, according to Bob ATKINSON, who is now teaching at the North Dakota A. C. This corroborates statements by Clyde Christensen, Eide, King, and other eminent North Dakotans, who seem to find it necessary to boost their fatherland occasionally. Now if Bob will only tell some of these native sons where the Couteau du Missouri is, maybe they will accept their own State without argument.

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St. John P. CHILTON writes from State College, Pa., that he is still plugging along and still has a lot to do.

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Forage Crops and Diseases are the most important things in the botanical world to Howard W. JOHNSON, who is devoting his time in the U. S. D. A. to diseases of the "herbages."

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From Michigan State College comes word from Axel L. ANDERSON that he is "enjoying his work immensely." He neglects to mention visits from any inhabitants of the Tottering Tower.

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Bob CASSELL discovered in AURORA that he was promoted to an Assistant Professorship in the Southern Illinois Normal University at Carbondale, Ill. In a recent letter, Bob admits his new status. Another scoop for AURORA!

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Old Timer FRANK KAUFERT spent an hour or two in the T. T. recently on his way to and from Wilmington, Delaware.

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Clyde ALLISON writes that it was necessary for him to go into hiding a week before the Ohio State-Minnesota football game and three weeks afterwards. Cheer up, Clyde, "we wuz robbed," but Ohio State didn't rob us; we just played them on the wrong day, at the wrong place, and with the wrong team!

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In the mailbag was received an anonymous communication, postmarked Ithaca, N. Y., with the following scurrilous remarks on the outside of the envelope:

Ohio State	23	Cornell	23
Minnesota	20	Ohio State	14

"Mind over matter?"

Who put poison in our Bowl? The referee--a former Cornellian, now a Machiavellian. The Golden Gophers are Great, but, in all seriousness, should a group of STUDENTS be expected to play the combined forces of CORNELL and OHIO STATE on the same gridiron, on the same day, and within the same 60 minutes? Bring 'em on one at a time and we'll learn 'em which end of the stadium to run to! They always ran the wrong way in the last game!

One of the greatest problems in American education today is to purify athletics, to purge our hearts of overweening desire to win. IT IS MORE BLESSED TO GIVE THAN TO RECEIVE. As is often the case, Minnesota is in the forefront of educational reform; we not only PREACH the new educational doctrine in athletics; we PRACTICE it. WE GIVE games away and let the SOULS of the RECIPIENTS TARNISH!
