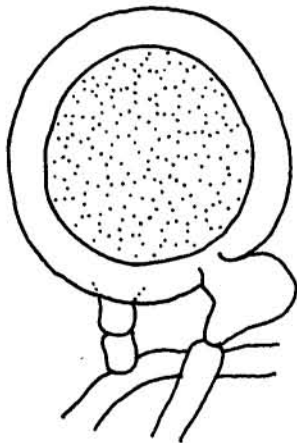


Aurora Sporealis

DECEMBER 1983



**FRED I. FROSHEISER
1913-1983**

by

**DEPARTMENT OF PLANT PATHOLOGY
UNIVERSITY OF MINNESOTA
St. Paul, Minnesota 55108**

REPORT FROM THE HEAD:

This has been a successful year for the Department. The new building which seemed destined to be delayed forever was started last May (1983) and will be finished in about March 1985. The schedule did call for completion by January of 1985, however, there have been the expected delays along with severe weather conditions. December of 1983 has been some month with record snowfalls and very cold weather. The University has rarely closed in the past and yet we have had two such closings - and this was well ahead of the winter season. In spite of the weather we will have excellent facilities for the future. For the first time in the history of this Department we will have modern labs for teaching, excellent lecture halls and a fine modern library. Furthermore, there will be adequate office space for the faculty as well as for the graduate students and visiting scientists. A new seminar room will provide more space and air conditioning. The administrative offices in the new building will allow more space for the larger staff.

We think the new building will be a very attractive feature as we search for a new Department Head. After 12 plus years in administration as Acting Head, Assistant Head, and Head, I plan to return to forest pathology. In addition to the new building, we continue to be optimistic about added greenhouse - headhouse space to be located east of Stakman Hall.

There have been and will be more changes in our administration. Bill Hueg has retired from his position as Deputy Vice President and is involved in other ventures now, including his new dairy farm in Wisconsin. Dick Sauer moved into Bill's position and will continue as Director of the Experiment Station. We are searching for a Dean of the College of Agriculture, who will be an associate director of the Experiment Station as will the other deans in Forestry and Home Economics. We are in the process of arranging for Norm Borlaug to spend up to a month on the campus. The Crop Quality Council has closed its doors. Recently, there was a nice appreciation event in behalf of Vance Goodfellow.

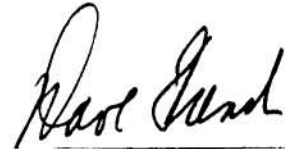
We now have in place a new generation of plot supervisors for our St. Paul and Rosemount operations. Dann Adair who handles the St. Paul plots came from the University of Illinois and Jim Rowe at Rosemount had his own farm near Owatonna, Minnesota. The Department is very pleased with both of these people and hope they will be with us for a long time. We have added a small amount of space to the St. Paul plots and likely will need to increase the Rosemount operation as the volume of research continues to increase. At Rosemount, we accommodate entomology projects.

For years, we have wanted to have a plant pathologist at the Crookston Branch Station and are pleased that such a position has been advertised and, hopefully, the person will be on hand for this upcoming field season. The Department decided to search for a person to coordinate the IPM undergraduate program and be involved in research in this subject, however, the position was retrenched and the IPM program will be handled by people already on the faculty. Jim Burleigh returned to Morocco as of September 1983 and will be in Rabat where he will be advising several students as well as being involved in teaching and research. Ben Lockhart will be returning to the Department at the end of 1984. Arrangements were made so that he was able to take time off from his responsibilities in Morocco to teach part of the winter quarter here. Roy Wilcoxson is now half time International Programs (Malcolm Purvis joined AID) and is in charge of the Moroccan programs.

As a result of the January 1983 Department Review, a planning process is underway to respond to the panel's suggestions and to do this in the reasonably near future.

The Department recently received much-appreciated gifts for our endowment from Fred and Esther Frosheiser and from the Kernkamps. These gifts have been designated for graduate student scholarships. All of us in the Department are proud of and greatly appreciate our alumni.

With best wishes for a wonderful 1984.



**AURORA
SPOREALIS**

**FRED I. FROSHEISER
1913 - 1983**

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The last regular number of Aurora Sporealis was Volume 53, Number 1 Dated July 1982.

DR. FRED I. FROSHEISER died November 12, 1983. He had suffered with cancer since early 1983. Fred was Research Plant Pathologist, USDA and Professor in the Department of Plant Pathology, University of Minnesota. His principal research effort was made in the breeding and testing, in cooperation with USDA and Minnesota plant breeders, of alfalfa resistant to bacterial wilt, Verticillium wilt, Phytophthora root rot, and virus diseases. A number of highly superior varieties were introduced. He was author or co-author of about 100 scientific papers distinguished for their scientific insight, clear exposition and practical value. Fred took an interest in the Department equal to that of regular university faculty. He attended seminars and contributed ideas, opinions and critical thought to all. He was adviser to several graduate students.

A retirement tea was held in the seminar room for Fred on March 25, 1983, when he retired from his USDA position. It was attended by 75 people, including Old Timers from Illinois, Iowa, Wisconsin and North Dakota.

Fred was born at Keeline, Wyoming, September 23, 1913. He is survived by his widow, Esther, two sisters and a brother.

OLD TIMERS COLUMN

According to Gene Saari (9/1/82) Jon M. (Mike) Prescott, PhD 1970, has been transferred from Turkey to Mexico (9/1/82) to be in charge of plant pathology in the CIMMYT wheat breeding program. Bobby Renfro, PhD 1960, representing the Rockefeller Foundation, cooperates with CIMMYT.

As of January 1, 1984, Bobby Renfro, PhD 1960, will retire from the Rockefeller Foundation and accept a position with CIMMYT. Bobby will remain in Bangkok and do the same kind of work.

Paul R. Fridlund, PhD 1954, will go to Roumania in May 1984 as N.A.S. Exchange Scholar. This is the third time Paul has been picked for this honor.

We learned from Tooty that Teresa McNeely Flowers is living in Saugus, California. Teresa's husband died in May, 1983 as a result of an accident that occurred several years before. Teresa has been in social work most of her life, a career she prepared for at the University of Minnesota. She was secretary in the Plant Pathology office during the 1950's.

Professor C.J. Mirocha attended the Fourth International Congress in Australia and, on his return trip, visited professional friends in Japan and Korea. In Japan he met several scientists who had worked in his laboratory in Minnesota. These included Tadaoki Inaba (Minnesota 75-76) who is now working at the Japanese Science Center, Tusculum; Kenji Ishii (Minnesota 74-75), doing research in pharmaceutical science at the University of Tokyo; Yoshuki Kawasaki (Minnesota 71-73), now in private industry in Tokyo and Takumi Yoshigawa (Minnesota 78-80) a biochemist on the Faculty of Agriculture, Kagawa University. At the University of Seoul

in Korea Professor Mirocha had the pleasure of visiting with Yong Joon La, MS 1962, who is doing research in forest pathology; Hoo Sup Chung, PhD 1967, Head of Plant Pathology and Yong Sup Cho, PhD 1970, Dean of the College of Agriculture.

In February, 1983, John Siwula, MS 1971, wrote to Matt Moore that he had invented an electronic check book, U.S. patent 4,075,702, which not only calculates checks and deposits, but stores the balance in a memory system. Available information does not indicate that it will prevent overdrafts. John's invention got him a lot of favorable publicity on TV and in magazines, but as of January 31, 1983 he had not started the manufacture of the device for lack of capital. John teaches high school in Jamestown, New York. He and Sally have 3 children.

Seung Hwan Ohh, Korea Ginseng and Tobacco Research Institute, Seoul, Korea, writes that Dr. Y.S. Cho, PhD 1970, became Dean of the College of Agriculture, Seoul National University, effective January 10, 1983.

Patti Sebesta, who recently moved to Fort Collins, Colorado, wrote (about October 1, 1983) that she misses everybody (in Plant Pathology). Husband Steve is very happy in his new job, but Patti hasn't been able to find work yet. They bought a 1980 Ford truck and have been driving around Sundays looking at open houses with the idea of buying a home next spring.

George Papavizas, PhD 1957, Chief of the Soil Borne Diseases Laboratory, Plant Protection Institute, Beltsville, MD, spent October 24-30, 1982 in England on Scientific business. He also visited Egypt.

Janice Kaye, who passed her MS oral exam April 22, 1983, is employed at John Hopkins University and is living in Columbia, MD.

Norman Borlaug, PhD 1942, accepted a part-time faculty position at Texas A & M University, effective January 1, 1984. He will have the Title of Distinguished Professor of International Agriculture. Borlaug, who was director of wheat, barley, and triticale research and production program of CIMMYT until 1979, is now consultant for CIMMYT.

John R. Vaughn, PhD 1947, retired November 30, 1982 and he and Dorothy now live in Sun City West, Arizona. Dorothy was a graduate student in the Department in the early 1940s.

John and Dorothy were among the Minnesotans who devoted much of their lives to "foreign service". Before embarking on this career John was Professor and Head of Plant Pathology at the University of Wyoming and, beginning in 1958, Assistant Dean of the College of Agriculture and Assistant Director of the Agricultural Experiment Station.

"We lived overseas for 13 years, from 1960 to 1973, in Afghanistan, Syria, Lebanon and Iran. During that period and since I have travelled and worked in almost all of the countries in the Middle East as well as Spain, Cyprus, Portugal and Finland in Europe on various agricultural projects. As you may recall, I worked for the Ford Foundation in Syria and Lebanon, with the Development and Resources Corporation in Southern Iran. Since returning to the USA, I have been with the World Bank as an Agriculturist with the Europe - Middle East - North Africa Region, with headquarters in Washington, D.C.

"Although my activities were mostly as an administrator, advisor, and consultant, I did manage to do some professional work, including some research on cotton diseases in Syria,

starting the Green Revolution in the Middle East where, with the help and direction of one Norm Borlaug, we introduced (and even planted ourselves, at first) the new high yielding varieties which Borlaug and colleagues developed. Including Borlaug, we often ran into Old Timers in various countries including, in Pakistan, one named Stakman who gave a talk at a wheat conference there. Although in his eighties he gave the typical Stakman speech with no less vigor and enthusiasm than he did when I first heard him in 1938!"

The Vaughns have three daughters, all married, who have given them five grandsons and 3 granddaughters.

Beverly Bergman, who was a secretary in the Department in 1975-76, thoughtfully sends greetings to us occasionally. Beverly is working at the Hennepin County Medical Center and husband Bruce at Anheuser-Busch. They recently bought a new town house in St. Louis Park.

Gusti Sarbini, PhD 1978, "stepped down" from the position as Dean of the Faculty of Agriculture at the University of Lambung Mangkurat in Indonesia. He had held the post since 1979 and declined to be a candidate for a second term. However he accepted another assignment, that of coordinator in developing experiment stations in seven universities in Eastern Indonesia. During the summer of 1982 Gusti was, at Washington State University attending a management training program. They kept him so busy he didn't have a chance to visit Minnesota.

Markus Andres, PhD 1982, accepted employment with Rhom and Haas in August, 1983. He is headquartered at Spring House, Pennsylvania.

John Dueck, PhD 1971, has been promoted. He is now Director, Agriculture Canada Research Station at Regina, Saskatchewan.

Dave Thurston, PhD 1958, was on sabbatic leave from his professorship at Cornell during the first half of 1983, to work on a book, "Tropical Plant Disease". Most of the time he and Betty were in Wageningen, The Netherlands. Four weeks in May and June were spent at the Bellagio study and Conference Center on Lake Como, Italy.

Stakman was a visitor to the Center in 1975. He said "(I) have long conversations with William Tell, Virgil, Pliny and others at night when the sprits roam. During the day they sometimes flow -- but always gently". Dave didn't mention talking with any spirits, not even Stak's. He did say the amenities included free drinks twice a day.

According to Dave, Norm Borlaug was at the Center for two weeks, giving six talks. Dave's book will be published within a year.

Charles Dorworth, PhD 1966, spent 15 months at the Instituto di Pathologia e Zoologia Forestale e Agraria, Firenze, Italy, returning to his position with the Canadian Forest Service, Sault St. Marie, in May 1983. He did research on Scleroderris canker while in Italy.

C.M. Christensen contributed the following "social note" from Arizona: "On April 6, 1983, Dr. and Mrs. Lee Hines had a luncheon bash in honor of Chet Wismer (whose wife was attending a meeting of Doctors of Osteopathy in Phoenix, and so could not attend), Cam and Wanda Lefebvre, Kerny and Marge Kernkamp, all of Sun City, and Clyde and Katie Christensen, of Sun City West. After a social hour at the Hines' they repaired to the King's Inn, in Sun City, for lunch. Old Timers were discussed and a good time was had by all. All were invited by Chet to visit the Wismer mansion in Hawaii."

In a letter to Aurora, Dr. Wismer expressed his delight in seeing the Arizona Old Timers. On leaving, he and

Susi visited various places in eastern United States. In August he made his fifth trip in the past four years to the Sudan as adviser to the Kinana Sugar Co. He also spent a week in Egypt, getting up the Nile as far as Aswan.

Marshall Evans, an Old Timer who majored in plant breeding, wrote recently expressing his appreciation for his associations with the Department. He took courses in plant pathology and also, as an undergraduate, kept Stakman's lawn mowed and neat. While working as plant breeder for the Green Giant Co., in Le Sueur, Minnesota, Marshall cooperated with Tom King and others in the Department, to the great benefit of both the company and the University. Marshall retired in 1978 and still lives in Le Sueur. He and Mrs. Evans have three sons, all M.D.'s, and ten grandchildren.

Alfonso Castronovo, MS 1954, was an invited speaker at meetings of Directors of Agricultural Research in Madrid in 1982. After the meetings, with Mrs. Castronovo and one of their daughters, he spent a couple of months in Spain, Portugal and France before returning to Buenos Aires.

Recently Alfonso wrote: "At 66 I bought about 12 acres of land and I'm beginning a program for the production of hybrid tomatoes."

E. G. Sharvelle, PhD 1934, has offered the Department the pick of his library of books and reprints on plant pathology and posters of fungi, an offer gratefully accepted. Professor Emeritus (Purdue) Sharvelle plans to spend the winter months on South Padre Island, off the coast of Texas. Of course he will be missing a lot of wonderful skiing by not coming to Minnesota.

Bob Crow, PhD 1975, sent Aurora a picture of the Minnesota Missionaries to Iowa. They include Bob Nyvall, Dennis McGee, Dr. G. Benson (Agronomy) Laura Sweets and Bob Crow. "--we occasionally get together to drink (except for

Laura), tell lies and sing the Rouser". All are on the staff at Iowa State except Dr. Crow, who is Regional Agronomist with Funk's Seed Co.

A.W. Henry, PhD 1923, wrote a favorable review of the Anniversary Aurora, which was much appreciated. Our appreciation was increased because the opinion came from the Chairman of the committee which edited the first Aurora, dated August 1, 1924. Helen Hart and H.A. Rodenhiser were the other committee members. After receiving his degree in 1923, Dr. Henry was Assistant Professor in the Department until 1926. He is now Professor Emeritus in Plant Pathology, University of Alberta, Edmonton. Among other claims to fame, Henry says he was responsible for the name "Tottering Tower" which was applied to the plant pathology building occupied before 1941.

T.H. King, PhD 1946, and Shirley are now living in a retirement area north of San Antonio, Texas. Available are swimming pool, golf course, tennis courts, facilities for hobbies and crafts, etc. Tom sold his place at Kerrville, Texas, where he had planted strawberries, boysenberries, cherries, plums and grapevines (Aurora, July 1982). The new place will be quite a change, with grass-mowing, watering and other landscape activities taken care of. But we are sure Tom will be able to cope with his new-found leisure. He and Shirley plan to spend 4 to 6 months a year in Minnesota. We look forward to seeing them.

Aurora was pleased to receive a letter from Ruth Waterhouse, daughter of W.L. Waterhouse, who was the first of many foreign scholars to come to Minnesota to study plant pathology. He was in the Department for several months in 1920-21. Ruth wrote "He told us repeatedly how much he owed 'Stak' and he kept in touch with him over the years. . . He always maintained that the biggest recognition of his research work was the award to him of the first Stakman Award, which he particularly treasured". Dr. Waterhouse was Professor

of Plant Pathology in the University of Sydney, Australia. He died in 1969.

Julia Guzman, PhD 1961, retired several years ago. She thought she was forgetting what she new about Phytophthora infestans until the new generation in Colombia had trouble getting infection on the potato seedlings they were testing. So Julia had to go to Tibiatata and straighten them out. She hadn't lost her touch.

Clyde C. Allison, PhD 1935, now spends most of the year in Loma Linda, California. Of his earlier career he wrote recently "After two or three years with the USDA on tobacco diseases at Greenville, Tennessee, I went to Ohio State University and stayed until I went to Brasil in 1964 for four years; returned to Columbus, Ohio for a year or two, retired and returned to Brasil, which I really liked. (Clyde learned to speak Portugese fluently). The inflation got so bad that I returned to Columbus and finally had an opportunity to go to Loma Linda---

"When I went to Columbus I joined the Department of Botany and Plant Pathology. Finally the Head of Plant Pathology at the Wooster Experiment Station and I got the Department of Plant Pathology started at Ohio State and I developed quite a fine graduate program, with many (students) from outside the USA. Stakman's picture was posted over the door of the seminar room."

Ibra L. Connors, who took graduate work in the Department in 1919-20, was honored August 1, 1983 at a "second retirement" party at the Department of Botany and Plant Pathology, Purdue University. Ibra was 89 on July 5, 1983 and for several years has been a volunteer researcher at the J. C. Arthur Herbarium at Purdue.

According to Phytopath News, Katherine Widin is owner and plant pathologist of Plant Health Associates, a firm that does consulting on urban plant problems for business and home

owners. Dr. Widin received her PhD degree from the University of Minnesota in 1980 and was a college professor and consultant in the Boston, Massachusetts area for several years. The firm's address is: Plant Health Associates, 13457 Sixth Street North, Stillwater, MN 55080, (612)436-8811.

Dr. Ma de Lourdes de Bauer, MS 1957, is now Chair (Head) of the Department of Plant Pathology, Colegio de Postgraduados, Escuela Nacional de Agricultura, Chapingo, Mexico. Congratulations, Lulu!

Marge and M. F. Kernkamp, who have lived in a condominium in Sun City, Arizona for several year, will move to a life care center February 1, 1984. Nursing home facilities are available "if we need them in our old age."

Mary Ooka spent the last half of 1983 in Florida learning to be a computer programmer, courtesy of the U. S. Air Force. She will be chief of the software section in the new automated air defense system in Hawaii. Mary and Husband Jeri, PhD 1975, live at Kapaa, where he is pathologist at a branch station of the University of Hawaii.

Dexter Douglas, President and General Manager of Hi-Alta, Inc., Arco, Idaho (a seed potato company) spends a lot of time as a potato disease consultant and expert witness in law suits. He says "I am confident that the old type seminars we used to have more than prepared me for cross-examinations those attorneys delight in giving."

Dr. Shih - I Lu, PhD 1952, pathologist at Academia Sinica, Beijing, China, has recently been appointed the science advisor of the Great Wall Technology Development Center for Edible Fungi. In the meanwhile, Lu is working with ergot, corn smut and mushrooms. Some of the mushroom work involves their possible medicinal use for cancer and heart diseases. His son, Tze-Hong, is presently a student in the Department

STAKMAN BIOGRAPHY PUBLISHED

C. M. Christensen has written a biography of E. C. Stakman, titled "E. C. Stakman, Statesman Of Science". The book, which is being published by the American Phytopathological Society, will be ready in March.

Thor Kommedahl, Publications Coordinator for APS, said "C. M. Christensen tells the story in a compelling and personal manner, with many examples of Stakman's warmth and humor and many anecdotes in Stakman's own words". Old Timers will realize that a story about Stak, written by Christensen, is bound to be an outstanding literary event.

The book will have approximately 150 pages, hard cover and cost \$18. Send your orders to: APS Books, 3340 Pilot Knob Road, St. Paul, MN 55121. Phone (612)454-7250.

PROMOTIONS

Tom Nicholls, North Central Forest Experiment Station, from Adjunct Assistant Professor to Associate Professor, July 1, 1983.

Dr. James Percich, from Assistant Professor to Associate Professor, July 1, 1983.

Alan Pierce, from Assistant Scientist to Associate Scientist, December 1, 1982.

Connie Post, from Senior Account Specialist to Accountant, November 16, 1982.

Kathy Zuzek, from Senior Laboratory Technician to Junior Scientist, February 16, 1983.

Patti Sebesta from Secretarial Assistant to Secretary, February 16, 1983. Patti resigned to move to Colorado in August 1983.

HONORS

Fred Frosheiser received the Honorary Premier Seedsman Award from the Minnesota Crop Improvement Association. The presentation was made at the annual banquet of the Association January 10, 1983. Fred has served on the crop variety review committee for a number of years. He also has been responsible for the development of several new alfalfa varieties resistant to bacterial wilt or Phytophthora root rot.

Fred also received the Gamma Sigma Delta Award of Merit at the initiation ceremonies April 21, 1983.

Initiated into Gamma Sigma Delta, the Honor Society of Agriculture, on April 21, 1983, were Paul H. Goodwin, Yin-Won Lee, J. G. O'Brien, Judy A. Thies and Linda Treeful. All are graduate students in plant pathology.

Three Minnesotans were made APS Fellows at the meetings at Iowa State University in Ames in June, 1983. They were C. J. Mirocha, Professor, and Old Timers Julio Bird and D. E. Munnecke. Julio Bird Pinero, PhD 1956, was Head of the Department of Plant Pathology, University of Puerto Rico, in 1964 and later Associate Director of the Experiment Station there. He retired in June, 1982. Don Munnecke, PhD 1950, and a native of St. Paul, MN, is Professor and Plant Pathologist in the Experiment Station, University of California, L. A.

Norman E. Borlaug, PhD 1942, received the first Distinguished Achievement Award in Food and Agricultural Science made by the Council for Agricultural Science and Technology (CAST). The presentation was made at Ames, IA, July 28, 1982 at the 10th Anniversary ceremonies of CAST. CAST represents 25 societies in food and agriculture. Borlaug's award recognized his well-known contributions to the world's food production problems and included a plaque and a scarlet oak, which was planted and dedicated in his honor at Iowa State University.

W. E. Sackston, PhD 1949, Professor of Plant Pathology, Department of Plant Science, MacDonald College of McGill University, was the first recipient of the Dr. and Mrs. D. L. Bailey award, presented by the Canadian Phytopathological Society at its annual meeting in August, 1983. Sackston was also made an Honorary Member of the Quebec Society for the Protection of Plants, which met at the same time. The Bailey award, which is given to the author of "an outstanding publication which demonstrates benefits of plant pathology to mankind," was given for a chapter in a recent Academic Press book.

In June 1982, Sackston was made Fellow of the Canadian Phytopathological Society "in recognition of distinguished contributions to plant pathology as researcher and adviser in Canada and internationally, as a teacher, and for service and leadership in the society."

D. W. French received the Distinguished Service Award for 1983 from the Minnesota Society of Arboriculture.

D. H. MacDonald received the Outstanding Teacher Award of the College of Agriculture, University of Minnesota in June 1983. Dave teaches the beginning course in plant pathology in the Department.

Dr. J. F. Fulkerson and Dr. E. J. Wellhausen were the twentieth and twenty-first recipients, respectively, of the E. C. Stakman Award.

Dr. Fulkerson, Plant Pathologist and Microbiologist, USDA, received the Award in the Shingle Creek Room of the Earle Brown Continuing Education Center on the St. Paul Campus, June 17, 1983. Dr. Fulkerson was honored for his leadership in plant pathology as a representative of the Cooperative Research Service of the USDA. After the award, Dr. Fulkerson spoke on "Value of the Agricultural Experiment Station System."

Dr. E. J. Wellhausen received the Award at a dinner in the Student Center, St. Paul Campus, on June 22, 1983. Dr. Wellhausen was Director General of CIMMYT and Associate Director of Agricultural Sciences, Rockefeller Foundation from 1963 to 1973. He is especially known for his leadership in developing improved varieties of maize for Mexico and other countries and for the encouragement and intellectual development of young scientists throughout the world. Dr. Wellhausen, who is presently Special Staff Member of the Rockefeller Foundation, gave an interesting review of the work of the Rockefeller Foundation in improving agriculture throughout the world.

Bill Shane received the Annual Best Economic Nematology Paper Award for 1982 at the annual meeting of the Society of Nematologists.

Todd Burnes, Lab Technician in forest pathology, was awarded a \$400 scholarship by the College of Forestry to continue his research on the pine wood nematode. The award was announced in March, 1983.

Professor Robert Brambl was elected to membership in the American Society of Biological Chemists. His nomination was sponsored by the Department of Biochemistry, University of Minnesota and the National Science Foundation.

Robert A. Dietrich, who started work in the fall of 1983 for the MS, was awarded a Graduate School Fellowship for 1983-84. Bob received the BS in horticulture from the University of Wisconsin. Dr. Blanchette is his adviser.

Dr. Rama Urs, plant pathologist with Dahlgren & Co., Crookston, MN, received the President's Award from the Dahlgren & Co., April 22, 1983. The award recognized Rama's professionalism and management ability as well as his innovative research. Dahlgren & Co. processes sunflower seed. Rama was a

Junior Scientist in the Department in 1975-77 before accepting his position with the Dahlgren company. He received his MS and PhD degrees at Iowa State University.

Richard D. Durbin, USDA at the University of Wisconsin, was the first recipient of the USDA ARS "Outstanding Scientist of the Year Award". He has been leader of a pioneer research group investigating the nature of disease resistance and was recognized for his research on tabtoxin and tentoxin. He also edited a recent book on "Toxins and plant disease." Rick was on the faculty of the Department in 1958-62.

Arden Sherf, Professor Emeritus of Plant Pathology, Cornell University, received the Award of Merit in Plant Pathology from the Northeast Division of APS at the annual meeting in Quebec City in August, 1983. The Award is made "with the highest honor and acclaim for meritorious contributions to the progress of plant pathology and the certificate conveys the esteem of professional colleagues for diligence, devotion and significant accomplishment". Arden received the BS degree from the University of Minnesota 1939.

MARRIAGES

September 19, 1982. Constance Vosberg and Terrance Post.

October 9, 1982. Elizabeth Smallwood and Michael Hotchkiss.

December 18, 1982. Marge Fischer and Nick Versteegen.

April 23, 1983. Marguerite M. Kight and James A. Clemens.

May 14, 1983. Cynthia Morgan and Loral Castor.

June 25, 1983. Melody Olson and Donald Olson.

OBITUARIES

HARRY W. SCHROEDER, PhD 1955, died May 10, 1983 at College Station, Texas. He had retired in January, 1980 from his position as Supervisory Plant Pathologist, Transportation and Marketing Quality Research Unit, Southern Region, ARS, USDA. He was also a member of the graduate faculty of Texas A & M University.

Harry spent much of his career with the USDA after a year (1956-57) with the Secretaria de Agricultura y Ganaderia in Mexico. He made important contributions to the solution of storage problems in rice as well as investigating mycotoxins in peanuts and pecans. From 1960 to 1977 he was Adviser on Public Law 480 projects in Spain, Israel, Japan and India. From 1969 to 1980 he was Secretary of the U.S. Toxic Microorganism Panel, Joint U.S. - Japan Cooperation on Development of Natural Resources.

Harry and Mrs. Schroeder, the former Maria de los Angeles (Angelita) Melendez, MS 1951, had two children, Harry W., Jr., and Christine Louise and three grandchildren.

H. A. H. WALLACE, MS 1951, died July 25, 1982. He was 75. Wallace was Research Scientist Emeritus at the Agriculture Canada Research Station, Winnipeg. Although he retired in 1972, he continued his research for another 10 years. He was an authority on seed borne diseases of cereals in western Canada and their prevention by seed treatment. He also provided the mycological input in studies on grain spoilage in storage.

EDWARD M. JOHNSON, PhD 1930, died at the age of 86 at Lexington, KY, May 1, 1982. Ed, with an MS in Agronomy, became interested in Plant Pathology by associating with W. D. (Dorney) Valleau,

another Minnesota student who became a famous plant pathologist. Ed's PhD thesis on virus diseases of tobacco was a classic in its time and he contributed other outstanding research on various diseases of tobacco. He was a bachelor and took an active part in university and professional affairs as professor of plant pathology at the University of Kentucky. He retired in 1966.

We have just recently learned of the death March 17, 1983, of Professor VINCENZO GRASSO, Director of the Instituto di Patologia e Zoologia, Forestale e Agraria in Florence, Italy. Professor Grasso was a visiting scientist in the Department from January to July, 1953 and again for a year in 1954-55. He was 69 years old.

Professor J. E. HERMANSEN died August 7, 1983. He was 66 years old. Professor Hermansen was Chairman of the Department of Plant Pathology in the Agricultural University, Copenhagen, Denmark. He was the sixth Chairman of the department which was established in August 1883. Hermansen and others had made elaborate plans for a dignified centennial observance which he could not attend because of illness. He died a few days later.

Professor Hermansen majored in plant culture for his PhD in 1952 but he was attracted by problems in plant pathology. In 1955-57 he was Visiting Professor in the Department of Plant Pathology at Minnesota, working on cereal rusts. On his return to Denmark he was engaged as rust pathologist and contributed brilliantly with studies of races, epidemiology and horizontal resistance to cereal rusts. Like his predecessor, Emil Rostrup, he is remembered by his associates as "The researcher, the teacher, the friend." Forskeren, Laereren, Vennen!

VISITORS1982

August 16. Donald Kenney, Abbott Laboratories, Chicago, Illinois.

August 20. Richard Morrison, PhD 1972, Northrup, King & Co., Woodland, CA.

August 30. Axel Anderson, Michigan State University.

September 2. Nestor Guevero Barquistimeto, Venezuela.

September 13. Eugene E. Saari, PhD 1966, was on his way to Bangkok from Mexico where he had attended a CIMMYT quinquennial review at El Batan. Geno has been working on wheat improvement including "a little plant pathology" since August 1980. Geno went to India with the Ford Foundation in 1967. In 1973 he took a position with CIMMYT in Beirut, but was "shot out" in 1976, and was stationed in Cairo until 1980.

While in St. Paul he visited his daughter, a Junior (presumably now a Senior) at Hamline University and his son, who was seeking employment here. Geno was raised in Grand Rapids, MN and spent about 3 weeks in July and August, 1982, enjoying the lakes and fishing up north like a true Minnesota Finn. The blue marlin he caught near Hawaii (Aurora, 1978) is now parked in his garage. Presumably, there are no bars big enough in northern Minnesota to accommodate the prize.

October 29. Abe Epstein, Iowa State University.

December 10. David Thurston, PhD 1958, visited Stakman Hall in the morning; had coffee. Said he will be on sabbatic leave for 6 months from January 1, 1983. (See Old Timers).

December 10. Dave Sauer, PhD 1967, U.S. Grain Marketing Laboratory, Manhattan, Kansas.

December 16. Nick Verstegen, on his way to Morocco.

1983

January 10. Roger Musick, Crop Guard, Inc., Eakly, Oklahoma. Here to finish his PhD.

January 21. Nina Jorgensen, formerly plant pathology librarian, now of Raymond Avenue, St. Paul.

January 24-26. David Punter, Associate Professor of plant pathology, University of Manitoba, visited professional friends and presented a seminar on "Fluorescent microscopy of host-parasite interactions with Helminthosporium oryzae". Dave was visiting Associate Professor at Minnesota in 1975-76.

February 16. Herb Johnson, PhD 1953, former Extension Pathologist, now of Roseville and Glenwood, MN.

February 24. Bill Haglund (PhD 1960) was on his way back to Mt. Vernon, WA, where he is pathologist at the Northwest Experiment Station. He had just come from Yuma, Arizona where he had 2 1/2 acres of peas. He was in St. Paul to talk about peas and had stopped at the University of Wisconsin to talk peas. He also visited his parents, who still live in St. Paul. June 24 Bill was in Stakman Hall again, on his way to the APS meetings in Ames, Iowa.

March 25. Barry Jacobsen, PhD 1973, University of Illinois, Urbana; Jim Miller, PhD 1971, USDA, NDSU, Fargo, ND; Craig Grau, PhD 1975, University of Wisconsin (All here to attend retirement tea for Fred Frosheiser).

April 11. Don Knutson, MS 1965, Corvallis, Oregon. Don was in the vicinity for several months and dropped in to plant pathology several times. He returned to Oregon, via California, October 31, 1983.

April 25. James C. Wolf, PhD 1975, was in town for a business conference. Jim is now employed by General Mills in Lodi, California. He allows that he can't remember much of the science he learned, but claims that he learned how to think, and that it was a wonderful experience. Stakman would approve.

April 29. Dennis McGee, pathologist in the Seed Science Center, Iowa State University, Ames, came to confer with Minnesotans who had experience in Morocco. I.S.U. is starting a program there on seed. Dennis said his principal interest is in the epidemiology of seed-borne plant pathogens. He was a Research Associate in the Department in 1967-68.

April 29. Laura Sweets, PhD 1981, Extension Pathologist at Iowa State University, Ames, visited friends in the Department.

May 3 and 4. Norman Borlaug, PhD 1942. CIMMYT, Mexico.

May 10. Kathy Widin, PhD 1980, of Woodbury Township (that's where Orville Bielenberg was mayor for about 16 years).

June 14. C. S. Logsdon, PhD 1954, and Mrs. Logsdon, Arloine (Secretary, early 1950s), of Palmer, Alaska. The Logsdons were in the area to visit Arly's family.

June 19. John Pitt, SIRO Food Research, North Ryde, N. S. W., Australia.

June 24. On their way to the meetings in Ames: Lucas Calpouzos, Department of Plant Science, California State University, Chico. John Dueck, PhD 1971, Director, Research Station, Agriculture Canada, Regina, Saskatchewan.

June 30. Bill Anderson, PhD 1974, and Mrs. Anderson came in. Bill delivered several items of wisdom and philosophy and departed. Bill is with the National Park Service.

July 6. Roger V. Anderson, MS 1957, attended the meetings in Ames and visited his parents in the Twin Cities. Roger is located at the Central Experiment Station at Ottawa where he is Head of the Section of Nematodes and Hymenoptera of the Biosystematics Research Institute in the Research Branch of Canada Agriculture. Biosystematics employs about 50 scientists and does research on the taxonomy and morphology of vascular plants, fungi, insects, spiders, mites and nematodes. Roger published 2 or 3 papers a year, travels frequently to Europe and South America, often to check on reports of nematodes in seed potatoes, etc.

July 10-15. Dr. James R. Burleigh, who was returning to Rabat, Morocco to continue his work at the Institut Agronomique et Veterinaire. He held the position of Professor there from June 1978 to June 1980 with the USAID/Minnesota project, and is back on the Plant Pathology faculty once more.

July 13-15. Edward R. French, MS 1963, visited with old friends and colleagues and gave an informal seminar on potatoes and South America. Ed is pathologist at the International Potato Center at Lima, Peru. We learned that potato (Irish) production in the tropics has doubled in the last five years.

July 29. Gareth Jones, Reader in Agricultural Botany, The University College of Wales, Aberystwyth.

August 2. Myra Smart, who was a student employee in the Department during the 40's. Myra was a technician in plant pathology and wheat quality studies at Washington State University until her retirement July 1, 1982. She still makes her home in Pullman, Washington, but comes "back east" occasionally to visit less fortunate relatives who live in Minnesota and North Dakota.

August 5-September 9. Ben Lockhart, Associate Professor, was here on

vacation from his position at the Horticultural Station in Agadir, Morocco. Ben is on leave from his position in the Department.

August 8. Tim Huberty and spouse, Susan Hepburn and son Charles. Tim was visiting his parents in Minneapolis. He was Master of the Word Processor in the Plant Pathology office from August 1979 to August 1980, and is now Research Manager of Tatum-Laird & Kudner, an advertising company in Chicago. Tim signed the visitors' book, "H. L. Mencken" probably an unconscious expression of his great admiration for the famous philosopher of the 1900's. He had planned to name his son Mencken, but evidently was voted down.

Two Old Timers paid a surprize visit August 16, 1983. They were Floraine (Tooty) Toutenhof Stark and Rajah Haik Kolb, (Secretaries during the 40's). They appeared at about 10 AM, bringing coffee, candy and a huge birthday cake for Carl Eide, who had a birthday August 20. The office staff and Dr. French took a break to enjoy the treat. There was much discussion of the good old days, when Stakman and J. J. Christensen ruled with iron hands and typewriters were powered by human hands and didn't talk back. Tooty and her husband operate Prairie Island Farm near St. Peter, MN. Rajah and family live in Eagan, a swank suburb of St. Paul. Her two daughters, Amelia and Melanie, came to the party.

August 16. Paul Manion, PhD 1967, New York State College of Forestry, Syracuse.

August 19, 21 and 22. Lois E. B. Johnson, PhD 1980. Lois took off time from her job with DuPont in Wilmington, Delaware, to oversee the wedding of her daughter and visit old friends in plant pathology.

August 30. Bent Skovmand, PhD 1976, on his way from a trip to Canada, stopped for a couple of days to confer with rust researchers here. Said he will

give a seminar on his next trip. Bent is with CIMMYT in Mexico.

September 21. Tom Kavanagh, PhD 1960, of the Kingsealy Research Centre, Dublin, Ireland, was here to confer about turf problems, including diseases.

October 5. Peter Dart, microbiologist and native of Australia, having spent several years with the International Crops Research Institute for Semi-Arid Tropics (ICRISAT) was on his way back to Australia via England and U.S.A. He came to Minnesota to discuss biological control of plant diseases with Drs. T. Kommedahl and C. Windels.

October 19. Virgil Jons, MS 1975, who was in the vicinity primarily to attend a meeting of the National Alliance of Independent Crop Consultants at Bloomington. Virgil has been an independent crop consultant in the Red River Valley for several years. He is employed regularly by about a dozen large farm operators who farm 2000-4000 acres each.

October 27. Robert Nyvall, PhD 1969, Extension Pathologist at Iowa State University, was here to see Bill Kennedy about the historical exhibit at the APS meetings in June 1983.

November 10. Howard Schwartz, MS 1975, took time off from attending a bean meeting at the Hotel Hilton. Howard is Assistant Professor of plant pathology at Colorado State University where he has been since 1980. His responsibilities are half in research and half extension work, principally with beans. Before coming to Colorado, Howard spent four years in Colombia, working with bean diseases. He is author of a field manual of bean diseases and editor of one on bean production problems.

November 21. Jon M. (Mike) Prescott visited with fellow uredinologists at the Cereal Rust Laboratory. Mike works for CIMMYT in Mexico.

Recent Graduate Students

Name, Academic Background
Starting Date - Adviser

ADHI, ELIZABETH; BS, Gadjah Mada University, Yogyakarta, Inodnesia; Industrial Microbiology, 1970.
F, 1983 - Kennedy

ALVAREZ, ELIZABETH; BS, National University, Palmira Colombia; Agronomy, 1979.
F, 1983 - Stewart

DIETRICH, ROBERT A.; BS, University of Wisconsin, Horticulture, 1975.
F, 1983 - Blanchette

HOYAS, GERMAN; BS, Universidad Nacional de Colombia, Agronomy, 1975 (Fulbright Scholar).
F, 1983 - Banttari

JOHNSON, KENNETH; BS, University of Minnesota, Plant Health Technology, 1979; MS Oregon State University, Plant Pathology, 1982.
F, 1983 - Teng

McLAREN, DEBBIE; BS, University of Manitoba, Plant Science, 1976; MS, University of Manitoba, Plant Pathology, 1983.
F, 1983 - Banttari

OSTRY, MICHAEL; BS, University of Minnesota, Forestry 1971; MS University of Minnesota, Plant Pathology, 1978.
W, 1983 - Anderson

OTJEN, LEWIS; BS, University of Minnesota, Horticulture and Plant Pathology, 1982.
F, 1982 - Blanchette

SECK, MOUSSA; BS, Institut Agronomique et Veterinaire Hassan II, Morocco, Plant Pathology, 1981.
W, 1983 - Teng

TOUFIQ, EL MOSTAFA; Institute Agronomique et Veterinaire Hassan II, Morocco, Phytiatry, 1979.
F, 1983 - Wilcoxson

Special Projects Committee Active

by Carl Matyac

The Special Projects Committee was organized during the 1981 academic year as a result of student interest in several projects which were not associated with the responsibilities of the Graduate Student Representative or the Thursday Night Seminar Committee. The only criteria for membership on the committee was to be a student in the department and to be interested in helping on committee projects. The first official agenda consisted of four projects: 1) work on a departmental photoboard 2) develop a new-student orientation program 3) find a source of money for a student-sponsored guest speaker and 4) make some contributions to the Aurora Sporealis.

The first two projects arose out of the concern that in such a large department with a high student turnover it is often difficult to become familiar with all the departmental personnel and to learn how to function within the department. In order to alleviate the first problem, Jane O'Laughlin and Carl Matyac set to work on the construction of a photoboard. Dr. D.W. French was contacted and he agreed that the project deserved the financial support of the department. Within a short time, all the faculty, graduate students, secretaries and technicians were photographed by Carl and Jane. The prints were mounted and displayed in an impressive wood and glass enclosure mounted outside the main office door.

The new-student orientation program was organized by Janice Kaye and Joe O'Brien and completed with the help of the office staff. They developed a Department of Plant Pathology New

(See page 14)

ZAKHARY, RASMY N.; BS University of Assiat, Egypt, Pest Control, 1969
F, 1983 - Castor

RECENT GRADUATE STUDENTS



Elizabeth Adhi



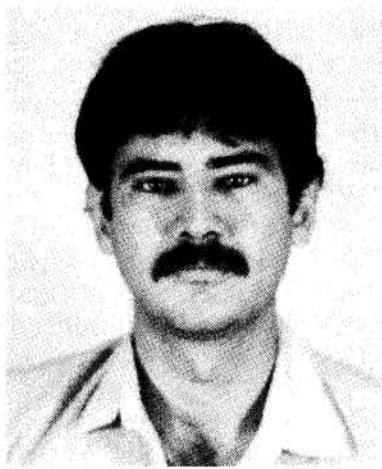
Elizabeth Alvarez



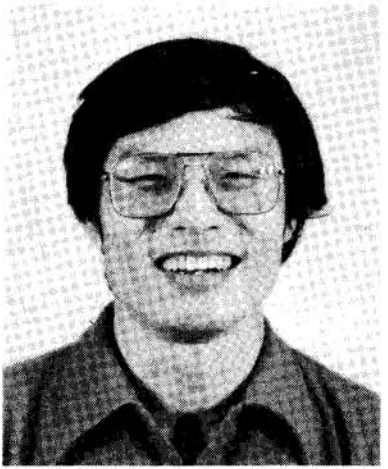
Indre Bildusas



Robert Dietrich



German Hoyas



In Sung Hoang



Kenneth Johnson



Tze-Hong Lu



Adalberto Martinez B

Employee Checklist which everyone now receives as they enter the department. The checklist includes numerous helpful items such as a complete list of the faculty and their speciality, greenhouse and field plot policy, how to order supplies, as well as the location of the nearest beer and pizza joint.

The third project, finding money within the university system which could be used to host the visit of a student-selected outside scientist, found success only after running into an administrative brick wall. The idea was to lease a beverage vending machine and collect the proceeds. It was estimated that within one year sufficient funds would be collected to proceed with our project. Mary Palm contacted the Office for Finance and Operations hoping to receive permission to lease a vending machine. Mary was quickly informed that these services are provided the University Vending Services and that no special group is allowed to lease a machine no matter how worthy the cause. Approaching that office again it was suggested some of the funds procured by the University Vending Services be available to groups needing money for educational purposes. With this proposal Mary contacted the Office of Support Services and Operations. The proposal was accepted and a grant of \$750.00 was received.

After much debate among the students it was decided that Dr. Donald T. Wicklow of the Northern Regional Research Center at Peoria, Illinois be invited as the first student sponsored scientist. Mary made all the travel arrangements and organized an itinerary for Dr. Wicklow. He visited the department on December 1-3, 1982 and presented three lectures: "Ecological Ideas and Fungal Communities", "Predator Defense Systems of Seed Eating Fungi", and "Research Activities at the Northern Regional Research Center". The response to Dr. Wicklow's visit was tremendous.

His excitement and enthusiasm seemed to rub off on the residents

of Stakman Hall not only because his subject matter was so unique but also because of the grad students pride in organizing such a successful occasion.

Before the fervor of Dr. Wicklow's visit diminished, Carl Matyac was nominated to use the balance of the grant to organize the selection of, and make arrangements for, a second speaker. This time the committee selected Dr. Diana W. Freckman, a nematologist at University of California, Riverside to be the next guest scientist. Dr. Freckman visited the department April 28 and 29, 1983 and presented two seminars: "Nematodes: How they Survive" and "Nematodes in Soil Ecosystems". As with Wicklow's visit, Freckman left a spark of enthusiasm in the department especially with the graduate students which was unequalled by other visitors in the department. It seems as though the opportunity of being able to choose, make arrangements for, and host a speaker caused many grad students to be more involved and attentive to the visitors' presence which was in turn reciprocated by the visitor with a special effort to relate to and communicate with the grad student body. Although these types of interactions are common place between professionals, it is rare for grad students to have such an opportunity. Most of the students felt that the organization of the visits has as much educational value as the content of the formally presented material.

Due to the overwhelming success of our experience with Drs. Wicklow and Freckman, Linda Treeful and Mary Palm approached the Office of Support Services and Operations with the proposal to continue funding of our program and were again successful!

The fourth part of the Special Projects agenda was a desire to make some contributions to the Aurora. This came as a response to a request by Carol Windels who was then editing the Aurora's 75'th Special Issue. It had been decided that this issue would

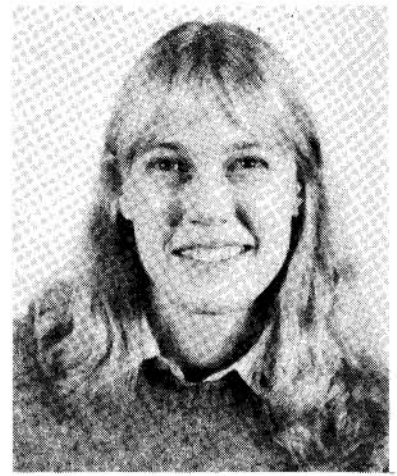
STUDENTS AND SCHOLARS



Debbie McLaren



Bridget Renlund



Laura Schickli



Moussa Seck



El Mostafa Toufiq



Cheng-Guo Wang

contain a brief description of all the projects in the department. In order to supplement this idea, Dan Gillman, Linda Treeful, Janice Kaye, and Bill Livingston managed to corral and photograph the projects as groups. These photos became a significant contribution to that section of the Aurora.

The Special Project Committee is still in existence but fluctuates in membership and activity. It has been an excellent forum for students to make contributions to the department without being elected or appointed or having to serve as a member any longer than they wish.



Carl Matyac and Diana W. Freckman

AFTERNOON SEMINARS

by Philip Graham

The departmental seminar series for 1982-83 was divided into a colloquium during fall quarter, and two seminar sessions during spring quarter. All seminars were held in Stakman Hall.

The topic of the fall colloquium was Specificity in Parasite-Host Relationships, under the direction of Dr. Zeyen. These sessions were held Tuesday afternoon. The titles and their respective speakers were:

Cytological features associated with partial resistance to cereal powdery mildew, by Dr. T.L.W. Carver, visiting scientist.

Physiology of fungal haustoria, I and Physiology of fungal haustoria, II, by Dr. J.L. Gay, visiting scientist.

Epidermal cell responses to attempted direct penetration by fungi, by Dr. R.J. Zeyen.

Lectins and host-parasite specificity, by Paul Goodwin.

Toxins and host-parasite specificity, by Kosim Kardin.

Common antibodies in host-parasite relationships, by Clint Kohls.

The evolutionary basis for parasitism, by Brahim Ezzahiri.

The winter quarter seminars consisted of a Monday afternoon session and a Wednesday afternoon session. The topic for the Wednesday seminar series, under Dr. Kommedahl, was Biological Control of Plant Diseases. The topic of the Monday afternoon series, under Dr. Baumer, was Recent Advances in Phytobacteriology. The demand by students wanting to give seminars was so great that both seminar series for winter quarter overlapped into spring quarter.

The titles and speakers for the series on Biological Control of Plant Diseases were:

Nature of pathosystem in root disease and biocontrol, by Carl Matyac.

Biocontrol in take-all of wheat, by Jesus Perez-Fernandez.

Trichoderma species as biocontrol agents: a critique, by Linda Treeful.

Disease suppressive soil mechanisms, by Janice W. Kaye.

Phyllosphere concept and its role in foliar disease control, by Philip Graham.

Cross protection by viruses, by Hamed Abbas.

Induced resistance in barley leaves by inoculation with the powdery mildew fungus, by In-Sung Hoang.

Cultural practices that favor antagonism to pathogens, by Kosim Kardin.

Hyperparasitism for disease control, by Coy Jones.

Fungal parasites of cereal cyst nematode, by Judy Thies.

Conservation tillage in relation to plant diseases, by Brahim Ezzahiri.

Organic amendments to enhance microbial antagonists of soil-borne phytopathogenic fungi, by Dan Gillman.

Biological control of pathogens in greenhouses, by Bill Randle.

Interaction between vesicular-arbuscular mycorrhizal fungi and root pathogens, by Mohamed Achouri.

The titles and speakers for the series on Recent Advances in Phytobacteriology were:

Siderophores: critical determinants in the growth promoting activity of rhizobacteria, by Jane O'Laughlin.

Immobilization of bacteria as a plant defense mechanism, by William Shane.

The role of the phytoalexin glyceollin in resistance of soybean leaves to Pseudomonas syringae pv. glycinea, by Indre Bildusas.

Bacterial mobility in relation to pathogenicity, by Laura Schickli.

Xanthomonas phaseoli in navy beans: density and distribution in relation to disease development, by Laura Todd.

Bacteriocin production and semi-selective medium for detection, isolation, and quantification of Pseudomonas solanacearum in soil, by Adalberto Martinez-Barreras.

Evaluation of seedborne Xanthomonas phaseoli and Xanthomonas phaseoli var. fuscans as primary incula in bean blights, by Suleiman Al-Kherb.

Chemotaxis in plant pathogenic bacteria, by Jeff Tate.

Methods for detection of Xanthomonas campestris in crucifer seed, by Bridget Renlund.

Antibiotic inhibition of the hypersensitive reaction induced by Pseudomonas pisi in tobacco, by Joe O'Brien.

Genetic factors controlling the host range of Agrobacterium tumefaciens, by Brahim El Yousfi.

THURSDAY NIGHT SEMINAR

by Linda Treeful

Members of the Thursday Night Seminar Committee for 1982-1983 included graduate students Dan Gillman, Clint Kohls, and Monte Miles with faculty advisors Dr. Thor Kommedahl and Dr. Loral Castor.

One of the unique things about TNS this year was that faculty members were asked to be hosts during the spring quarter; students were able to ask anything (well, almost anything) they wanted of Dr. Steve Johnson, Dr. Wilcoxson, Matt Moore, Dr. Kommedahl, Dr. Zeyen, Dr. Stienstra, Dr. Bissonnette, Dr. Meronuck, and Dr. French.

Mary Sortland won the Bread Baking Contest with her entry of Brown Rye Bread with Apricots. Winners of the cookie baking contest included Jesus Perez-Fernandez and Mary Sortland. One of the more unusual entries was potato cookies, made by Ken and Steve Johnson.

The seminar sequence started off with the traditional introduction TNS followed by a seminar titled "How I Spent My Summer Vacation". The rest of the seminars were as follows:

1982.

- Oct. 14 Greenhouse management, by Dan Adair
- Oct. 21 Citrus die back in India, by Dr. Rachaudrie
- Oct. 28 Air pollution produced by DC high voltage power line, by Dr. Greg Pratt
- Nov. 4 Open Forum - Discussion: Value of the Ph.D. dissertation
- Nov. 11 Thesis proposals: Janice Kaye, Clint Kohls, Bill Livingston, and Monte Miles

Thursday Seminar - continued.

- Nov. 17 Grain storage, by Dr. Meronuck
- Dec. 2 Research Activities at the Northern Regional Research Center, Peoria, Illinois, by Dr. D.T. Wicklow; potluck dinner preceding.
- Dec. 9 Present and future role of genetic engineering in agriculture: panel including Dr. Green, Dr. Giegenback and Dr. Rubenstein
- 1983.
- Jan. 13 Crop yield assessment, by Carroll Rock
- Jan. 20 Careers in plant pathology, open forum
- Jan. 27 Wood decay fungi, by Dr. Blanchette
- Feb. 3 Visual scales for disease assessment, open forum
- Feb. 10 Open forum
- Feb. 17 Sugar Beets: Production and disease, by Jim Percich, Bill Shane, Mike Hotchkiss
- Feb. 24 Disease situation assessment for 1982 and outlook for 1983 by Dr. Bissonnette
- Mar. 3 The evolution of deuteromycete systematics, by Mohamed Achouri, Joe O'Brien, Mary Palm, Elwin Stewart and Mike Wingfield
- Mar. 10 The future of agriculture, Dr. R. Sauer, Director of Minnesota Ag. Exp. Station
- March 31 Computer applications in plant pathology (trial run for plant disease article, by P.S. Teng): cookie baking contest
- Apr. 7 The Development of chemical fungicides, by Larry Hendrick, BASF Chemical Co.
- Apr. 14 Cancelled because of snow
- Apr. 21 New directions for farm policy, by Dr. Schuh, Head of Department of Agricultural and Applied Economics
- Apr. 28 Nematodes: How they survive, by Dr. Diana Freckman; pot luck dinner
- May 5 Consulting and testifying as an expert witness, open forum, by Mr. Willeke
- May 12 Some juicy bits on the biology, ecology, and taxonomy of Verticillium sp. worldwide by Mike Wingfield
- May 19 Sunflower diseases: an overview, by Dr. Carol Windels
- May 26 History of wheat research - major contributions to plant pathology from wheat development, by Dr. Schafer
- June 2 Poster practice session for APS meetings

VISITING AUTHORITIES TEACH CLASSES

Dr. Robert Partyka, Director of Horticulture, Chemlawn Corporate Center, Columbus, Ohio, gave three lectures on abiotic disease May 8 - 14, 1983, replacing Dr. Sagar Krupa, who was on leave. Also for Dr. Krupa, Dr. Nigle Bell taught the MS core course May 14-30. Dr. Bell is Assistant Director, Centre for Environmental Technology, Imperial College of Science and Technology, London.

During the fall quarter, 1982 guest lecturer for the PhD core curriculum course on host-parasite interactions was Dr. Harry Mussel, Boyce Thompson Institute of Plant Research, Cornell University.

COLLOQUIUM SPEAKERS

During the fall quarter, 1983, the Plant Pathology Colloquium, Pl Pa 8200, was enriched by the presence of a number of distinguished speakers from other institutions. Their visits were made possible by support from the E. C. Stakman Fund. They were:

September 28. Dr. Jeremy Burdon, Division of Plant Industry, CSIRO, Canberra, Australia. "Co-evolutionary interactions between plants and their parasites".

October 12. Dr. Albert Ellingboe, University of Wisconsin. "Genetics of host-parasite interactions".

October 19. Dr. Richard Riedel, Ohio State University. "Nematode-potato-Verticillium interactions".

October 26. Dr. Richard Fredericksen, Texas A & M University. "Transfer of agricultural technology to developing countries; the sorghum model".

November 2. Dr. James Lippincott, Northwestern University. "Host recognition in Agrobacterium infection".

November 9. Dr. Joan Bennett, Tulasne University. "Genetics and intermediates in biosynthesis of alfatoxin".

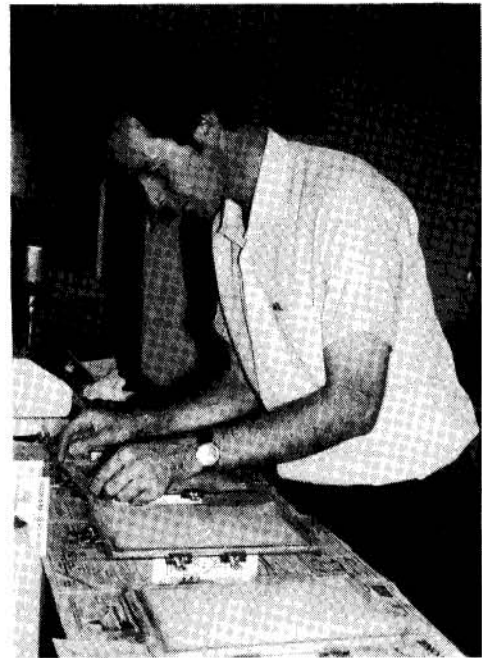
November 16. Dr. Bryce Kendrick. University of Waterloo, Waterloo, Ontario, Canada. "Current trends and problems in the systematics of conidial fungi".

November 23. Dr. Mike Jeger. Texas A & M University. "Modeling plant disease epidemics: theoretical or systems approach?".

November 30. Dr. Martin Hubbes, University of Toronto, Canada. "Hypoxylon canker".

December 7. Dr. Howard Ferris, University of California, Riverside. "Nematode distribution and density: impact on crop yield and management".

December 14. Dr. Linda M. Kohn, University of Toronto, Canada. "Understanding the Sclerotineaceae".



Jeremy Burdon

PHILIP HAMM LECTURES

Dr. Michael G. Boosalis, PhD 1951, delivered the 1982 Philip C. Hamm Memorial Lecture at the Earle Brown Center November 1. He spoke on "Ecofallow - a conservation tillage practice affecting plant health". Boosalis was Head of the Department of Plant Pathology at the University of Nebraska. He recently resigned from the headship.

The Hamm lecture for 1983 was given November 7 by Dr. Donald Marx, USDA Forestry Laboratory, Athens, Georgia. He spoke on "Mycorrhizae and Forestry, a world-wide view".

Guest Speakers

During the fall quarter of 1982 and all of 1983 approximately 35 visitors from other institutions, foreign and domestic, gave lectures in the Department. Some of these individuals are named in this Aurora under Seminars, Colloquia or Student Special Projects. Others presented informal seminars and group discussions. Among them were the following:

November 5, 1982. Dr. H. S. McNabb, Iowa State University.

May 25, 1983. Dr. Shozo Takai, Great Lakes Forest Research Centre, Sault St. Marie, Ontario.

June 2. Dr. J. C. Zadoks, Agricultural University, Wageningen, The Netherlands.

June 23. Dr. Blanche C. Haning, North Carolina State University.

July 14. Dr. Edward R. French, MS 1963, Head of Plant Pathology, International Potato Research Center, Lima, Peru.

September 8. Dr. T. N. Anathakrishnan, Loyola College, Madras, India.

November 2. Dr. Barry Jacobsen, PhD 1973, University of Illinois, Urbana.

November 7. Dr. Richard Hampton, Oregon State University.

November 17. Dr. Mike Stranghellini, University of Arizona.

December 8. Dr. A. Schmitthenner, Ohio State University.

Visiting Scientists

Mr. Chang-Cheng Hu has been in the Cereal Rust Laboratory since June, 1982, working with Professor Alan Roelfs. Mr. Hu received the MS in plant pathology from the University of New Hampshire in 1982. Before that he did research on cereal rusts for several years at the Suchow Agricultural Research Institute, Jiangsu Province, Peoples' Republic of China.

Professor John Gay of the Department of Pure and Applied Biology, Imperial College of Science and Technology, London, was the first E. C. Stakman Visiting Professor. He was resident in the Department from September 20 to October 30, 1982. During that period he made two colloquium presentations and several other talks on cereal rusts, discussed thesis problems with students and did research on haustorial function.



Frigyes Hajdu

Frigyes Hajdu arrived in September, 1983 to spend ten months in the Department under the International Student Exchange Program. Frigyes is Chief Engineer at the Plant Protection and Agrochemistry Station, Velence, Hungary. He is working with Dr. James Baumer on diseases of sunflower.



I.A. Watson

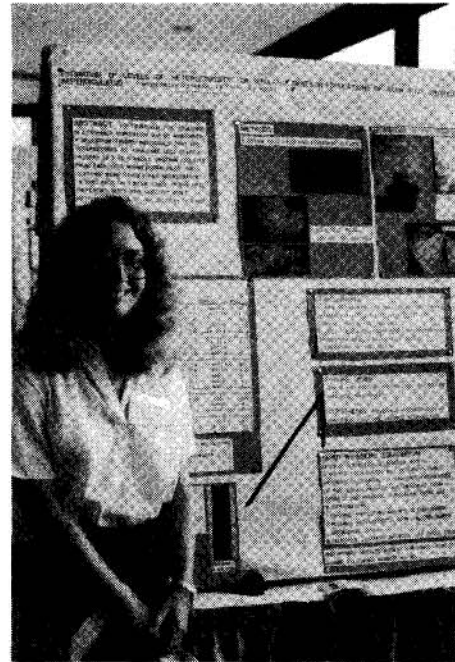
Irvine A. Watson, PhD 1941, spent the period September 8 - November 29, 1982 in the Cereal Rust Laboratory investigating the generation of variability from somatic crosses in Puccinia graminis tritici. Dr. Watson is Professor Emeritus of the University of Sydney, Australia.

Alison Woods, a student of Professor John Gay in the Imperial College of Science and Technology, arrived June 30, 1983 and spent eight weeks working with Dr. Zeyen on fungus haustoria, principally of the pathogen causing powdery mildew of peas.

Dr. Colin Birt spent several days in the Department during July, 1983 studying methods used in Minnesota municipalities in dealing with tree diseases. He is County Land Agent for the Warwickshire County Council, Warwick, England.

Cheng-Guo Wang arrived in May 1983 to spend two years taking course work and doing research on diseases of trees, especially Diplodia dieback of pine and pine gall rust. Wang is a graduate of Northwestern College of Agriculture, Wugong, Shaanxi, Peoples' Republic of China. He is working with Dr. Blanchette.

Dr. Jeremy Burdon came to the Department in March, 1983 to work with Drs. Jim Groth and Alan Roelfs on the isozymes in cereal rusts and rust population genetics. Jeremy, with a background in ecology and plant pathology, is Research Scientist, Division of Plant Industry, CSIRO, Canberra, Australia. He returned to Australia in November, 1983.



Helen Alexander

Dr. Helen Alexander left Minnesota on November 14, 1983 for Louisville, Kentucky. Her husband, David, accepted a position in the Biology Department in Bellarmine College in Louisville in August. Helen expects to have an adjunct appointment in biology in the University of Louisville to continue her research. She will continue to work with Alan Roelfs in the Rust Research Laboratory and expects to visit Minnesota occasionally. Helen had been in the Department as Research Associate since August 1, 1982.

New Staff - Civil Service

Dann K. Adair became Research Plot Coordinator (St. Paul) on July 1, 1982. Before coming to Minnesota Dann was Agricultural Gardener in the Department of Plant Pathology at the University of Illinois, Urbana. He replaced Loren Nickelson.

On March 1, 1983 James Rowe replaced Orville Bielenberg as Research Plot Coordinator at Rosemount. Jim holds a BS in mathematics and computer science from Mankato State University. He ran his own farm near Medford, MN, 1973-82.

Erik Biever has been the plant pathology librarian since July 16, 1982. His title is Library Assistant. Eric attended the University of Minnesota, majoring in political science.

Lewis Otjen is Junior Scientist, working on forest tree diseases under Professor Blanchette since July 1, 1982. He is also a graduate student in forest pathology.

Thomas E. Goodell is a Senior Laboratory Technician working in Professor Brambl's laboratory. He started work December 15, 1982. Tom is a candidate for the PhD in biochemistry.

Stuart E. Johnson accepted a position as Applications Programmer, March 7, 1983. He works with Professor Zeyen. Stuart attended South High School in Minneapolis and Southwest State University in Marshall, MN. His work deals with "Development of original software (which) will depend upon knowledge of sequential development of fungal cells...logic pathways to simulate this development, recording pathways and grouping of like events for statistical analysis" (Just in case someone doesn't know what an Applications Programmer does).

Elizabeth A. Ozmun is Senior Laboratory Technician working for Dr. Baumer. She joined the Department on October 16, 1982. With BS degrees from the University of Minnesota, 1955 and 1982, Elizabeth was formerly Supervisor in the Microbiology and Immunology Department, Northwestern Hospital, Minneapolis.

Cheri Olson has worked at the plant pathology Rosemount station as Research Plot Technician for the past two years. Cheri and husband Robert live in Lakeville, MN. He is County Extension Agent for Dakota County.

Sandra Gould has worked in the Plant Disease Clinic as Laboratory Technician since June 8, 1981. She has a BA from Macalaster College and formerly worked as Medical Technician in hospital laboratories.

New Staff - Academic Research

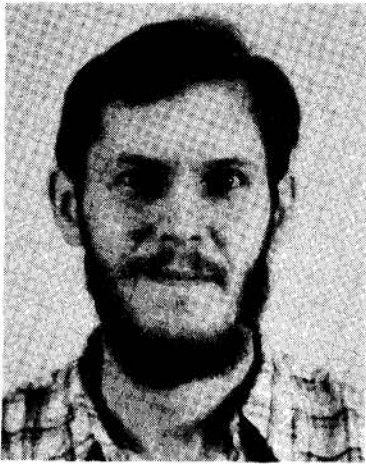
Steven B. Johnson is Research Associate in the epidemiology project, Professor Teng. He joined the project on December 5, 1982. His education includes: BS, plant pathology, University of Wisconsin, 1977; MS, plant pathology, University of Maine, 1979; and PhD, University of Florida, 1982.

Charles L. Guy joined Dr. Brambl's group on September 21, 1983 as Research Associate. He holds a BA degree from the University of South Florida, the MS from the University of Central Florida, and the PhD in horticulture, University of Minnesota.

Others presently on the Academic Research staff, and named in earlier Auroras include:

Kajal Chatterjee, Research Associate, mycotoxins, Professor Mirocha.

NEW STAFF MEMBERS



Dann Adair



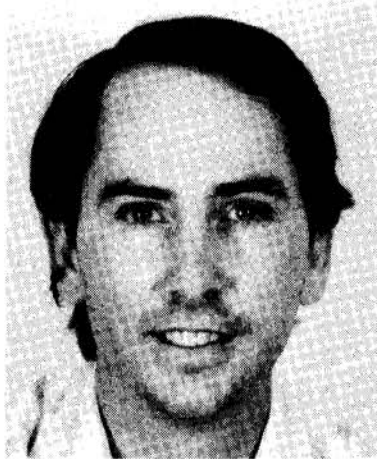
Erik Biever



Thomas Goodell



David Hewetson



Charles Guy



Sandra Gould

David Hewetson, Research Fellow,
mycotoxins, Professor Mirocha.

Mary Palm, PhD 1983, Research Associate,
mycology, Professor Stewart.

Robert Pawlosky, Research Fellow,
mycotoxins, Professor Mirocha.

Jill Porkony, Extension Fellow, Plant
Disease Clinic, Professor Stienstra.

Greg Pratt, PhD 1982, Research Fellow,
air pollution, Professor Krupa.

Bill Shane, PhD 1983, Research Fellow,
epidemiology, Professor Teng.

Loral Castor, Research Associate, grain
storage.

Kathy Kromroy, MS 1982, Research
Specialist, epidemiology, Professor
Teng.

Disease Clinic Clients Charged

by Jill Pokorny

The year 1983 was one of transition and change for the Plant Disease Clinic. Due to severe cutbacks in funding, the extension clinics in plant pathology, entomology and horticulture were faced with finding a supplemental source of funding or closing their doors. Hence, a pilot program called Dial "U" was initiated.

Dial "U" is a telephone charge-back system set up in association with Northwestern Bell. Callers from the metro area can dial the 900 number, receive information, and a charge is automatically made to their monthly phone bill. Currently, there are 2 dial "U" services: The Insect and Plant Information Clinic and Teletip.

The Insect and Plant Information Clinic consists of a pool of trained phone technicians ready to discuss and diagnose insect and plant problems. It costs the caller \$2.00 and involves faculty and staff in the departments of plant pathology, entomology and horticulture. At times, a caller's problem requires follow-up lab work to confirm a diagnosis. In such cases, the caller is asked to submit a sample and no additional charge is made for the lab analysis.

The second service is called Teletip and consists of prerecorded tapes on a variety of topics. Currently a library of over 100 tapes is available. It involves the departments of plant pathology, entomology, horticulture and the College of Home Economics. Originally, a \$1.00 fee was charged for Teletip, however, due to low public demand, it will become a free service used to promote the Insect and Plant Information Clinic. Each tape will direct the caller to Insect and Plant Information if they have further questions on the topic.

A summary of clinic users was conducted via phone interviews and mail surveys to determine user acceptance of the charge and user satisfaction with the service. The data collected in the survey indicate that users are very satisfied with the service, willing to pay for the information, and willing to re-use the service in the future. Callers felt the University was a very reliable source of information; many volunteered comments that it was an unbiased source of information.

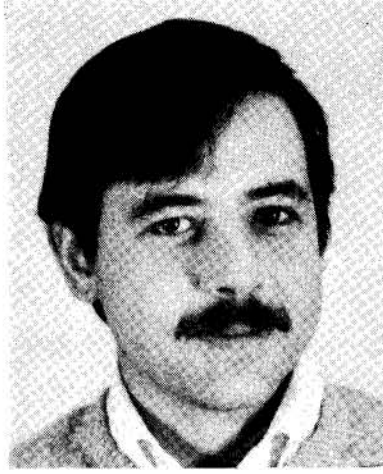
It is clear that while those who choose to use the service are very satisfied many people are simply choosing not to use the service. The total number of contacts dropped substantially after the charge went into effect. For instance, plant pathology, entomology, and horticulture experienced a 64%, 75% and 92% reduction in total contacts respectively. This strongly suggests that many "old users" are balking against the charge and are seeking alternate sources of information.

Nursery and garden centers are likely the most frequently used alternate sources of information. In fact, several nursery and garden centers surveyed reported a substantial increase in insect and plant related questions from the public. With time, many "old users" may find alternate information sources inadequate and return to the University for help.

It is impossible to judge the success of Dial "U" after only one year. The program must give the public a chance to absorb the shock that the extension clinics are suddenly charging for services. Clearly, those who use the service are very satisfied. Now we must win back "old users" and encourage "new users" by effective publicity and word of mouth. Given time, the Dial "U" program has excellent potential to succeed.

NEW OR RECENT STAFF

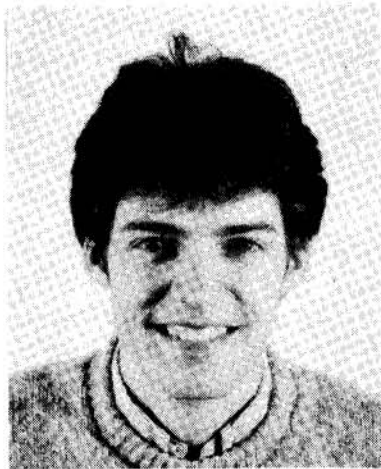
Cheri Olson



Steven Johnson



Stuart Johnson



Lewis Otjen



James Rowe



Patti Sebesta

Newsletter In Third Year

Connie Post and Kelly Sieg are the editors and originators of a weekly news bulletin for the Department. It announces seminars, special speakers, examinations passed, marriages, births and numerous other items that would otherwise pass unnoticed by a majority of the Department. It saves money because many announcements and memoranda, official and otherwise, can be printed at one time, instead of making a special job of each. That is,

if the authors of the memoranda can wait until Monday or foresee the need for a memorandum before it becomes a crisis. There are still quite a few messages that end up in the waste basket and it costs \$0.08 per sheet to run the Xerox. The editor of Aurora appreciates the Newsletter because it records important news that should eventually appear in Aurora and might otherwise be forgotten or overlooked. Connie and Kelly merit special credit for the idea and for putting it into action. (Connie often does the typing during the weekend).

Orville Bielenberg Retires

by Linda Treeful

Orville Bielenberg was born in Woodbury, Minnesota and managed the 100+ year old family farm there until 1961 when he accepted the job of Plot Supervisor at Rosemount. At that time Dr. Kernkamp was the department chairman. To say Orville has led a productive life is an understatement. He had been farming for twenty years when he changed jobs to work at Rosemount. In 1967 he was elected to the position of Woodbury's first mayor and was re-elected for a total of 15 1/2 years, watching the town grow from a population of 3,000 to 12,000. Orville has been very active in community affairs including serving as a member of the Soil Conservation Board. He and his wife, Bernice, have participated in a Student Exchange Program, hosting 8 students from Sweden, Germany and Denmark over the years. When Orville retired from the department his official title was Research Plot Coordinator, of which there are but a few in the state.

Orville normally spent winters working in the greenhouses on the St. Paul campus but during the past two winters he helped Connie and Kelly in the budget office. Orville was liked by all who knew him perhaps because he enjoyed his work so much and always had a smile on his face. His extensive experience in farming and contacts within the local agricultural community made him an invaluable asset to the department. A retirement reception was held for him and Bernice on January 29, 1983 in the Cherrywood Room, St. Paul Student Center. Over 90 friends attended the reception. Dr. French presented Orville with a book of congratulatory letters and a gift from the department. Following his retirement Orville and his wife spent 2 months traveling. Orville's presence and know-how will be sadly missed.

Orville retired as Mayor of Woodbury in January, 1982. The grateful citizens declared January 16-22, "Orville Appreciation Week" and everyone wore big buttons which carried the message. On January 16 there was an open house and program at the Woodbury Senior High School. A bust of Orville was commissioned and stands in the City Hall.

Other Retirements

Weston J. Martin, PhD 1942, retired September 30, 1983, from his position as Professor and Head, Department of Plant Pathology and Crop Physiology, Louisiana State University. Wes became a member of the faculty at L. S. U. in 1947 after serving there for five years with the USDA. He became Head in 1977. He was honored at the Department with cake and coffee, and at a reception at the L. S. U. Faculty Club.

Attending the reception were St. John P. Chilton, PhD 1938, and Mrs. Chilton. Dr. Chilton was Head at L. S. U. from 1950 to 1976.

Harry C. Young, PhD 1949, retired June 30, 1982 as Professor of Plant Pathology at Oklahoma State University. He was honored at a surprise dinner by former students. The Youngs now live at Pagosa Springs, Colorado 81147.

W. E. Sackston, PhD 1947, Professor of Plant Pathology, MacDonald College, McGill University, retired from teaching September 1, 1983, but will continue his research with a 3-year award from the Natural Sciences and Engineering Research Council of Canada. He will also continue to direct graduate students.

In *Phytopathology News* for May, 1983 the Department of Plant Pathology, University of Nebraska - Lincoln, solicits applications for the position of

Head. This, by sheer logic, leads us to the conclusion that the Erstwhile Head, M. G. Boosalis, PhD 1951, was about to retire or "step down."

Kenneth R. Bromfield, PhD 1957, retired from his position as Plant Pathologist with the ARS, USDA at Frederick, MD. Ken joined the Crops Division of the Army in 1959 and the USDA in 1971. He is noted principally for his work with rusts of cereals, peanuts and beans.

Julio Bird, PhD 1956, retired June 30, 1982. He was Head of the Department of Plant Pathology, University of Puerto Rico and Associate Director of the Experiment Station.

A.W. (Willie) Feldman, PhD 1947, retired October 31, 1983 from his

position at the Agricultural Research and Education Center, Lake Alfred, Florida. The Center is a branch of the University of Florida. Willie had been with the University for 25 years and was known internationally for his research on diseases of citrus.

Professor John E. Mitchell retired December 31, 1983 from the Department of Plant Pathology at the University of Wisconsin. He was formerly Chairman of the department there. John graduated from the University of Minnesota in 1939 and worked as a research assistant in the Department in the early 1940s. He received the PhD in biochemistry at Wisconsin. John is spending the first three months of his retirement at Kasestart University near Bangkok, Thailand on an FAO assignment.



Seminar in the old Tottering Tower. L - R: Coyt Wilson (with pipe), L. Dossdall, E. G. Sharvelle, S-M. Chen, ?, W. D. Thomas, ?, J. W. Hendrix, L. W. Melander (standing), D. A. Preston, H. Hart, M. B. Moore. Probably about 1940.

DEPARTURES

Coy Jones accepted a position as Regional Manager, Agricultural Division, Westbridge Research Group, effective in October, 1983. He will work in Florida, Georgia and Alabama. Coy was a graduate student in the Department from the summer of 1980 to 1983.

Kira Bowen, MS March, 1983, left in April for Taiwan where she worked at the Asian Vegetable Research and Development Center on a project directed by Professor Paul Teng. She visited Japan and Thailand before returning to the United States. In September she entered the University of Illinois, Urbana to study for the PhD in plant pathology.

Brian Steffenson left February 22, 1983 to go to Australia where he accepted temporary employment with the South Australia Department of Agriculture, Adelaide. He spent several months traveling in Australia and New Zealand. Brian entered the University of California, Davis, in the fall of 1983 as a candidate for the PhD.

Jenny Juzwik, PhD March 1983, accepted a post doctoral position as Research Fellow at the University of Toronto. She left Minnesota January 31, 1983.

Mike and Betty Smallwood Hotchkiss returned to Georgia in October, 1983. Betty accepted a position as Horticulturist with the American Camellia Society, Fort Valley, GA. Mike is considering several employment options.

James Kolmer, MS 1982 is a PhD candidate at North Carolina State University. He left Minnesota October 12, 1982.

Paul Goodwin, MS August, 1983, left September 2, 1983 to enroll in a PhD program at the University of California, Davis.

Laura Todd, MS, June 1983, is pathologist with the Jacques Seed Company, Prescott, WI. She started her job June 1, 1983.

Ellen Cypher, Research Assistant with Dr. Blanchette, resigned July 31, 1983 to move to University Park, PA, where her husband is a student in Penn State University.

Sixto Fernando Guiang III, Junior Scientist working with Dr. Krupa, resigned August 19, 1983 to enroll in the University of Minnesota Medical School.

Dan Gilman, who worked on the grain storage project since Summer 1981, returned to his former profession as psychiatric counsellor at Fairview hospital in Minneapolis. He left the Department October 1, 1983.

Alfredo Orellano, MS, 1982, returned to his native Venezuela in November, 1982. He anticipated a career in teaching plant pathology.

Wayne Gade, Research Associate with Dr. Brambl, December 1, 1981 to June 30, 1983, accepted a research position in the experiment station at Virginia State, a land grant institution at Petersburg, VA.

Cho-Li Fei, MS, 1983, transferred to the Department of Computer Science, Institute of Technology to work for an MS in that discipline. She retained her position as Research Assistant in plant pathology, working for Dr. Teng.

Dr. Tim Carver, Mrs. Angie Carver and son James left October 20, 1982 to return to their home in Aberystwyth, Wales, where Tim is Senior Scientific Officer in plant pathology at the Welsh Plant Breeding Station.

Mary Palm, PhD 1983, has accepted a position as Mycologist with the USDA/APHIS in Beltsville, MD. She will assume her new duties May 1, 1984.

ROSEMOUNT - 1982

by Orville Bielenberg

The Plant Pathology farm at Rosemount was a very busy and interesting place. I had two excellent workers in Nick and Cheri and I look at my last year at Rosemount as a successful season.

In 1982, the Rosemount farm consisted of slightly over 200 acres with cropping fields totaling about 192 acres. We had 135 different plots and fields ranging from 320 sq. ft. to 10 acres in size. There were thirteen different crops involved plus several large tree plantings.

During the past summer, 29 different professors and graduate students had research plots on the farm, including four from Entomology, and one each from Forestry, Horticulture, and Agronomy. Besides these plots, Rosemount personnel maintained the continuous cropping, crop sequence, and disease garden fields. Cash crops were produced on the fields not in use for research plots in 1982. Despite the dry season and the low grain prices, we sold

Jesus Perez Fernandez passed his MS final in May 1983 and returned to his former position at the Estacion Experimental Regional Agropecuaria Anguil, at Anguil (La Pampa) Argentina.

James Mital, MS, June 1982, is a candidate for the PhD in forest ecology at the University of Idaho.

Mike Wingfield returned to South Africa January 1, 1984, to become Plant Pathologist in the Plant Protection Research Institute, Stellenbosch, South Africa. Mike came to Minnesota in the fall of 1980 and studied the ecology of the pine wood nematode for his PhD thesis. He was a guest at a farewell tea in the Seminar room, December 9, 1983.

approximately \$17,500 in field crops. Weed control in 1982 was generally very good except in potatoes. Also tried solid planting navy beans and had very poor success as the weeds won out. The irrigation pump ran for a total of 262 hrs. this past summer. We irrigated 18 different plots principally wild rice, potato, sugar beets, and alfalfa.

Sugar beet plots returned to Rosemount after about 15 years so we activated the old beet machinery. The plots turned out very good despite many trying days of thinning. The wild rice area added a misting system, bird net cover, and fences to break the wind and was an active area in 1982.

Dr. Radcliffe, Dr. Whitney Cranshaw, and Dr. Ragsdale of Entomology had many plots and spent considerable time spraying, insect counting, and maintaining plots. I truly appreciate the excellent cooperation they have given over the years and the use of their John Deere 2040 tractor.

In 1982, we did nearly all the major field work ourselves using the general farm crew for field cultivating about two days during field preparation. It was also necessary to have them swath, combine and haul grain. The addition of a new Ford tractor in October was welcome and appreciated. It speeded up plowing and should be a great help in future years.

Maintenance of yard and field roads fills the spare moments and adds much to the appearance and atmosphere of the farm. Also, the large number of sprayers, planters, and other equipment need constant repair, up-keep, and alternations. In summary, I believe we have excellent equipment although some is 20 years old and will soon need replacement.

Department Endowment Funds

There are two groups of Departmental endowment funds: University Business Office Endowments, established by bequests and gifts, and the University Foundation, to which contributions are currently being made by individuals and groups.

The book value of the Business Office Endowments as of November 30, 1983 was as follows:

E. C. Stakman Fund	\$490,243.88
E. C. Stakman Endowment Fund (Stakman Award)	\$44,223.77
C. C. Bausman Memorial Fund	\$80,491.92
Helen Hart Endowment Fund	\$17,913.98

The market value of these funds was approximately 31.65% greater than the book value on November 30, but was 3.35% less than it was July 1, 1983, due to fluctuations in the securities markets.

The University Endowment Funds, with balances (approximate) are as follows:

E. C. Stakman Visiting Professorship	\$5,856
Plant Pathology Library Fund	\$27,144
Stakman Annual Softball Fund	\$1,431
Thomas W. French Memorial Fund (Student travel)	\$15,058
M. F. Kernkamp Endowment Fund (Scholarships)	\$10,000
Fred I. Frosheiser Endowment Fund ^{1/} (Scholarships)	\$40,000 ^{1/}
James Tammen Endowment Trust Fund	\$10,000 ^{1/}

^{1/} Pending.

Gifts, mostly of amounts less than \$1,000, have been made by approximately 100 individuals, most of which were designated for the Visiting Professorship or the Library Fund. Of these donors, fifty-four had MS or PhD degrees, or both, from the Department, four had BS degrees in plant pathology, three were minors and two were students in the Department who did not take

degrees. Fifteen were visiting scholars, mostly from other countries, and ten were various other friends of the Department. Four were previously on the plant pathology faculty, three are on the present faculty and one presently a graduate student. Three are widows of Old Timers.

Amounts of the gifts ranged widely:

Number of Gifts	Amounts
53	\$ 5 - 50
12	51 - 100
21	101 - 500
3	501 - 999
9	1000 plus

Following are the names of recent donors, including those making special endowments:

Geoffrey Ainsworth
 Axel and Mrs. Anderson
 Mark Andrews and Sharon Sussmilch
 Dr. H. Asuyama
 Henry D. Barker
 Eldon Behr
 A. M. Boyce
 Robert Brambl
 Campbell Soup Company
 Edwin Carley
 J. J. Castano
 C. M. and Katherine Christensen^{2/}
 J. H. Craigie
 R. S. Davidson
 Eduardo Casas Diaz
 William Donald
 Alicia Drage
 Carl J. Eide
 Albert Ellingboe
 Marshall Evans
 H. H. and Iva H. Flor^{2/}
 D. W. and Audrey French^{1,3/}
 Fred and Esther Frosheiser^{1,3/}
 Leonard Fucikovsky
 Hiroshi Fujii
 David Gardner
 Kazuo Goto
 George Hafstad
 Margaret Hanish
 Earl D. Hansing

Earle Hanson
 J. George Harrar^{2/}
 J. E. Hermansen
 Lee Hines
 Unji Hirua
 C. S. Holton
 Hugh H. Hotson
 Tadoki Inabe
 Jacob Janzen
 E. M. Johnson
 Lois Johnson
 M. F. Kernkamp^{1,3/}
 T. Kommedahl^{2/}
 Thomas Laskaris
 John Laurence
 Camille Lefebvre^{3/}
 Duane LeTourneau
 Charles Logsdon
 Shih-I Lu
 Mary Merrill
 William Merrill
 L. I. Miller
 Ayooha P. Misra
 T. W. and Annabelle Mew
 Donald Munnecke
 David Mumford
 Anne E. Newbery
 A. G. Newhall
 Robert Noble
 David Punter
 J. M. Prescott
 Louis Palmer
 Ned Raun
 Curt and Martha Roane
 Lewis Roberts
 Stella D. Rodenhiser
 M. C. Sanford
 Parker Sanders^{2/}
 Marjorie Schad
 Myrtle Schneiderhan
 Savel Silverborg
 John Skelly
 Clyde Shumway
 Bent Skovmand
 George Starr
 John Stevenson
 Deon Stuthman
 Theodore Sudja
 James Tammen^{2/}
 Thomas Hernandez T.
 Morris N. Teller
 A. Tjokrosudarmo
 W. H. Thornberry
 W. D. Thomas

H. D. Thurston
 Esther M. Tolaas
 Lawrence Tyner
 Gerald T. Vigue
 Isaak Wahl
 Monica K. Wallace
 I. A. Watson
 Ed Wellhausen
 Kenneth Wernimont
 Kathy Widin
 Chester Wismer
 Robert Zabel

^{1/} Special Endowment
^{2/} Donor of 1,000 or more
^{3/} Donor of 10,000 or more

Uses of Endowment Funds

The two principal efforts supported by the endowment funds have been the Visiting Scientist program and the Plant Pathology Library. These have been liberally supported by gifts from Old Timers and other friends of the Department. However, income from the principals in these funds which have accumulated thus far have not been sufficient to meet the present needs. Accordingly, income from the Stakman Fund has been used to support these programs. The decision to do this was made in staff meetings of the Department and has the moral support of Old Timers as evidenced by their gifts.

During the fall of 1938 ten individuals from other institutions gave seminars or colloquia in the Department (see Visiting Scientists and Speakers, elsewhere, this Aurora). The benefits arising from the visits of these people needs no comment.

The library situation was more critical. Adequate space for a superior departmental library was planned for the new addition to Stakman Hall. In the summer of 1983, well after construction was started on the building, the University Central Library System announced that it was withdrawing support from the plant pathology library. It was virtually impossible to change the building at that stage and

the prospect of losing the library was most discouraging. In order to avoid this, the consensus of the faculty was to continue to use present endowment funds to pay for library staffing and a small supply budget. An agreement was drawn up to that effect, signed by members of the Department and of the library and college administration. Presently the amount involved will be about \$24,000 annually.

The Department is thus assured of a library that will continue to be one of its greatest assets and help to ensure its position as a leader among plant pathology Departments in the world. It will be more than a place for books. It will have computerized cataloging, computerized information retrieval for literature searching on many data bases, autotutorial carrels for A-T study of diseases and many other features.

In time the Library Fund will be large enough so the income from the Stakman Fund can be used for other purposes. At present funds for student scholarships and fellowships are available in other endowments and several new endowments for the purpose have recently been established or will become available later. The first two travel grants to graduate students have been made from the Thomas W. French Memorial Fund, filling a need that has always been present.

The Department is deeply appreciative of the many alumni, friends, and faculty who have seen fit to contribute over the years. These philanthropic efforts mean that future generations of plant pathologists will have enrichment resources for scholarships, a library of excellence, the intellectual stimulation of visiting scientists, funds for student travel to scientific meetings, our Aurora Sporealis and many more endeavors which we would otherwise be unable to support in an era of uncertainty and retrenchment. Because of this endowment program the Department at Minnesota will remain one of national excellence.

MANUSCRIPTS

During 1983 the editorial committee read 68 manuscripts. That is 12 more than in 1982. The manuscripts that passed through the committee were those intended to be official experiment station papers for publication in refereed journals or chapters in books. Faculty members also write articles that the editorial committee does not see, but these do not bear experiment station numbers.

The names of 26 faculty members, including federal adjunct appointees, appeared on from 1 to 10 manuscripts during the year. However, there were very few papers by single authors. Other faculty, graduate students, and various civil service scientists also appeared as authors, sometimes as many as five per paper.

An idea of relative "productiveness" can be had by apportioning fractional authorship for each paper. Thus, a person may be one of two authors ($1/2$) or one of three ($1/3$), etc. When this is done with the 1983 manuscripts and the fractions for each individual added, faculty authorship ranged from 0.2 ($1/5$) papers to 4.58. Of the 68 papers, faculty authorship accounted for fractions totalling about 38, or about 1.8 per individual. The other 30 fraction-equivalents were divided among 57 non-faculty people, or a little more than 0.5 papers per person. Individual non-faculty authorship ranged from 0.2 to 2.25 papers.

The research reported covered a wide range of problems--too many to be detailed here. Pathogenesis, biological control, races and resistance were prominent. There were good contributions to new techniques, mycorrhizae, mycology and epidemiology. Crops most frequently involved were trees and cereals.

Generally speaking, the manuscripts were well-written and only a few required major changes.

NEW BUILDING

by R.J. Zeyen

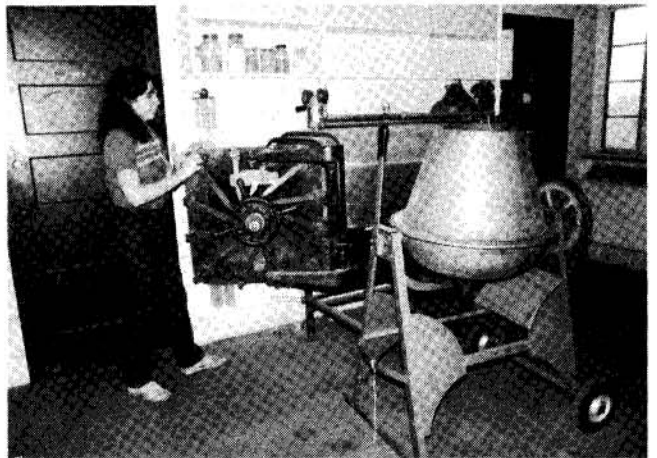
Since 1977 we have been talking and writing about the "new building"; well it has finally come to pass. Construction on the 17 million dollar Agronomy, Plant Pathology, and Soil Science Building started in May of 1983. This 5 story building physically joins Stakman Hall with the old Agronomy building to the south and to the Soil Science Building to the north, and is located on the western end (top of the hill) of these buildings. To make room for the new building the greenhouse and headhouse connected to Stakman Hall were removed, as were those connected with the old Agronomy building. Many memories and a great deal of noise, earth, and concrete were disturbed in the process. To date, the first 3 floors of the building have been constructed and enclosed, and it is anticipated that the entire project will be completed by the summer of 1985.

The Department's allocation of space in the new building (12,000 sq. ft.) when coupled with 10,000 sq. ft. of research laboratory space acquired from the Agronomy and Soil Science departments, in a complex trade of "exchange space", will mean that in total Plant Pathology will increase by 22,000 sq. ft. Thus, this building and expansion program is the most significant in the history of the Department since the construction of Stakman Hall in 1941. In addition to new teaching, research, library, and administrative spaces there is a plan underway to add a greenhouse for teaching purposes directly across Gortner Avenue from Stakman Hall (where the old "shops" building stands).

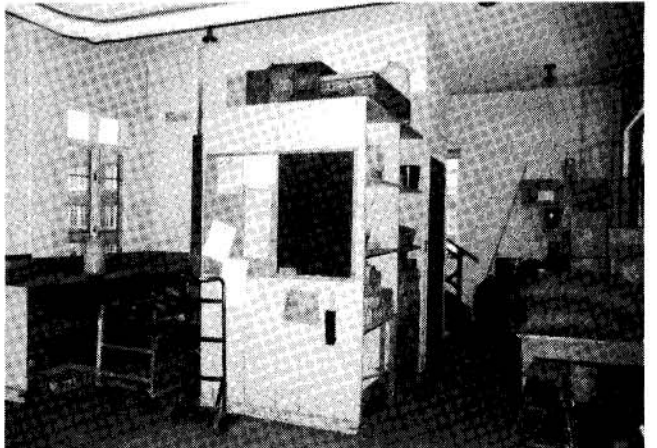
Sacrificed to progress and the hope of better facilities, the old greenhouse and head house behind Stakman Hall were demolished after nearly 42 years service.



Ellen Cypher. She is using the entrance to the building that most people used because it was the handiest, although it was really the back door.



Janese Thatcher tries out the old sterilizer.



Work benches and shelves for pots.

Wildflower Field Trips

by Linda Treeful

Thor Kommedahl was the fearless leader for two wildflower field trips in 1983. The first trip, to Nerstrand Woods State Park in Rice County, Saturday, May 7, was attended by Phil Graham, Dan Gillman and his son, Brett, Ellen Cypher, Fay Kommedahl, Bob and Kurt Skarjune and Linda Treeful. Although it was cold, windy and wet during lunch, once on the trail the sky cleared, it warmed up and turned into a beautiful afternoon.

Many interesting observations were made along the trail; animal forms were abundant, especially worms, thanks to Brett's sharp eyes. Among the 15 species of angiosperms observed was Dutchman's breeches, sharp-lobed hepatica, wild ginger, bloodroot, marsh marigold, white troutlily, wood betony and spring beauty. The highlights of the 19 angiosperms which were not yet in bloom were black snakeroot, mayapple, sweet cicely and golden alexander. Representatives of 10 genera of fungi were identified. Coffee and cookies were shared over an open fire afterwards.

The second trip, to Sherburne National Wildlife Refuge, Sherburne County, on Saturday, June 11, 1983, was hot and sunny. Participants included Fay Kommedahl, Mike and Betty Hotchkiss, Phil Graham, Paul Goodwin, Yin-Won Lee and Linda Treeful. Among the 26 flowering plants observed were yellow lady's slipper, hoary puccoon, blue-eyed grass, starflower and poison ivy. Twenty five not-yet-flowering angiosperms were identified including water hemlock, leadplant, culver's root, white and black snakeroot, hog peanut, and gooseberry. Also encountered along the trails were British soldier lichens, Polyporus sulphureus, Dibotryum morbosum, green tree frogs, an American toad, 2 snakes, a woodtick and zillions of mosquitoes. On the way home, Thor

treated all to ice cream cones at Dairy Queen, perhaps the highlight of the trip.

More trips are in the works for fall and next spring.

SPORTS

It appears to this observer (a non-athlete and hence unbiased) that among plant pathologists sports have deteriorated to the level of recreation and exercise. Apparently to some people, even dignified faculty members, skiing means going to northern Minnesota and taking lodging at a properly-equipped establishment. After skiing for a few hours, the participants retire to the sauna from which they emerge and jump into a hole in the ice on a lake (ice hole). These people are not Finns, not even Norwegians, but they seem to survive.

Occasionally recreation becomes adventure. Jim Groth, Chet Mirocha, Alan Roelfs and Jim Clemens recently made a loop, on skis, of about 10 miles starting from Camp Du Nord on Burntside Lake near Ely, where they were spending a weekend with their wives. They were following streams, where the skiing was easier, when Jim Groth, breaking trail, went thru soft ice on the Korb River. The water was about 5 feet deep but Jim got out easily, being submerged only about 30 seconds.

Because the temperature was about 10 F they decided not to build a fire and dry Jim's clothes, having extra socks and a dry shirt which Jim put on. A couple of minutes after starting back Mirocha went through the ice. Fortunately he only got his feet wet.

It took nearly three hours to get back to the camp, but the exercise and trail food kept Jim and Chet from suffering frost-bite or hypothermia.

Two Years of Corn Feasts

by Debbie Baden-Drange and Kelly Sieg

The Annual Corn Roast was held September 2, 1982 at the Plant Pathology farm in Rosemount. This year's event was a very special one as it was the last time Orville was to cook the ever famous Chicken. The reason this chicken is so good is because of the "Bielenberg Sauce" which is sprayed on the chicken as it is being grilled. The special sauce is a "secret recipe" of Orville and Bernice Bielenberg. Kelly and Debbie are trying to squeeze the secret out of Orville, but have not reported on the success of their efforts.

The evening was filled with various activities, volleyball, and standing around the fire drinking beer and telling all kinds of stories.

Everyone in the Department would like to extend our appreciation to Orville for the many years he made the Corn Roast a success. We will miss him when he retires.

Jogging and running continue to be popular, with some apparent records set, at least for Minnesota plant pathologists. On December 2, 1983 Kommedahl's biological odometer turned 11,000 miles, counting from 1968. He currently does about 4 mi/da. However Alan Pierce has logged about 17,000 miles since 1976. Alan has run in 21 marathons, including the Boston event in 1982; he has run the Grandma (Two Harbors, MN to Grandma's Bar in Duluth) five times. He and Linda enjoy running marathons together. According to Kommedahl, "some folks run to enter races, but others run just for the health of it." (That's a joke; Kommedahl type).

The annual E. C. Stakman softball game was played May 20, 1983. Faculty and staff defeated the students 12 to 11.

In 1983 the Corn Roast was held in the usual location on August 27. It was the first in many years when Orville was not in charge of the chicken (after spending the summers raising corn). To further break with the past, the piece de resistance was not chicken but pork. A 215 lb porker was barbequed whole under the supervision of Jim Rowe, the new Rosemount Plot Supervisor and Cheri Olson, his right hand lady. There also was chicken in limited quantities, plus baked potatoes, sauerkraut, watermelon, rolls and, of course, corn. Beer could be had for an extra \$1.

Orville and Bernice were there. Orville professed to be dismayed at the idea of having pork, but after a sample and several helpings he was converted and full of praise. Everyone else agreed.

Another innovation was that the affair was held on a Saturday afternoon instead of Thursday evening as before. A number of people spent an enjoyable afternoon socializing, playing volleyball and getting in their \$1 worth of beer. The feast was served between 5 and 6 PM.

The Thursday Night Seminar Committee, Ken Johnson, Chairman, as well as Cheri and Jim deserve high praise for a very successful day.

Seven Children and 81 adults were pay-in guests (\$3.50 for adults). At last report the committee was still trying to collect from two.

CHRISTMAS PARTIES

1982:

Date: December 17. Place: North Star Ballroom (St. Paul Student Center). Hor d'oeuvres were brought by everyone, resulting in an excellent collection of snacks. The band started playing at 8:00 PM.

1983:

Date: December 16. Place: Paul's Place in Roseville, Minnesota. Chicken Kiev, Prime Rib, and Fried Shrimp.

The Great and the Near Great



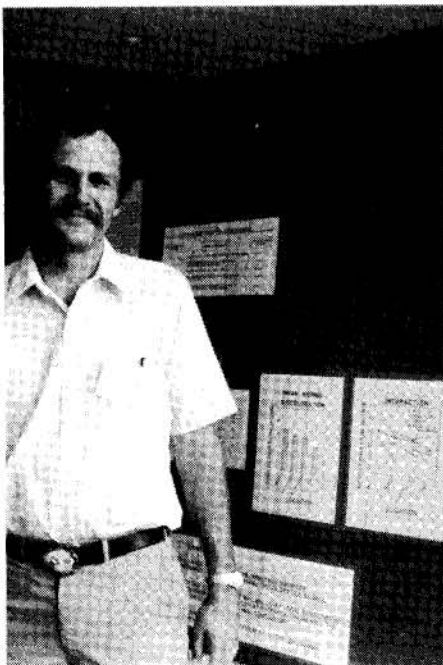
Dr. and Mrs. E. J. Wellhausen.
Stakman Award winner, June 22, 1983.



Dr. J. F. Fulkerson receives the
Stakman Award from Richard J. Sauer,
Deputy V. P. and Director of the
Experiment Station.



Fred Froshaiser and Jim Miller.
Retirement tea for Fred, March 25, 1983.



Monte Miles and exhibit, APS, Ames,
IA 1983.



Joe O'Brien and Dr. Roy Gaunt,
Lincoln College, Canterbury, N.Z., July
1, 1983.

World Travelers

Professor Howard Bissonnette spent September 15-28, 1983 in Japan as consultant for Colbee Potato, Inc., a large Japanese potato processing company. Howard found Japanese potato growers had good machinery and equipment and that storage facilities were modern and satisfactory. He was able to make a number of suggestions regarding disease control and management practices that will prevent certain losses before and after harvest. The company wants Howard to make another trip in the near future and perhaps help them employ permanent technical personnel.

Dr. Paul Teng was probably the most-travelled faculty member in 1983, having attended meetings in four (4) foreign countries: Canada (February 15-16, and again December 14); Australia (Congress, August 17-24); Italy (October 10-13) and England (November 20-25). At each of these places he gave one or two papers on subjects ranging from forecasting late blight of potatoes to crop losses due to plant pathogens to "PESMID; a pest surveillance methodology information data base". Paul also spoke at meetings in 10 places in the U.S.A., eight of them outside of Minnesota.

In May, 1983 Dr. Elmer Schmidt attended a meeting of the International Research Group on Wood Preservation, held at Surfers' Paradise, Australia. The meeting was sponsored by the CSIRO. Elmer presented three papers, including his work on wood fumigation and wafer board deterioration. Jean joined him after the meeting and they spent a few days exploring the Great Barrier Reef. Elmer is Assistant Professor in the Department of Forest Products, College of Forestry, U. of M., a position he accepted January 1, 1983.

Professor C. J. Mirocha was in Paris December 13-15, 1983 presenting a workshop on mycotoxins, which was sponsored by the Center des Perfectionnement des Cadres des Industries

Agricoles et Alimentaire (CPCIA). From Paris he went to Uppsala, Sweden, where he lectured to a seminar at the Swedish University of Agriculture on nutrition and husbandry and conferred with Swedish investigators on the continuation of research on zearalenone. He also stopped at Oslo to arrange to have collections of *Fusarium* made in the Arctic next April. Among others, he visited with O. T. Leif Sundheim, PhD 1964.

In November, 1938, Professor Mirocha conferred with scientists in Agriculture Canada at Ottawa concerning methods of analysis for trichothecenes in grain, blood and other materials. The visit was sponsored by the U.S. Department of State.

Ten people made the trip to Australia in August 1983. They attended the Fourth International Congress of Plant Pathology. They were, Thor Kommedahl, Carol Windels, Paul Teng, Steve Johnson, Michael Wingfield, Marge Palmer, James Groth, Rama Urs, Chester Mirocha and Alan Roelfs. Several brought spouses and several made educational side trips. Knowledge gained: The pubs close at 10 PM.

Professor Thor Kommedahl is now Secretary General and Treasurer of the International Society for Plant Pathology. He was elected to a five year term at the International Congress of Plant Pathology, Melbourne, Australia, August 17-24, 1983.

Dr. Thomas Nicholls, Associate Professor, Plant Pathology and Principal Plant Pathologist, North Central Forest Experiment Station, spent the summer of 1983 on a training assignment in Washington, Oregon and Idaho. Among other activities, he visited private, state and federal nurseries and Christmas tree plantations. He also did research on dwarf mistletoe of lodgepole pine in the Fraser Experimental Forest in Colorado.

Local News**EXAMINATIONS PASSED**1982

August 2 - Markus Andres - PhD
 December 10 - Rodney Vargo - Prelim
 December 14 - Bill Livingston - Prelim

1983

January 7 - Cho Li Fei - MS
 January 12 - Roger Musick - PhD
 January 21 - Mike Wingfield - Prelim
 January 27 - Jenny Juzwik - PhD
 February 11 - Brian Steffenson - MS
 March 14 - Bill Shane - PhD
 March 15 - Brahim Ezzahiri - PhD
 March 16 - Kira Bowen - MS
 March 31 - Therese Atcham - MS
 April 22 - Janice Kaye - MS
 April 25 - Mary Palm - PhD
 May 18 - Jesus Fernandez Perez - MS
 July 19 - Hamed Abbas - Prelim
 August 5 - Peter Bedker - MS
 August 25 - Paul Goodwin - MS
 October 7 - Joe O'Brien - Prelim
 December 16 - Mike Wingfield - PhD

Greenhouse Users to Pay.

Beginning January 1, 1984, researchers using space in the East greenhouses will be charged \$.10/square foot per quarter to help pay upkeep costs and buy much-needed equipment. The fee will generate about \$475 per quarter and will not cover all costs, which exceeded \$5,000.00 for the period October, 1982 - June 1983, inclusive. Improvements needed include a soil aerator for pasteurizing soil, a pesticide cabinet, controllers for motorized greenhouse vents and a pot washer. Cereal Rust Laboratory personnel will not be charged due to sharing CRL facilities. No charge is made for the Northwest (Gibbs) greenhouses because they need considerable upgrading to compare in usefulness to the newer facilities.

BIRTHS

January 29, 1983. Sarah Marie to Kathy and Tom Kromroy. 8 lbs., 11 oz.
 February 20, 1983. David Peter to Ross and Michaeleen McQueen. 8 lb., 5 oz.
 February 25, 1983. Konrad Joseph to Bob and Mary Pawlosky. 6 lb., 8 oz.
 April 27, 1983. Erik Christopher to Connie and Terry Post. 7 lbs., 10 oz.
 June 28, 1983. Natalie Elizabeth to Mary and Steve Palm. 8 lb., 13 oz.
 July 18, 1983. Sarah Elizabeth to Sharon Sussmilch and Mark Andrews. 8 lb., 12 oz.
 September 16, 1983. Daniel Markus to Hedi and Markus Andres. 8 lb., 6 oz.
 September 29, 1982. Dennis to Patrica and Bill Donald.
 October 9, 1983. Eric Christopher to Karen and Rodney Vargo. 8 lb., 11 oz.

Test Plots Abandoned

The second crop sequence plots at Rosemount were abandoned after the 1983 season. Dr. Wilcoxson reports that, to his knowledge, only one person, Janese Thatcher, has generated any data from the plots and, because weeds are becoming unmanageable, the area will be planted to soybeans in 1984. The first crop sequence plots were established by J. J. Christensen and others soon after the fields became available in 1947. These plots were the source of much useful information but research objectives have changed over the years and the sequence started in 1965 has been little used.

"LOST" OLD TIMERS

A number of copies of recent Auroras have been returned because they could not be delivered. Apparently the addressees have moved and neglected to give us their new addresses. We would like to know where these people are. If you happen to know their whereabouts we will appreciate your telling us. The most recent addresses on our list are given.

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Edward A. Andrews
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David A. Baskin
Scientific Oil Compounding Co.
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Fung Fang Chao
Chang-Chia-Tian, Teechien
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