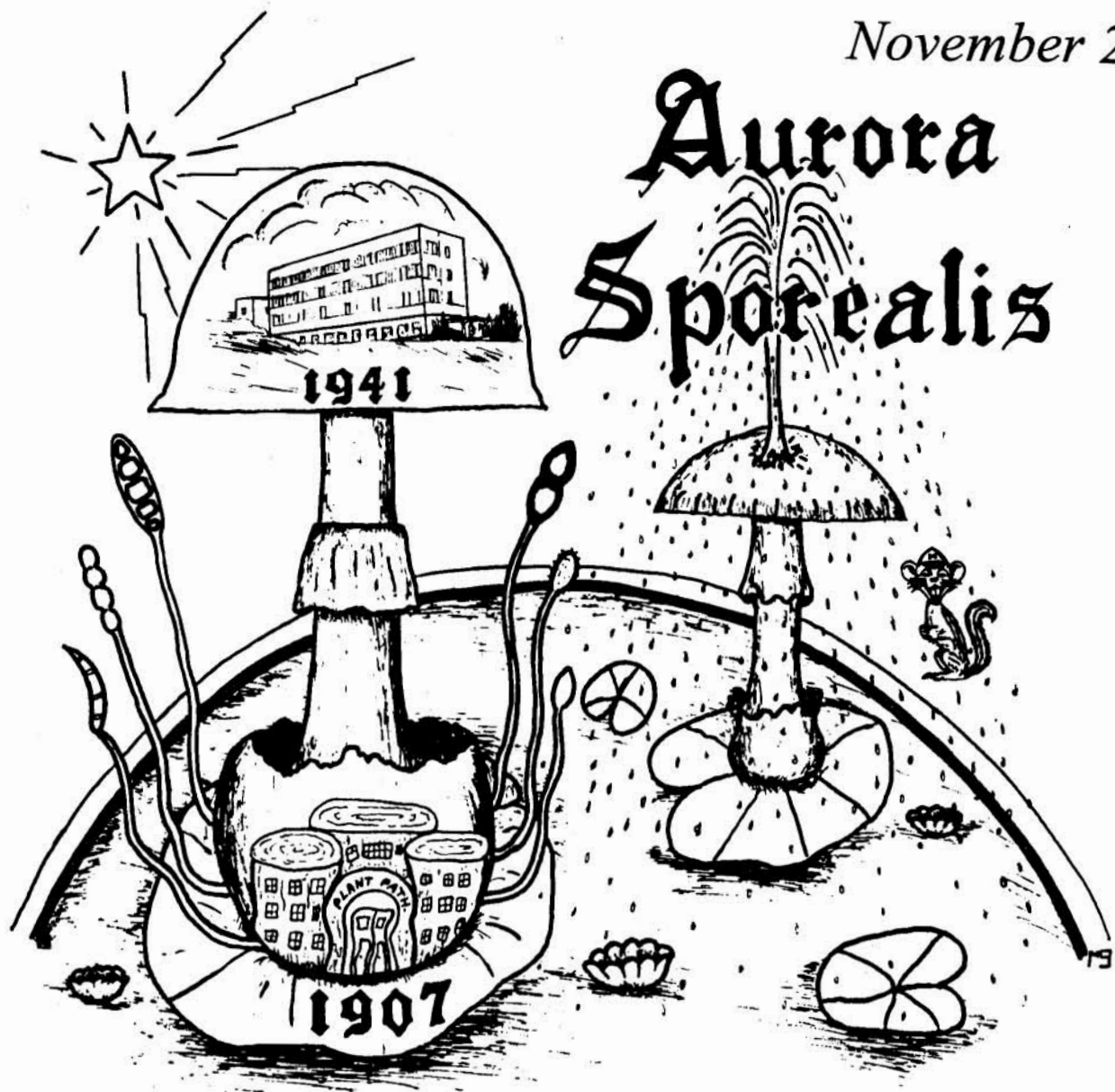


November 2001



1907-2001

Wherein are recorded the recollections, the ruminations and the raspitations 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 run dry
Let the spout squirt and never lose power

AURORA SPOREALIS

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The *Aurora Sporealis* is the alumni news magazine of the Department of Plant Pathology. First published in 1924, it is the oldest, consecutive departmental news magazine in the history of the University of Minnesota.

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Aurora Sporealis is mailed annually to former and current faculty, staff, graduate students and old timers who worked in the Department of Plant Pathology. Items for the next volume can be sent to:

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If you would like you receive your *Aurora Sporealis* in an electronic version in the future, please e-mail Debbie Baden Drange at debbd@umn.edu to be placed on the listserve.

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Front Page

History of *Aurora Sporealis*

By Thor Kommedahl

The first issue of Aurora Sporealis was printed (mimeographed) on August 1, 1924, and the message that appeared on that first page was continued until May 1978. A graduate student Ta Ching Loh (PhD, 1933) designed a cover that you see reproduced for this issue and which appeared first on the January-February 1933 issue. *Aurora Sporealis* was published 6 times a year in those days. The Seminar Committee that handled *Aurora Sporealis* then consisted of Helen Hart, H. A. Rodenhiser, and A. W. Henry (chair). During these times the department was housed in the old Agricultural Botany Building, referred to affectionately as *The Tottering Tower* (it was subject to vibrations because the building was set on shifting sand and clay soil--there was even a crack in the southwest corner of the building that widened over time). In the January-February 1943 issue, the cover was redrawn to show both the old and the new building (now known as Stakman Hall) but the artist was not named. Because of the new building, scientific names were coined for the buildings: *Phytobrickhaus tremuloides* for the Tottering Tower and *Phytobrickhaus concretus* var. *erectus* for the new building (*Aurora Sporealis* 17[4]:July-August,

1941); it was later referred to simply as *P. erectus*. In 1950 (January-March issue), graduate student Malcolm Shurtleff (PhD 1953) redrew the cover to make it neater and he added the "gopher". This drawing continued to be

used until May 1978. After that, each issue had a different cover design to reflect a theme or emphasis of that particular issue.

MESSAGE FROM THE HEAD

Dear Friends of the Department:

Greetings from Minnesota!! The state legislative session for FY 2002 recently completed its business, and in my opinion, this session could be considered one of the most difficult in the history of the state. Strong differences in opinion among and between members of the Senate and the House and the Governor on what to do with the state surplus with regard to spending and/or property tax relief sparked a debate and standoff that sent the process into not only a special session, but nearly a government shut down before a compromise was reached just prior to the midnight deadline on July 15. Well, throughout all of this, how did the legislative decisions impact the University's funding requests? The university received about 45% of its request, which will result in major budgetary challenges over the next fiscal year and beyond. President Yudof presented a plan to cover this shortfall in the following manner: a) 33% will come from legislative allocations, b) 33% from increases in undergraduate and graduate tuition and c) 33% through internal reallocation that includes a tax that is to be paid by colleges and departments therein. Thus, we are currently in the midst of significant budgetary challenges; immediate and into the future. The department certainly felt the sting as the reallocation decision trickled down from central to the college and from the college to the department. The good news is that there was salary increase for faculty, staff and students.

General state support for university programs over the last 20 years reveals a pattern of steady decline. This is not unique to the University of Minnesota, but rather, unfortunately, is the reality facing the majority of major public universities throughout the U.S. Certainly, this trend will require universities to rethink on how they conduct their business. From a departmental standpoint, it will require us to make some difficult choices, but it's also an opportunity for us to redirect programs and funding and to rethink our priorities. State support is critical to department functions, and shortfalls impact our teaching, research and extension programs and for that matter, all functions and programs of the university. However, in times of adversity, we remain committed to excellence *within our priorities of research, teaching and extension.*

Now, let me move on to a more pleasant topic. The

college has been engaged in a prioritization process to define ways to best use the College's resources to serve the needs of the citizens of Minnesota, and to develop guidelines for effective assignment and allocation of the College's human, financial and physical resources. The planning for this process emerged as a grassroots effort among department heads and faculty members. Comments and advice from students, staff members of the College, and citizens across the state have been incorporated into the priority themes to help develop a vision for the future. Five broad priorities include: **1) Promoting Safe and Healthy Foods, 2) Improving Environmental Quality, 3) Serving Urban Communities, 4) Revitalizing Minnesota's Rural Communities 5) Enhancing Agricultural Production Systems**, describe the future direction of the College. More importantly, these five priorities are connected by an over-arching commitment to education—**Emphasizing Exemplary Education** that has been identified by faculty members, students, staff members and citizens as the premier goal for the College. We are now in the process of requesting faculty groups to develop and submit 1 to 3 creative initiatives linked to each of the 5 priorities. Out of this process, at least one initiative from each priority will be selected for funding. The College will provide "seed money" to initiate the projects. Slowly, the College effort will begin to reflect the direction and vision of the 5 priorities with **Emphasizing Exemplary Education** as the corner stone. As you can see, each department within the college will provide significant contributions to each of the priority themes. Also, the broad priorities will facilitate and foster collaborative efforts with other colleges including the medical school. I will keep you informed as we move along the road of change with the priorities as our guide into the future.

Departmental News: Several new faculty have joined the department this past year. First, **Dr. Janna Beckerman**, Extension Educator/Assistant Professor, assumed her new responsibilities in the Yard & Garden Line January 22, 2001. Filling this position brings a full compliment to the Yard & Garden Line group and includes a plant pathologist, horticulturist, and entomologist. Janna's primary focus is to provide education and support for Extension Educators, Master Gardeners and the public concerned about urban plant care. Additionally, Janna will maintain and expand a web-driven disease diagnostic and

control database for public access. Secondly, **Dr. Sally Stetina** began her tenure track position as Assistant Professor with 75% teaching and 25% research located at the University of Minnesota's Southwest Research & Outreach Center, Lamberton. Sally's tenure is in the department. Sally joins a team of three other plant and soil scientists providing instruction for degree programs offered by our college at the University of Minnesota in an institutional partnership with Southwest State University, a regional liberal arts institution in Marshall, Minnesota. For the research component of her position, Sally has chosen to direct her research efforts on soybean disease management with particular focus on soybean cyst nematode. **Dr. Sue Cohen**—joined the department April 23, 2001 and is employed by APHIS. The department and APHIS has entered into an agreement that will facilitate Sue spending 9 months at the University of Minnesota working on the following a) implementation of the on-line international workshop on risks of exotic pests and impact with global trade b) evaluation of risk management approaches for forest diseases, c) develop a pest risk assessment for *Phytophthora* canker and e) integration of geospatial analysis into pest risk assessment and risk management approaches. Sue's expertise brings a new dimension to the departmental activities and will support and enhance existing teaching, research and outreach programs within the department.

Dr. Jeff Miller, Assistant Professor and potato pathologist, resigned his position in the department in January 2001 and accepted a position at the University of Idaho at the Aberdeen Experiment Station, Aberdeen Idaho. I refer you to the Departures section of the Aurora for additional details regarding Jeff's decision. We were sorry to see Jeff leave but also understand his decision to seek this opportunity at the University of Idaho. Fortunately, we were successful in convincing the Dean of the importance of this position and we are currently searching for a person to continue to research potato diseases but with a different slant. The responsibilities of the person in the newly described position is integrating genetic host plant resistance with alternative management methods to minimize losses to major potato diseases using molecular and classical methods. We plan to fill the position by mid-year 2002.

Scholarly activities by the faculty have resulted in another banner year of research reporting. The following is a summary of our publications: one book, 12 book chapters, 50 refereed articles, 52 abstracts, 28 extension articles and 2 patents. Faculty success at securing external grant funds to support their research has been outstanding. Our outreach/extension and teaching programs remain strong as well. Most faculty have at some point, taken advantage

of various teaching improvement workshops sponsored by either the University of Minnesota or other organizations. Involvement of faculty in these activities contributes to the excellence of our teaching efforts.

The graduate students are embarking on sponsoring and planning another symposium for spring of 2002. Last year's symposium, **Genomics and Bioinformatics in Plant Pathology**, was a resounding success. Invited speakers regarded as leaders in this area came from far and wide to participate in the event. As in past years, the students are totally responsible for planning, organizing and seeking funds to support the symposium. The students feel that this is an excellent experience and that they look forward to the challenge each year. The theme for the 2002 symposium is **New Approaches to Plant Disease and Pest Management: Alternatives to Pesticides**.

The extended cool wet spring followed by hot and dry weather conditions has resulted in an excellent growing season with diseases of little consequence on most major crops. For example, potato late blight has not been found in the state, losses in wheat and barley due to *Fusarium* Head Blight are minimal, and other than the usual diseases on soybean, e.g. SCN, *phytophthora* etc. yet no severe outbreaks have occurred. However, the cool wet spring did result in significant seed rot and in some cases, seedling and/or root rot thus affecting stands especially in pea, snap and dry bean, soybean and sugarbeet.

In this issue of the Aurora, please note that nomination forms for the E.C. Stakman Award are enclosed. I request that you give serious consideration to nominating individuals of any country and nationality for outstanding achievements in plant pathology. The award may be given for documented achievements in the areas of research, teaching, outreach, international development, or for any combination of these areas. This year's recipient of the E.C. Stakman Award is Dr. James E. DeVay at the UC Davis. Jim will be on campus October 17 to visit with students and faculty and to receive the award followed by a seminar.

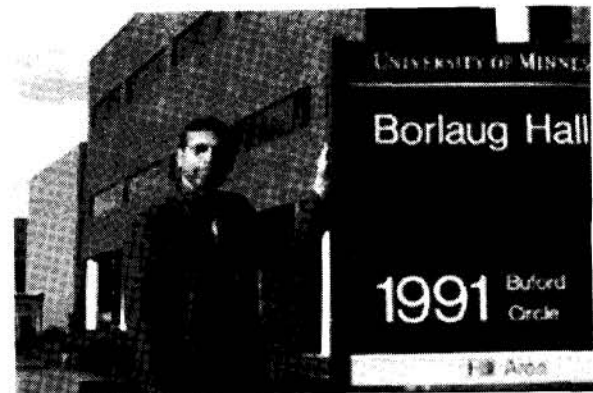
With the recent hires of young new faculty, I thought for sure that this would be our year (faculty that is) to win the annual E.C. Stakman faculty/staff vs. graduate student softball game. I attributed our losses in previous years to the fact that we had difficulty running (which was true), but I learned that some (most) of us have another limitation---we can't hit! Thus, the student reigned again by humiliating us by the score of 22 to 5. Just wait until next year.

The University of Minnesota is in the midst of a capital campaign. Many of you have received mailings from me providing you with an update of our current endowments and a summary of the university campaign. One of our goals is to achieve the \$25,000 in the E.C. Stakman Plant Pathology Graduate Student Fellowship Endowment. We are close as we now have \$18,900 in this endowment. Once we reach \$25,000 level the university will match the interest earned from this endowment with the earnings coming to the department for graduate student support. Please see the letter from Norman Borlaug for further details. It is gratifying that many of you have contributed to this endowment as well as other departmental endowments. For this I am truly grateful. It's clear that you care deeply for this department. Your financial and moral support provides the foundation to assist us to maintain and improve the quality of our programs. The decline in state funding brings to mind even more the importance of our endowments in caring out our departmental programs.

If your travels, business or pleasure, bring you into the Twin-Cities please include a visit to the department in your plans. You're always welcome.

I want to thank Dr. Nevin Young, the editor of this year's *Aurora* and to all involved in the development and production of this annual departmental newsletter that we share with alumni and friends.

Frank L. Pfleger

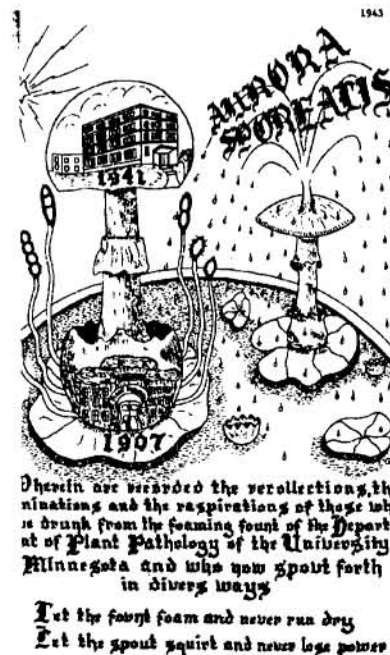


PAST AURORA COVERS

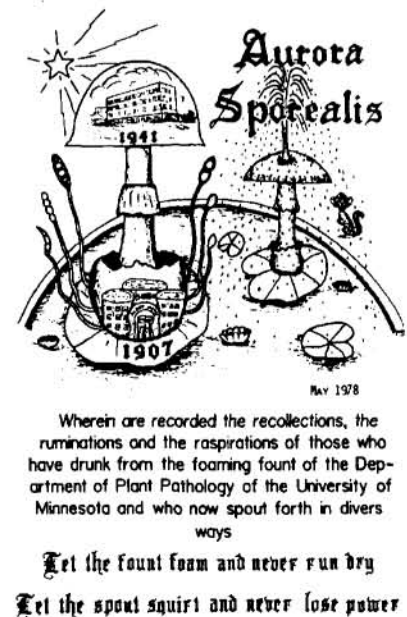
1933



1943



1978



November 1, 2000

Dear Colleague:

I'd like to take this opportunity to address you, my fellow alumni and friends of the Department of Plant Pathology at the University of Minnesota. While many things have changed since my graduate days (MS '41 PhD '42), there is one constant—the worldwide need for education and training in plant pathology. Through education, training, and research we have hope of feeding the world.

Plant pathologists are among the most broadly educated and versatile scientists in agriculture. We play a pivotal role in the production of food and fiber for all societies. Simply put, we need to continue to educate and train plant pathologists for the challenges that face our planet in the 21st century.

We, and the entire world, have benefited from our education as plant pathologists at the University of Minnesota. Now the University of Minnesota is in a position to help us help them ensure opportunities for education and training of future plant pathologists.

The University of Minnesota has encouraged us, through the 21st Century Graduate Fellowship Endowment program, to establish the E.C. Stakman Plant Pathology Graduate Fellowship Fund because, at this time, the impact of our gifts will be doubled. Our goal is \$250,000.

Some of you may have the where-with-all to establish your own named fund at \$25,000. That's great, and I certainly encourage you to consider this. Others may make any size gift to the E.C. Stakman Plant Pathology Fellowship Fund as their pocketbooks and estates permit.

Please consider making a gift to the E.C. Stakman Fellowship. Your gift now will double its impact through the 21st Century Graduate Fellowship Endowment Program and create a legacy for future plant pathologists.

Sincerely,



Norman E. Borlaug
Nobel Peace Prize Laureate

CALL FOR NOMINATIONS:

E.C. STAKMAN AWARD

The Department of Plant Pathology at the University of Minnesota is requesting nominations for the E.C. Stakman Award. The award is granted to individuals of any country and nationality for outstanding achievements in plant pathology. The award may be given for documented achievements in the areas of research, teaching, outreach, international development, or for any combination of these areas. Preference will be given to candidates actively engaged in these areas; only occasionally will lifetime achievement awards be considered. Nominations must include a brief biographical sketch of the nominee and received by February 15, 2000. Please send your nominations to the following address, or fax them to 612-625-9728 or E-mail them to plpa@puccini.crl.umn.edu. Dr. Benham Lockhart, Department of Plant Pathology, University of Minnesota, 495 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108-6030 USA.

STAKMAN AWARD RECIPIENTS

- Dr. W.L. Waterhouse, Professor, University of Sydney, Australia, 1956
- Dr. H.A. Rodenhizer, USDA, Washington, DC, (formerly Deputy Administrator for Farm Research), 1957
- Dr. T. Johnson, Head, Canadian Rust Research Laboratory, Winnipeg, 1958
- Dr. J.J. Christensen, Head, Department of Plant Pathology, University of Minnesota, 1959
- Mr. Jose Vallega, Argentina Department of Agriculture, FAO in Rome, 1960
- Dr. Norman E. Borlaug, renown wheat breeder and plant pathologist with the Rockefeller Foundation's agricultural improvement program in Mexico, 1961
- Dr. Helen Hart, Professor, Department of Plant Pathology, University of Minnesota, 1963
- Dr. J.H. Craigie, former Head, Canadian Rust Research Laboratory, Winnipeg, 1964
- Dr. J.A. Rupert, in charge of the Rockefeller Foundation's agricultural improvement program in Chile, 1965
- Dr. I.A. Watson, Dean, College of Agriculture, Sydney University, Australia, 1966
- Dr. H.H. Flor, Research Plant Pathologist, USDA, Fargo, North Dakota, 1967
- Sir Frederick C. Bawden, Director, Rothamsted Experimental Station, Harpenden, Herts, England, 1968
- Dr. Donald G. Fletcher, former Executive Vice-President, Crop Quality Council, Minneapolis, Minnesota, 1968
- Dr. George J. Harrar, President, Rockefeller Foundation, 1969
- Dr. H. Asuyama, Department of Plant Pathology, University of Tokyo, 1971
- Dr. C.S. Holton, Department of Plant Pathology, Washington State University, Pullman, 1971
- Dr. J.C. Walker, Professor Emeritus, Department of Plant Pathology, University of Wisconsin, Madison, 1972
- Dr. D.L. Bailey, Professor Emeritus, Department of Botany, University of Toronto, Canada, 1972
- Dr. C.M. Christensen, Regents Professor Emeritus, Department of Plant Pathology, University of Minnesota, 1981
- Dr. J.F. Fulkerson, Plant Pathologist and Microbiologist, USDA, Washington, DC, 1982
- Dr. E.J. Wellhausen, Special Staff Member, The Rockefeller Foundation, Mexico, 1982
- Dr. J.E. VanderPlank, Plant Protection Research Institute, Pretoria, South Africa, 1985
- Dr. J.M. Daly, Department of Agricultural Biochemistry, University of Nebraska, Lincoln, 1986
- Dr. Arthur Kelman, Department of Plant Pathology, University of Wisconsin, 1987
- Dr. Theodor O. Diener, USDA, Plant Virology Lab, Agricultural Research Center, Beltsville, Maryland, 1988
- Dr. R. James Cook, USDA, Regional Cereal Disease Research Lab, Washington State University, Pullman, 1989
- Dr. Thor Kommedahl, Department of Plant Pathology, University of Minnesota, 1990
- Dr. Allen Kerr, Department of Crop Protection, The University of Adelaide, South Australia, 1991
- Dr. Luis Sequeira, Departments of Bacteriology and Plant Pathology, University of Wisconsin, 1992
- Dr. Sanjaya Rajaram, Germplasm Improvement Subprogram International Maize and Wheat Improvement Center, CIMMYT, Mexico, 1993
- Dr. Malcolm C. Shurtleff, Professor Emeritus, University of Illinois, and Adjunct Professor, Texas A&M University, 1999
- Dr. William R. Bushnell, Professor, Cereal Disease Laboratory, University of Minnesota, 2000

E.C. STAKMAN NOMINATION FORM

Nominee: _____ **Date:** _____

Address: _____

Phone: (Business) _____ **(Home)** _____

Educational background:

Employment background:

Significant honors and awards:

Please provide rationale and documentation to explain why you believe this person is deserving of the E.C. Stakman Award:

Nominator name: _____

ALUMNI SPEAK

Alumni Speak is a column devoted to news and views from alumni. We are interested in what *you* are doing! All alumni are invited to drop us a line by regular mail (see enclosed envelope) or by E-mail (alumnis-plpa@puccini.crl.umn.edu). We are particularly interested in news from the alumni who graduated during the following decades. Send us your news and photos, tell us what you are doing, give advice to today's students or share a favored reminiscence. We look forward to hearing from you!

YEAR & STUDENT	DEGREE/ADVISOR	YEAR & STUDENT	DEGREE/ADVISOR
2000		Annabell I-Pin Chang	Ph.D. Kommedahl
Pedro Figueroa	Ph.D. Roelfs	Young Sup Cho	Ph.D. Wilcoxson
Laszlo Gyenis	Ph.D. Anderson	Delfin B. Lapis	Ph.D. Calpuzos
Kun Xiao	M.S. Kinkel	Richardo M. Mont	M.S. Rowell
Julie Jenkins	M.S. Jones	Jon M. Prescott	Ph.D. Kernkamp
Consuelo Estevez de Jensen	Ph.D. Meronuck/Jones	Alan P. Roelfs	Ph.D. Rowell, Romig
Warren Kruger	Ph.D. Zeyen	Phillip J. Salisbury	Ph.D. Kommedahl, French
Silvia Penuela	Ph.D. Young	John W. Schwandt	M.S. Anderson
		David P. Swendsrud	M.S. Calpouzos
		Franklin H. Tainter	Ph.D. French
1990		Herman L. Warren	Ph.D. Kommedahl
Necmettin Bolat	M.S. Roelfs	William C. Woodruff	M.S-B Kernkamp, Wilcoxson
Grace Z. Bucher	M.S. French	Richard J. Zeyen	Ph.D. Banttari
Robert L. Hills	M.S. Kennedy		
German P. Hoyos	Ph.D. Anderson	1960	
Kosim Kardin	Ph.D. Groth	Arne S. Andersen	M.S. Rowell
Flavio A. Lazzari	Ph.D. Meronuck	Neil A. Anderson	Ph.D. French
Francisco Javier Placencia de a Parra	M.S. Mirocha	George A. Bean	M.S. Wilcoxson, J. Christensen
Beatriz Alida Perez	Ph.D. Roelfs	Bimala P. Charavarti	Ph.D. Hart
		Arthur M. Elliot	M.S. Hart
1980		Paul G. Gustafson	M.S.-B Unknown
Phillip H. Berger	M.S. Zeyen	William A. Haglund	Ph.D. King, Durbin
Barbara J. Christ	M.S. Groth	Thomas Kavanagh	Ph.D. J. Christensen Wilcoxson
Glenn R. Furnier	M.S. Anderson		
David W. Gardner	M.S. Krupa	Kenneth W. Knutson	Ph.D. Eide
Curtis B. Hill	M.S. Anderson	Charles W. Miller	M.S. Hart
Lois E.B. Johnson	Ph.D. Frosheiser/Wilcoxson	Jacobo Ortega	Ph.D. J.J. Christensen
Nilceu Ricetti Xavier De Nazareno	M.S. Roelfs	Donald Penner	M.S. Linck
Gregory C. Pratt	M.S. Krupa	Bobby L. Renfro	Ph.D. Kernkamp, Wilcoxson
Gusti Sarbini	Ph.D. Kommedahl	Richardo A. Rodriguez	Ph.D. Eide
Rachid Sayoud	M.S. Wilcoxson	Eric G. Schleder	M.S. Taylor, J. Christensen
Dale L. Smeltzer	M.S. French	Donald P. Taylor	Ph.D. J. J. Christensen
Susan Stade	M.S. Brambl	Myron E. Tumbleson	M.S. Kommedahl
Steven P. Swanson	M.S. Mirocha	Thomas D. Wyllie	Ph.D. J. Christensen, Taylor
Herman C. Wenzler	Ph.D. Brambl		
Katherine D. Widin	Ph.D. Kennedy	1950	
Carol E. Windels	Ph.D. Kommedahl	A. David Baskin	Ph.D. Stakman, Eide
		Julio Bird	M.S. Stakman, King
1970		Alfredo Campos	M.S. Stakman, Hart
Roderick R. Bevis	M.S. Rothman	John W. Gibler	M.S. Kernkamp

Phillip C. Hamm	Ph.D.	C.E. Steinbauer, Landon, Stakman, Harvy	Dudley A. Preston	M.S.	Stakman, R.V. Ellis
Lavanial Henderson	M.S.-B	Landon (?)	Ian White Tervet	Ph.D.	Stakman, J. Christensen
Yu-Tien Hsai	M.S.	J. Christensen, Stakman	John R. Vaughn	M.S.	Eide
Abrar M. Khan	Ph.D.	Stakman, Kernkamp	1930		
Shih-I Lu	M.S.	Stakman	Clyde C. Allison	M.S.	Stakman
Donald E. Munnecke	Ph.D.	Stakman	Clyde M. Christensen	M.S.	Stakman
Malcolm C. Shurtleff	M.S.	Stakman, Hart, Loegering	Lee Hines	M.S.	Stakman (?)
Martin T. Tveit	M.S.	Moore	Elia E. Johnson	Ph.D.	Leach
Chester A. Wismer	Ph.D.	J.P. Martin, Stakman, Hart, J.Christensen	E.M. Johnson	Ph.D.	Stakman(?), Leach(?)
			Thorvaldur Johnson	Ph.D.	Stakman
			Frank Henry Kaufert	M.S.	Stakman, Lachmund
			Leonard W. Melander	Ph.D.	Stakman
			Ralph M. Nelson	Ph.D.	Stakman
			Louis O. Regeimbal	Ph.D.	Harvey
1940			1920		
J. Lewis Allison	Ph.D.	Stakman (?)	Raymond Fogelman	M.S.	Stakman
Shan-Ming Chen	M.S.	Stakman, J. Christensen	G. F. Puttick	M.S.	Stakman(?)
William J. Cherewick	M.S.	Stakman, J. Christensen	1910		
Donald J. deZeeuw	M.S.	Stakman, Eide	Robert A. Jehle	M.S.	Freeman
Andrew R. Downie	M.S.	Stakman	Jane Nisbit	M.S.	Freeman
Milton A. Petty, Jr.	Ph.D.	Stakman	Elvin Charles Stakman	M.S.	Freeman

OLD TIMER NEWS

(Alumni Speak)

Rosalie Beer sends here regards to the Department. She lives in Seattle with her children, Emily (college) and Jake (Jr. High). She learned electron microscopy and virology working with Dr. Richard Zeyen as an undergraduate in 1972-1975; she majored in microbiology. For years Rosalie was involved with various west coast biotechnology firms and is now an administrator of Technology Transfer at Hutchinson Cancer Research Center in Seattle. There was great excitement at the "Hutch" in October when its President, Lee Hartwell was named a 2001 Nobel Laureate for his discovery of key regulators in the cell cycle.

Beverly Bergman (Secretary 1975) Thank you for sending the Aurora Sporealis and the news from Plant Pathology. I will send some of the information to Millie Fortner as I still stay in touch with her at Christmas-time. I still work at Hennepin County. I was going to retire in June, but fate took a turn in March prior to my birthday. Therefore, I made the decision to stay at my work until "the time is right". Although I do get tired and the work is demanding, I still enjoy certain aspects of what I do. For enjoyment we keep busy with Masonic Lodge gatherings, attending church at Mount Olivet and gardening. Our best wishes for a wonderful and prosperous New Year 2001.

Tom Kucharek (MS 1965, PhD 1969) This is a letter Thor Kommedahl received: Just an update on my recent professional career. This past year I received a Distinguished Service Award from the Florida Phytopathological Society for which I had previously served as secretary, vice president and president. Also, I was awarded a first time offered, faculty step award (monetary) on a strict competitive basis. Those eligible were those at full professor level for at least 7 years. I attained full professor status in 1980. The idea was to provide incentives and at the same time try to offset salary compression. A couple of years ago I was awarded a Professorial Excellence Award which was another status thing with the monetary benefits helping a bit.

For your information, a couple of years ago, some colleagues and I successfully completed an experiment which was carried on a space shuttle. This work was published recently in the Journal of Applied Microbiology and Biotechnology. My contribution was eliminating some fungal contamination problems. This was an interesting, minimal time-consuming project away from my usual work with agronomic and vegetable crops. I will continually acknowledge you, Dr. Harry Young Jr., and Dr. Milton Kernkamp for your combined efforts in helping me through my formative graduate school years. I hope I am not over stepping my bounds when I say that

your combined efforts and that of the Plant Pathology Department as a whole at the University of Minnesota were worthwhile for me, my family and the growers in Florida.

In case you did not know, Eldon Brown retired a few years ago after becoming a world wide authority on post harvest diseases of citrus. He worked for the Florida Department of Citrus after finishing at the University of Minnesota and concomitantly was an adjunct professor with the University of Florida.

Shih-I Lu (MS 1949, Ph.D. 1952) Dear Professor Pflieger, thank you for mailing me my Ph.D. thesis. I have a deep love for my alma mater - Department of Plant Pathology; it is the cradle for intellectual refinement that enables me to serve the society through science. I would be grateful if you can mail me my MS thesis, 1950 Cultural Characters of *Ustilago zaeae* mutants. This was my first piece of work that the "big boss" - E.C. Stakman liked very much, he said "this is just the way I would like to put it".

Chuck Logsdon (Ph.D. 1954) Your tribute to Boss Eide (as I called him) was great. He was certainly one of the good guys — my advisor, my boss from 1946 to 1953, my counselor, and my very good friend for many years. My new e-mail is: cel@mtaonline.net.

Tarkus Suganda (MS 1991, PhD 1995) Deb, my university has sent me to UK for 3 weeks to study university management. They hope that sometime in the future I will be positioned as the president or vice president of my university. Although for now my position is still staffing, however, I am now a staff of Vice President for Academic Affairs, of VC for Cooperation, of VC for Planning and Development. All of the university. I also am the staff of Vice Dean for Academic Affairs of my college. That's why I am so busy since I am involved in all university business. However, if I can choose (or having an opportunity) I prefer to deepen my knowledge on university management in the US university, since I know that US universities are more suitable and related with our system. I miss you all. Please send my best regards to everyone.

Kenneth "Kenny" R. Walker (MS 1957) I visited the Fountain of Knowledge on Saturday, June 30, 2001. While I greatly regretted not seeing anyone to learn about "Old Timers" of the nineteen fifties, it was a source of joy to walk through the "Plant Path" building following an absence of nearly 50 years. My address is 1 Beresford Crescent, Kingston 08, Jamaica, West Indies, phone: 876-9259278.

DR. CARLOS OCHOA RECEIVES FIRST WILLIAM L. BROWN AWARD OF EXCELLENCE IN PLANT GENETIC RESOURCES CONSERVATION

Dr. Carlos Ochoa, international potato expert, received the first William L. Brown Award of Excellence in Plant Genetic Resources Conservation in a ceremony at the National Academy of Sciences on May 9, 2001. The award reflects Dr. Brown's lifelong efforts to collect, preserve, understand and share plant genetic resources. Dr. Ochoa was chosen from a group of 30 world-class nominees by an internationally recognized selection committee of experts in genetic resource conservation. Dr. Ochoa's career has spanned more than 40 years of collecting, studying, and improving potato germplasm from his base at CIP, the International Potato Center, where he is currently senior scientist emeritus. Some of his accomplishments that were noted are: the collection and classification of more than 12,000 accessions of wild and cultivated potato species and discovered 80 wild species, about 1/3 of those known to exist. He has developed at least a dozen improved potato varieties that are now cultivated commercially on 70,000+ acres in Peru, about 20% of the country's potato growing area. Along with several published scientific articles and books on potato taxonomy and breeding. He accepted the award gratefully and will use the prize money to help underwrite publication of his lifework.

VISITORS TO THE DEPARTMENT

1999

June 16 - Kanti Patel (Ph.D. 1967), India
June 25 - Bruce Paulsrud (M.S. 1996), University of Illinois, Urbana.
October 29 - Judy Thies (Ph.D. 1988), U.S. Vegetable Laboratory, Charleston, SC.

2000

June 16 - Moussa Seck (M.S. 1985), ENDA-SYSPRO, Dakar, Senegal.

2001

June 8 - Paul S. Teng, Monsanto Philippines
June 26 - William Anderson, Burke VA. (Ph.D. 1974)
June 30 - Kenneth "Kenny" Walker (M.S. 1957), Jamaica, West Indies
July 7, 2001 - Howard (PhD. 1964) and Karwyn Bissonnette, Florida.
July 26 - Phil Berger (M.S. 1980), University of Idaho, Moscow
August 13, 2001- Jeff Miller, University of Idaho,

Aberdeen Experiment Station, Aberdeen, Idaho.
August 17, 2001 - Daqun Liu (Ph.D. 1992), Agricultural
University of Hebei, China

August 17, 2001 - Yehoshua Anikster, Israel
September 6, 2001 - Ward and Myrna Stienstra, Michigan.

NEW FACULTY



Dr. Saliana Stetina
Assistant Professor
By Frank Pflieger

The Department is pleased to welcome Dr. Sally Stetina, who joined the Department January 2, 2001. Sally is located at the Southwest Research & Outreach Center at Lamberton and is involved in the partnership degree program established between the University of Minnesota and Southwest State University at Marshall, Minnesota. Students enrolled in this program can earn a B.S. degree from the University of Minnesota while attending Southwest State. Sally, along with three other U of M faculty from the departments of Soil, Water & Climate and Agronomy & Plant Genetics are involved in teaching students enrolled in one of four majors offered, has a 75% teaching and 25% research appointment. Her research program will focus on diseases of soybean. Sally earned her B.S. and M.S. degree from Eastern Illinois University in 1988 and 1990, respectively and her Ph.D. in Plant Pathology from Louisiana State University in 1996 where she studied competition between several nematodes and the effect of soybean genotypes had on competition between select nematodes. From 1997 to 1998, she worked as a Research Associate in the Corn Pathology Program/Aflatoxin Initiative Project Rice Pathology at LSU. She then joined the Soybean Pathology Program at Southern Illinois University as a Research Associate in 1998. Sally served as an Adjunct Assistant Professor at Southern Illinois University before coming to the University of Minnesota.



Dr. Susan Cohen
APHIS
By Frank Pflieger

The faculty, staff and students extend a pleasant welcome to Dr. Sue Cohen who holds a position with APHIS and joined the department April 23. Sue recently completed her Ph.D. at George Mason University where she studied and researched her thesis on A comparative Population Ecology Study of the Fungal Pathogen, *Discula umbrinella*, on *Quercus alba* and *Quercus rubra*. APHIS has requested that Sue spend 9 months at the University of Minnesota working on the following a) implementation of the on-line international workshop on risks of exotic pests and impact with global trade b) evaluation of risk management approaches for forest diseases, c) develop a pest risk assessment for Phytophthora canker and e) integration of geospatial analysis into pest risk assessment and risk management approaches. Sue's expertise brings a new dimension to the departmental activities and will support and enhance existing teaching, research and outreach programs within the department.





Dr. Janna Beckerman
Extension Educator/Assistant Professor
By Frank Pflieger

It is our pleasure to welcome Dr. Janna Beckerman to the Department. Janna began her position as Extension Educator-Plant Pathology in the Yard & Garden Line on January 22, 2001. Janna joins a core of other educators whose expertise includes Entomology and Horticulture in the Yard and Garden Line. This faculty core group have the responsibility of providing information and education to the citizens of the state on a broad range of topics involving insects, growing of plants and plant diseases. Janna is involved with development of information on urban plant health care for the general public and development of educational workshops and short courses

for Extension Educators, and Master Gardeners. She received her B.S. and M.S. degrees from SUNY College of Environmental Science & Forestry. She then went on to Texas A & M for her Ph.D. where she studied the morphogenetic and hormonal control of appressorium formation of the rice blast fungus. Upon completion of her Ph.D. degree in 1997, Janna accepted a Postdoctoral Fellow position in the Department of Genetics, Cell Biology and Development at the University of Minnesota where she studied *Candida* genomics and pathogenesis. The department faculty, staff and students extend a hearty welcome to Janna.



DEPARTMENTAL NEWS

DEPARTMENTAL AWARDS 2001

by

The Department of Plant Pathology's annual awards program was held May 24, 2001. Exceptional achievements by alumni, friends, students, staff, and faculty were recognized. The following people received awards:

SPECIAL GUEST AND 2000 DISTINGUISHED ALUMNUS RECIPIENT

Dr. Michael J. Wingfield

Michael J. Wingfield (PhD 1983) was present at the department's annual award ceremony to receive the Distinguished Alumni Award. Professor Wingfield is currently the Director of the Forestry and Agriculture Biotechnology Institute at the University of Pretoria, Republic of South Africa. He has established one of the most productive forest pathology research centers in the world and has been a pioneer in the application of

biotechnology to the study of forest tree diseases. Some of his other awards include a Fellow of the South African Society of Plant Pathology, Fellow of the Royal Society of South Africa and he was recently elected to the South African Academy of Sciences. Another recent award was the Hendrik Christiaan Persoon Medal presented by the South African Society of Plant Pathology. This award has only been presented 3 times in the last 40 years. For a view of the wide array of accomplishments take a look at his Institute's web page at: <http://www.up.ac.za/academic/fabi/index.html>.



Michael Wingfield (PhD 1982) after receiving his award being congratulated by Professor Bob Blanchette and Emeritus Adjunct Professor Tom Nicholls.

2001 DISTINGUISHED ALUMNUS AWARD

Dr. Eugene B. Hayden

This award will be presented to Dr. Hayden at the 2002 Awards Ceremony. We will present this award for his dedication to plant pathology and for his leadership as Head of the Crop Quality Council, an organization dedicated to cereal crop improvement and as President of the Cereal Institute, Inc. As Head of the Crop Quality Council, Dr. Hayden was instrumental in bringing University researchers and industry cereal chemists together to evaluate milling and baking qualities of wheat varieties prior to release. As President of the Cereal Institute, Inc. Dr. Hayden provided the leadership for development of materials for use by educators regarding the nutritional value of cereals. The Department of Plant Pathology is proud of his accomplishments and it is our pleasure to recognize his contribution.

DISTINGUISHED FRIEND OF THE DEPARTMENT

Tom Anderson



This award was presented to Tom Anderson for his leadership at the state and national level in successfully securing funds to support research efforts to develop effective disease management strategies to control Fusarium Head Blight on wheat and barley. Tom is a small grains grower in Barnesville, MN. The Department of Plant Pathology is appreciative of his untiring support and recognize his dedication.

DISTINGUISHED MENTOR AWARD

Dr. Ruth Dill-Macky

This year's Distinguished Mentor Award was awarded to Dr. Ruth Dill-Macky by the graduate students in Plant Pathology. Dr. Dill-Macky was recognized by the students for her dedication and commitment to students in her lab and throughout the department. At the award ceremony, the graduate students noted how on numerous occasions, Dr. Dill-Macky has provided advice and guidance to the students as they considered projects and special events, and served as a liaison between the students and faculty. As a result of Dr. Dill-Macky's support, guidance, and encouragement, the graduate students feel they have become closer to her and to each other.

M.F. KERNKAMP SCHOLARSHIP

Claudia V. Castell

Claudia came to the department in 1999 and has since been working with Dr. Samac on molecular variation in the mycorrhizal fungus, *Phoma medicaginis*. Claudia has been very active in departmental and graduate student affairs, including being the chair of last year's highly successful symposium, "Genomics and Bioinformatics in Plant Pathology". To quote one of the nomination letters, "Claudia gives 150% to everything she takes on".

FRED I. FROSHEISER SCHOLARSHIP

Charles W. Barnes

Charlie came to the department in 1998. He has worked on two research projects during that time: "Environmental constraints on infection of big bluestem by *Puccinia andropogonis*" and "Importance of inbreeding on selection and gene flow for maintaining genetic variation in *Ustilago maydis*". Much of his work on big bluestem has taken place at Cedar Creek, while the *Ustilago* project took Charlie to South America where he visited Argentina, Brazil, and Uruguay. He has been a highly visible member of the department and been very active on departmental and graduate student committee work

CIVIL SERVICE AWARD OF EXCELLENCE

Amar M. Elakkad

Amar is a research plot technician on the small grains pathology project and plays a vital role in the management of the wheat and barley disease screening nurseries at St Paul. In the summer months Amar often spends weekends and evenings ensuring that our field research plots at St.

Paul, Morris and Crookston are properly maintained. Amar contributes to the general activities of the Plant Pathology department in a number of small ways that are greatly appreciated - for example in helping to move large furniture items and providing computer support to others within the department. Amar keeps his ear to the ground and likely knows as much about the facilities on campus than anyone here. He also adds to the social life of the department frequently acting as chief cook at the BBQ's (even when it is raining) and a pitcher at the softball game.

Mark W. Galatowitsch

Everyone knows Mark for his savvy advice, valued help, and pleasant personality. Mark always takes the time to get computer problems fixed quickly - and with a minimum of fuss. Mark comes in on the weekend to repair server crashes and keeps the department email, web site, and classroom computers/projectors up and running. It is difficult to imagine the department running so smoothly without the commitment and effort that Mark brings to his job.

**WARD C. STIENSTRA GRADUATE
STUDENT TRAVEL AWARD**

Shawn C. Bernik

Shawn attended the APS meeting last summer in Salt Lake City. At the meeting, he gave an oral talk entitled, "Species specific PCR primers for the detection of American isolates of *Sclerotinia homoeocarpa*". This is the causal agent of Dollar Spot and Shawn's work helps to develop specific molecular markers for positive identification of putative *S. homoeocarpa* isolates.

Elizabeth E. Wiggins

Elizabeth will be attended the APS meeting last summer in Salt Lake City. At the meeting, she presented a poster on her work, "Green manures influence pathogen inhibitory potential of indigenous antagonist communities in the soil". This work has significant impact on the management of potato scab caused by *Streptomyces scabies*. At the meeting, she also attended committee meetings related to her work.

**COAFES DISTINGUISHED CIVIL
SERVICE/BARGAINING UNIT STAFF
AWARD**

Dann Adair

Congratulations to Dann Adair for receiving the College of Agricultural, Food and Environmental Sciences Distinguished Civil Service/Bargaining Unit Staff Award. This award recognizes Civil Service/Bargaining Unit staff who have made outstanding contributions to improving the working environment for members of the university community. Dann's highly effective management of the greenhouse and growth chamber facilities and his work in greenhouse energy use conservation were cited in the

award.

HONORS AND RECOGNITIONS

Robert A. Blanchette, Associate Editor, *Canadian Journal of Forest Research*, 2000

Robert A. Blanchette, Associate Editor, *International Journal of Biodeterioration and Biodegradation*, 2000

William R. Bushnell, E. C. Stakman Award, 2000

Rhoda Burrows, Leadership Award, Council of Graduate Students, 2000

Ruth Dill-Macky, Promoted to Associate Professor, 2000

Roger K. Jones, Promoted to Professor, 2000

Linda L. Kinkel, Promoted to Professor, 2001

Linda L. Kinkel, Associate Editor, *Plant Disease*, 2000

Linda L. Kinkel, Immediate Past Chair, APS Biological Control Committee

Sagar V. Krupa, Past President, Sigma Xi Research Society, 2000

Sagar V. Krupa, Medallion of Recognition, the Royal Society of Economics, Science and Culture, Valencia, Spain, 2000

Sagar V. Krupa, Associate Editor, *Environmental Pollution*, Elsevier Science, An International Journal, 2000

Sagar V. Krupa, Chief Editor, *Developments in Environmental Science*, Elsevier Science, 2000

Sagar V. Krupa, Co-Principal Editor, *Global Systems, The Science World*, 2000

Jacelyn A. Morrison, Presented 4 medallions to recognize over 400 volunteer hours for the Springbrook Nature Center

Andrea Morse, International Graduate and Professional Fellowship Award from the Office of International Programs to support her student exchange/internship program this fall at the University of Waikato, New Zealand, 2001

Andrea Morse, Graduate Student Research Award from Sigma Xi, University of Minnesota, 2001

Deborah A. Samac, Promoted to GS14, 2001

Deborah A. Samac, Associate Editor, *Plant Disease*, 2000

Les J. Szabo, Promoted to Adjunct Associate Professor, 2000

Carol E. Windels, APS Presidential Award, 2000

Carol E. Windels, Award of Merit, Gamma Sigma Delta, Minnesota Chapter, 2001

Nevin D. Young, Associate Editor, *Molecular Breeding*, 2000

Nevin D. Young, Associate Editor, *Molecular-Plant Microbe Interactions*, 2000

Nominee to Sigma Xi, The Scientific Research Society

Associate Member: Rubella Sanyal

Civil Service Length of Service Recognition

Ann Arendt, 25 years

Sandra Gould, 15 years

Ben Held, 5 years

Joel Jurgens, 5 years

CAROL WINDELS RECEIVES GAMMA SIGMA DELTA AWARD

Congratulations to Carol Windels for receiving the Gamma Sigma Delta Award of Merit, Minnesota Chapter. The award states, "The careers described herein best exemplify the phrase, "Outstanding Service to Agriculture and the Related Sciences and Arts". Carol received this award April 5, 2001 at the Earle Brown Center, St. Paul Campus.



Pictured (Frank Pflieger, Carol Windels and John Wheaton, President of the Minnesota Chapter)

ALAN DYER RECIPIENT OF THE STORKAN HANES FOUNDATION AWARD FOR 2001

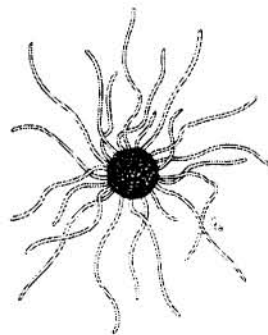
Alan Dyer was one of the recipients of the Storkan Hanes Foundation Award for 2001. Alan's advisor is Dr. Carol Windels, the title of his winning research proposal is "Oospore survival of *Aphanomyces cochlioides*". The Storkan Hanes Foundation awards are the result of a foundation set up by the founders of Tri-Cal, a fumigation company that serves the agricultural industry in California. The awards this year were \$5,000 per student and can be used in any way seen fit by the recipient. Other winners were Payungsak Rauryee of Pennsylvania State University and Kirk Radewalk of the University of California Riverside. The awards were presented by Mrs. Joanne Vargas, daughter of one of the Tri-Cal's founders, Mr. J. Hanes, at a noon luncheon sponsored by the Foundation during the American Phytopathological Society's Annual Meeting in Salt Lake City.

APS FOUNDATION/APS COUNCIL TRAVEL AWARD WINNER

Andrea Morse, received the Dennis H. Hall Award. Dennis H. Hall was an extension specialist at the University of California, Davis, with responsibility for diseases of field and vegetable crops. He was noted for his contributions to teaching, research and understanding and control of vegetable and field crop diseases. Andrea, is completing her master's degree in the Department under the direction of Robert A. Blanchette. Andrea presented her work on the "Etiology of Red Stain in Living Boxelder (*Acer negundo*).

Elizabeth Wiggins, received the Stuart D. Lyda Award. Stuart D. Lyda, professor emeritus at Texas A&M University, is noted as an excellent teacher, mentor, and researcher. He guided more than 40 graduate students, served APS in several capacities, and also served as secretary and head of the National Cotton Disease Council. Elizabeth is working on her M.S. degree under the direction of Linda L. Kinkel. Elizabeth presented a poster on the influence of green manures on the pathogen inhibitory potential of indigenous antagonistic communities in soil.

Yuhong Li, is the first recipient of the John S. Niederhauser Award. John S. Niederhauser has a distinguished plant pathology degree in the area of potato diseases and production. He served with the International Agricultural Programs of the Rockefeller Foundation from 1947 to 1972 in Mexico, primarily focusing on potato improvements. In 1971, he was the cofounder of the International Potato Center (CIP) in Lima, Peru. Niederhauser was the 1990 World Food Prize recipient in recognition of his work with national programs that dramatically increased potato production in many Third World countries. Yuhong is working toward her Ph.D. degree under the direction of Senyu Chen in the Department. Yuhong presented some of her research on the effects of the soybean resistance gene *rhg1* on the life cycle of *Heterodera glycines*.



Departmental Picture



DEPARTMENT OF PLANT PATHOLOGY

Pictured from (left to right):

First Row: Dave Long, Mark Hughes, Dariush Danesh, Yan Huihuang, N.S. Shekhawat, Liying Zhang

Second Row: Lori Hillman, Laurie Brand, Linda Hanson, Ramya Mani, Rubella Sanyal, Michele Grabowski, Jennifer Gilpen, Lisa Price, Karen Broz Hilburn, Kim Phoung Nguyen, Mervat ElAraby

Third Row: Stephanie Lundgren, Charlie Barnes, Ann Arendt, Debbie Drange, Bill Bushnell, Claudia Castell, Elizabeth Wiggins, Matt Rogers, Kun Xiao, Anita Davelos, Lifeng Chen, Dana Larson, Kay.

Fourth Row: Charles Hu, Frank Pflieger, Kurt Wilhelm, Jordan Eggers, Dan Lew, Jason Smith, Dale Johnson, Erika Marti, Alexi Balmuth, Nevin Young, Mesfin Gebeyaw, Karen Wennberg

Fifth Row: Shawn Bernick, Willie Bartholome, Elissa Burk, Chris Newby, Ruth Dill-Macky, Sharon Lewandowski, Tina Seeland, Corby Kistler, Edugie, Jose Martinelli, Bacillio Salas, Darryl Krueger, Alan Dyer

Sixth Row: Don McVey, Jim Kolmer, Brian Steffenson, Amar Elakkad, Matt Culler, Kent Evans, Chris Kavanaugh, Joel Jurgens, Jon Powell, Debbie Samac, Kristen Falk, Y. Katan, Sue Cohen, Mrs. Katan, Roxanne Denny, Jackie Morrison

Not pictured:

Professional Academic: Janna Beckerman, Jason Brantner, Consuelo Estevez de Jensen, Dawn Foster-Hartnett, Dean Herzfeld, Julie Jenkins, Kathy Kromroy, Soon Dong Lee, Joann Mudge, Silvia Penuela, Dean Reynolds, Liane Rosewich, Weiping Xie, Shaobin Zhong.

ASCME/Civil Service: Dann Adair, Gib Ahlstrand (photographer), Todd Burnes, Patricia Combs, Melinda Dornbush, Jennifer Flor, Mark Galatowitsch, Ben Held, Leslie Johnson, Laura Morales, Richard Wenkel, Mel Wiens.

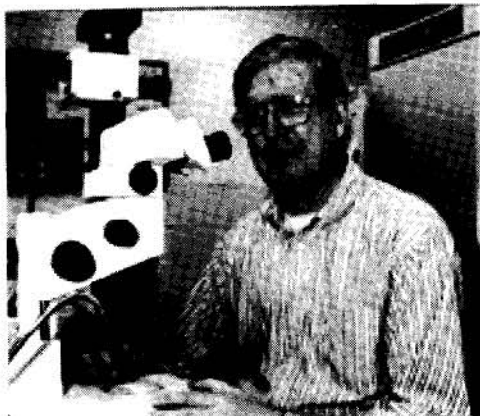
Federal Civil Service: Julie Gribble, Lucy Wanschura, Shawn Neuman, Gerald Ochocki.

Faculty: Neil Anderson, Ernest Bantari, Bob Blanchette, Senyu Chen, Jim Groth, Roger Jones, Jennifer Juzwik, Linda Kinkel, Thor Kommedahl, Sagar Krupa, Jim Kurle, Phil Larsen, Kurt Leonard, Ben Lockhart, Dave MacDonald, Chester Mirocha, Bob Nyvall, Jim Percich, Sally Stetina, Les Szabo, Hala Toubia-Rahme, Carol Windels, Richard Zeyen.

Students: Crystal Floyd, Gacheri Kimathi Muriuki, Marc Neuman, Silvia Pereyra, Jon Reinders.

Visiting Scientists: Susan Cohen

RETIREMENTS



Dr. Kurt Leonard

After 13 years as Research Leader at the ARS Cereal Disease Laboratory, and 32 years with ARS, Kurt Leonard retired April 1, 2001. Kurt grew up in Iowa, went to Iowa State for his B.S. Degree, and attended Cornell University for his Ph.D. In 1968 Kurt took an ARS position as a Plant Pathologist located in the Department of Plant Pathology, North Carolina State University, later transferring to the CDL in 1988. Kurt has been highly productive throughout his career, but is perhaps best known for research in population genetics of plant pathogens. For his Ph.D. thesis Kurt examined the effects of unneeded virulence genes on fitness in the oat stem rust pathogen. Kurt was the first to consider the entire genetic background of a plant pathogen when assessing how specific virulence genes affect fitness in plant pathogens. From his Ph.D. studies, Kurt derived an equation to calculate the fitness costs associated with unneeded virulence genes. This equation has been used and cited extensively by many other researchers in later studies. Kurt also examined oat stem rust reproduction and spread in a mixture of resistant and susceptible oat lines, and later derived a theoretical model for increase of pathogen races within host multiline mixtures that has also been cited extensively in later research. At North Carolina State University, Kurt studied the genetics of the southern corn leaf blight fungus, *Cochliobolus heterostrophus*, which caused a major epidemic on corn in the US in the late 1960s. Kurt was able to show that the isolates of the fungus with the toxin gene all belonged to a single mating type, while isolates of the fungus without the toxin gene belonged to both mating types. From this and other data, Kurt was able to surmise that the isolates with the toxin gene must have been derived by mutation from the previously existing population of *C. heterostrophus*. He also derived models to examine the effects of polygenic resistance on pathogen populations. He examined taxonomy of northern corn leaf blight pathogen (now known as *Exserohilum turcicum* Leonard and Suggs) and studied the population genetics of common leaf blight caused by *C. carbonum*. At the CDL, he continued to develop mathematical models for the selection processes that govern co-evolution of major gene resistance and virulence in host-parasite systems, giving

insight on how virulence in pathogen populations can be stabilized by deploying host mixtures. He also conducted the oat crown rust survey and helped to characterize oat breeding lines with adult plant resistance to crown rust. Kurt has published 130 papers including 81 refereed journal articles.

Kurt Leonard is also well known for his editorial contributions to the profession of plant pathology. He served as associate editor, senior editor and editor in chief of *Phytopathology*, editor in chief of APS press (at a time of rapid expansion of publishing activities) and also served as a member of the editorial board of the Annual Review of *Phytopathology*. In addition, he was a member of 12 different APS committees and served two terms as a member of the APS council. In recognition of his research accomplishments and his contributions to APS, he became an APS Fellow in 1983.

During his 13 year tenure as Research Leader, the mission of the Cereal Disease Laboratory (formerly the Cereal Rust Laboratory) was expanded to include Fusarium head blight which reemerged in the 1990s as a serious disease of wheat and barley. Kurt also brought in new expertise in fungal genetics and molecular biology, maintaining the laboratory's worldwide reputation as a leader in cereal disease research. Kurt now shares an office in Stakman Hall with fellow retiree, Chet Mirocha. He visits the CDL on a daily basis and is thriving in his new situation.. Best wishes, Kurt, from the many friends you have helped and encouraged so generously throughout the years.



Dr. Donald McVey

Dr. Donald V. McVey, USDA-ARS Research Plant Pathologist, Cereal Disease Laboratory, St. Paul, retired on September 3, 2001, after more than 40 years of service with ARS. Don's research has played a pivotal role in the protection of cereal crops from leaf and stem rust, especially in spring and winter wheats in the Central and Northern Great Plains. Don began his career with ARS in 1960 working in Puerto Rico testing wheat accessions for

SOUTHERN RESEARCH AND OUTREACH CENTER

by Senyu Chen

The cool and wet weather early in the season delayed soybean planting and inhibited soybean growth in southern Minnesota. After planting, a long period of dry weather did not benefit soybean growth. Due to the weather conditions, soybean growth delayed, and chlorotic symptoms associated with soybean cyst nematode (SCN) and/or iron deficiency showed up in late July and early August, later than normal years. Soybean harvest also delayed about two weeks compared to previous years.

Our research continues to focus on SCN management. This year, newly initiated research included a study of effect of diverse (16) crops on SCN population density and a survey of cyst nematodes in the Red River Valley. A heavy rain early in the season damaged a few plots in a crop rotation study. In variety trials, one of three SCN-infested sites was abandoned due to severe iron chlorosis. Field plots of other experiments have been good.

Mrs. Ruth Solyntjes and Ms. Janet Frederick were hired this year as laboratory technicians to assist in taking and processing SCN soil samples. Yuhong Li, a Ph.D. student, moved from Waseca back to campus in April this year. She conducted research on the effect of resistant gene of soybean on SCN life cycle and population development in Waseca. She will continue this research in Dr. Nevin Young's laboratory on campus. Shufen Liu, a visiting Ph.D. student from the Hebei Agricultural University, China, continues her research on biology and ecology of *Hirsutella minnesotensis*, a new fungal parasite of SCN. Other members in the nematology laboratory include Daniel Miller, assistant scientist; Cathy Johnson, senior laboratory technician; Wayne Gottschalk, field plot technician; Jeff Ballman, summer laboratory assistant; and Senyu Chen, assistant professor.

USDA-ARS CEREAL DISEASE LABORATORY

by Kurt J. Leonard

Three new employees joined the Cereal Disease Lab staff in the past year. Julie Gribble, the new program assistant, replaces Rosalind Richards, who retired in May, 2000. Julie was hired in November, 2000. Formerly she worked as a Federal employee in the Denver office of the Criminal Investigation Division of the Environmental Protection Agency. Michelle Grabowski was hired as a Biologist working in Jim Kolmer's wheat rust research program. Michelle came to Minnesota in January, 2001, after completing her M.S. in Plant Pathology at North Carolina State University. Karen Hilburn joined the staff in August, 2001, as a Biologist in Corby Kistler's research program. Karen completed her M.S. with Richard Zeyen in the

University of Minnesota, Plant Pathology Department working on "A plant suspension cell assay for anti-fungal transgene efficacy." Her current duties at the CDL include functional genomics involving transformation and gene disruption in the *Fusarium* head blight fungus.

Two Cereal Disease Lab scientists retired; Kurt Leonard on April 1, 2001, after 13 years as Research Leader at the CDL and 32 years with ARS; and Don McVey on September 3, 2001, after 42 years with ARS, most of them in St. Paul at the Cereal Disease Lab. Don is best known for his long-term collaboration with wheat breeding programs, particularly those at the University of Minnesota and the University of Nebraska, that have been instrumental in keeping wheat in the northern Plains largely rust free during Don's tenure.

The Cereal Disease Lab hosted several visiting scientists during the year. Dr. Talma Katan, Department of Plant Pathology, The Volcani Center, Bet Dagan, Israel, is spending a year-long sabbatical working with Corby Kistler. Dr. Katan is an expert on genetics of vegetative incompatibility and fungicide resistance in fungi and is a long-time collaborator with Corby Kistler. At the Cereal Disease Lab, she is doing research on out-crossing and defining biological species of the *Fusarium* head blight fungus. Dr. Jose Martinelli, Fitossanidade Dept., Faculdade de Agronomia, UFRGS, Porto Alegre, Brazil, is also spending a year-long sabbatical at the Cereal Disease Lab. His work is on oat crown rust resistance and virulence in collaboration with Kurt Leonard. Other visiting scientists include Drs. Yehoshua Anikster and Tamar Eilam, Institute for Cereal Crops Improvement, Tel Aviv University, Israel; Dr. Virgilio Balmas, Dipartimento-Struttura di Patologia Vegetale ed Entomologia Agraria, Università degli Studi di Sassari, Italy; Dr. Mohammed Nazim, Faculty of Agriculture, Minufiya University, Shibin el-Kom, Egypt; and Drs. Seydigapbar M. Mamadaliyev and Shyrbolat S. Rsaliyev of the Scientific Research Agricultural Institute, Otar, Kazakhstan. Dr. Anikster visited the CDL for one month in the summer as well as for one week on two other occasions to collaborate with Bill Bushnell, Kurt Leonard, Dave Long, and Alan Roelfs on several on-going projects on cereal rust fungi. Dr. Eilam spent two weeks at the CDL working on scanning electron microscopy of protein caps induced in pycniospores of grass rust fungi by a factor in pycnial nectar from infections of opposite mating type. Dr. Balmas is a mycologist specializing in *Fusarium* identification and is spending the summer working with Dr. Kistler in conjunction with a continuing collaboration with Dr. Quirico Migheli, Università degli Studi di Sassari. Dr. Nazim spent two weeks at the CDL working with Don McVey and Dave Long reviewing results of cooperative research on wheat leaf rust resistance and virulence in Egypt, preparing the final report for the project, and outlining manuscripts from the research; Drs. Mamadaliyev and Rsaliyev also spent two weeks at the CDL working with Jim Kolmer to develop a new project on wheat rusts in Kazakhstan funded by the

