

Plant Pathology Newsletter

1985-86

With this seventh issue of the Plant Pathology Newsletter, we have many items of accomplishments, activities, and change to report. Perhaps most obvious to those of us on campus is the construction of a new building right outside Buckhout Lab. This six-story building will house the Biotechnology Institute and classroom space and should be completed by the end of 1986. Our department expects to be among those from the College of Agriculture to establish ties with the Biotechnology Institute. Meanwhile, we still look forward to bringing our group together under one roof, and the renovation plans for Buckhout Lab call for construction to take place in 1987.

Along with these physical changes have come many changes in personnel. On January 1, 1986, **Dr. John M. Skelly** returned to full-time research in the department. Through a grant from the U.S. Department of Agriculture, John is developing an assessment of tree foliage symptoms of air pollution damage for the Forest Service; he is also initiating studies of the spruce decline problem in Pennsylvania and West Germany. **Dr. Herbert Cole** is now serving as Interim Head of the department.

On Ag Hill, the deanship of the College changed, with **Dr. Lamartine Hood** of Cornell University-Geneva assuming this post on March 1, 1986. Our former dean and Professor of Plant Pathology, **Dr. Samuel H. Smith**, moved to Washington State University to take the reigns as President of that institution on July 1, 1985. On April 1, 1985, **Dr. Richard R. Nelson** retired as Evan Pugh Professor Emeritus of Plant Pathology, and on October 1 **Dr. Richard Schein** retired as Professor Emeritus.

Best of luck goes to **Dr. Bruce Jaffee** in his new position at the University of California-Davis. Bruce, who resigned his position at the Biglerville Fruit Research Laboratory on February 15 of this year, will be missed not only by the department but also by the Pennsylvania fruit industry. **Dr. William J. McCarthy**, who served in our department as both assistant and associate professor, has become Associate Professor of Entomology. This change reflects Bill's interest and emphasis on insect virology, and although he is no longer in the department we plan to maintain close cooperative ties with him and his program. Bill McCarthy and Pete Romaine have designed an undergraduate course, "Biotechnology in Agriculture," that they expect to coteach this fall. Congratulations are in order for **Crystal Huff**, who resigned as Research Assistant on February 15, 1986, to accept a position with Northrup King in Mount Joy, PA. Crystal is now putting the finishing touches on her Masters thesis.

We also welcomed **Dr. W. F. O. Marasas** of the South African Medical Research Council, National Research Institute for Nutritional Diseases, to our faculty as Adjunct Professor of Plant Pathology and Veterinary Science on January 1, 1986. It is a pleasure to officially recognize Wally's contributions to and cooperation with the Fusarium Research Center.

Many of our faculty received awards this year, and the department hosted the Fusarium Workshop, Christmas Tree Short Course, several field days, and a group of distinguished seminar speakers. In other news, we are happy to include an alumni section in this year's newsletter, along with updates on our graduate students and Plant Science graduates.

The changes and activities of the past year or so show us to be a dynamic, flexible department, whose strengths lie in its people and its programs. These strengths will hold us in good stead as we join forces to meet the challenges and changes of the future.

IN MEMORIAM

The department was saddened by the loss of two of its members during the past year. In August, 1985, **Dr. Frances Aloysius Wood** passed away, and on May 21, 1986, **Lester P. Nichols** died following a heart attack.

Lester P. Nichols joined the department as Assistant Professor of Plant Pathology Extension on May 1, 1948. He retired as Professor Emeritus in 1982, after 34 years of service to Penn State. Although "LP" retired in 1982, he continued an active interest in publicizing the flowering crabapple as the perfect tree for all seasons.

During his years at Penn State, Les first conducted extension plant disease programs and later focused on the diseases of ornamentals and nursery crops. He taught Penn State's Plant Pathology Winter Course and directed the Plant Disease Clinic. His research into the disease resistance of flowering crabapples, however, was his main interest. In addition to publishing several regional bulletins while at Penn State, Professor Nichols distributed an annual summary of disease resistant crabapples for a wide audience, including nurseries, groundskeepers, and homeowners. This summary was based on data collected at over 18 crabapple plots across the country--plots that Les visited annually even after his retirement.

In 1984, the American Horticultural Society honored Professor Nichols with a "Citation of Scientific Horticulture." Most recently, Les was elected director of the International Ornamental Crabapple Society, formed in 1985.

The ornamentals program at Penn State has lost a valuable member with Professor Nichols' passing. We hope that the crabapple program will continue, with the same dedication, enthusiasm, and optimism that Les brought to it. We will miss him.

In August 1985 **Dr. Frances Aloysius Wood** died. Al joined the department in 1961 as Assistant Professor of Forest Pathology, and his career at Penn State spanned eleven years. In addition to serving on the Plant Pathology faculty, Al was a member of the faculty of the Center for Air Environment Studies, where he served as Assistant Director for several years. In 1972, Al moved to the University of Minnesota as Head of the Department of Plant Pathology; he then went on to the University of Florida, where he served as Dean of Research for the Institute of Food and Agricultural Sciences.

Al was a charter member of the newly created Department of Plant Pathology of 1964. His youthful wisdom, enthusiasm, and genuine concern for the strength of the department were felt throughout the College and by colleagues in his profession. Al fostered the development of forest pathology students and later the air pollution research programs of the department. His vision created the first and--much to his credit--what continues to be one of the foremost air pollution research programs within our land grant university system. His continuing strong interests in epidemiology were integral in the formation of a strong and newly emerging program of national prominence. The list of accomplishments could continue for numerous pages but two awards in particular, both presented to Dr. Wood in 1985, exemplify his continuing career accomplishments. These were election as Fellow of the American Phytopathological Society and the first ever Award of Merit presented by the United States Department of Agriculture.

Al will be missed by all of us. Although not necessarily on a day-to-day basis--Al would be the first to tell you that--but at our national APS meetings, our air pollution workshops, and at our everyday, roll-up-your-shirt-sleeves work sessions, his dynamic, personable, and concerned attitudes will be missed. So will his laughter and sense of humor. Those he could leave behind and he did.

R. R. Nelson Retires

Dr. Richard R. Nelson retired on April 1, 1985, as Evan Pugh Professor Emeritus of Plant Pathology. "RR" came to the department in 1966 from a USDA position in Raleigh, North Carolina, where he had established an international reputation in the taxonomy and genetics of the genus Helminthosporium and its perfect stages. The University's highest academic title, Evan Pugh Professor, was awarded in 1974.

Those who know Dr. Nelson know well his immense productivity, dedication to the graduate program, and international reknown. For those who do not know him or only brushed against him while here, we append the following, far-from-complete recitation of his work. For many years he was the department's only APS Fellow. He traveled and worked abroad extensively, and, in addition to serving as a Sigma Xi lecturer, he gave over a hundred seminars, symposium talks, and invited lectures. His name is on some 280 research publications, eighteen book chapters, and one book. He guided the doctoral studies of some of the department's brightest lights.

It seems totally unnecessary to add that such a man can never be replaced and that his absence is felt in the department daily. RR continues to live in State College (1215 Mayberry Lane) and still answers all correspondence promptly, although we are happy to report he has given up the pink paper! Write to him.

Quantifier-Philosopher Moves On

Quantifying the ecology of pathogenesis has been the quest of R. D. Schein, Ph.D., since his arrival at Penn State in 1955. On December 1, Professor Schein became farmer Schein after decades of teaching, advising, administrating, writing, and researching in phytopathology and biology, and now he directs his interest towards a 1200- tree country orchard.

Those of us who were fortunate enough to be graduate students in the 1950's were exposed to Rick's ideas and his science philosophy, both vanguard and stimulating to young scholars. These ideas and philosophies continued to evolve throughout his academic career.

The University leapt into the forefront of environmental sensitivity in the 1970's via his leadership in the Office of Environmental Quality Programs. Dr. Schein's commitment to the international community was fostered through NATO-supported epidemiology meetings in France, The Netherlands, plus other international symposia, where he served as a very active organizer and elicitor of funds. He also spent time as lecturer for Smithsonian, visiting scientist, and mentor to international visitors. These experiences and exposures were reflected through a unique undergraduate course he offered for nine years: Plants, Places and People. His epidemiology textbook, coauthored with Dr. Zadoks, served students worldwide as they first learned of epidemiology.

Centre County has a new full-time orchardist. We hope the pathogens and pests don't get his fruit before he can get it to market. Rick, remember X_0 and r , integrate the cultivars with the soils and climate, and make a function of farming sense with scientific knowledge, and your future will be satisfying. We hope you and Cinny continue in the pursuits you both enjoy.

Sam Smith Inaugurated

Dr. Samuel H. Smith brought to a close a 16-year career with Penn State on July 1, 1985, when he joined Washington State University as President. On March 21, 1986, Sam was inaugurated at a ceremony that included representatives from more than 90 higher educational institutions. **Dr. John W. Oswald**, President Emeritus of Penn State and Professor Emeritus of Plant Pathology, provided the keynote remarks.

Sam's contributions to our department have been many. As a researcher, he established an internationally recognized program in plant virology. His research career at Penn State began at the Biglerville Fruit Research Lab; in 1976, following an earlier move to University Park, he was named Head of the Department. His leadership as department head and later as Dean of the College of Agriculture nourished an environment that fostered productive, quality programs. Through his tireless efforts, well-deserved recognition came to the teaching, research, and extension programs of both the College and the Department.

From all reports, Sam and his wife, Pat, are enjoying their new position, and the Department sends sincere best wishes to them and their children, Linda and Pete. We will miss their enthusiasm, commitment, and camaraderie.

Tammen Recognized

On May 24, 1985, **Dr. James Tammen** was honored for his contributions to the foundation of this department through a special program and presentation of his portrait. As first head of the department, from 1963 to 1976, Jim was instrumental in establishing Penn State as a leader in Plant Pathology.

Nearly 75 persons attended the reception and dinner, which were held at the Nittany Lion Inn. The program covered many aspects of Jim's tenure in the department and included comments from colleagues and former students. Jim was genuinely surprised with

the portrait, and he has expressed his warm thanks to each of the alumni, members of the department, and friends whose contributions made the portrait possible. The portrait hangs in the Department Reading Room in Buckhout Lab.

Faculty Awards

Paul E. Nelson, Professor of Plant Pathology, was named Fellow of the American Phytopathological Society during the 1985 Annual Meeting in Reno, in recognition of his research on the biology and taxonomy of the genus *Fusarium*. Paul's cooperative efforts with T. A. Toussoun in forming the Fusarium Research Center and revising the taxonomy of *Fusarium* were cited in particular, along with the several landmark books that he and his colleagues have published. Paul's active participation in both the Society and in the programs of the department was also noted.

Gamma Sigma Delta, The Honor Society of Agriculture, presented its 1986 Research Award to **Dr. Lee C. Schisler** (Ph.D. '57) at its annual banquet in April. Lee, who is Professor of Plant Pathology and Director of the Mushroom Research Center, was recognized for his outstanding research contributions on the physiology and nutrition of the cultivated mushroom, as well as his contributions to the mushroom industry.

Graduate Student Awards

Diane M. Karasevicz was honored for her presentation at the 1986 Potomac Division APS Meetings, held at the University of Maryland during April, 1986. Diane received the Graduate Student Award for her paper entitled "Succession of Biodeterioration Fungi in Red Oaks Killed Following Gypsy Moth Defoliation in Pennsylvania." Diane is currently completing requirements for a Masters degree in Plant Pathology under the advisorship of Dr. William Merrill.

Robert Long recently received a Graduate School Award for Summer, 1986. The Graduate School Awards are designed to honor the top, post-comprehensive graduate students in the University, and include a cash award. Bob's Ph.D. research efforts have focused on the evaluation and quantification of the effects of anthropogenic stresses such as acidic deposition and ozone on forest tree growth. Dr. Donald D. Davis advises Bob's program.

Richard N. Raid, who is finishing his Ph.D. under the direction of Dr. Stanley P. Pennypacker, received an Honorable Mention for his exhibit at the University-wide Graduate Research Exhibition held on campus this spring. Rick's presentation was entitled "The Effects of Puccinia polysora on Growth and Yield of Corn in Pennsylvania and Maryland."

V. James Spadafora won the 1985 Graduate Student Paper Award at the Northeast Division meetings of the American Phytopathological Society, held in Newport, RI, last November. Jim's paper was entitled "The Qualification of Environmental Favorability to Epidemics of Septoria nodorum on Winter Wheat." Jim, who received his doctorate at Spring Commencement ceremonies on May 18, completed his program under the direction of Drs. Herbert Cole and James Frank.

These students are most deserving of this recognition, and our congratulations go to each of them for their outstanding work.

Comings and Goings - Staff

William K. Corl, Supervisor of the Potato Breeding Research Facility, retired on March 31, 1985. Bill joined the department in 1971 as Greenhouse and Field Worker; he assisted with campus and Rock Springs greenhouse and field research until 1977, when he was promoted to a staff position at the Black Moshannon potato research facility. Our best wishes go with Bill in his retirement. **Michael W. Peck** filled Bill's position on April 1, 1985,

following several years of service at Rock Springs. We are pleased to have Mike as part of our staff. Another change in the potato research area occurred on September 18, 1985, when **Roxanne J. Lease** was appointed as Senior Research Aide. Her responsibilities include assistance with field and laboratory experiments conducted in the potato program. Roxanne is not a newcomer to the department, having previously worked in both the mushroom and turf programs of the department.

Other additions to our staff include **Brian Bahler**, Research Technician, and **Christine Fisher**, who are working at the Mushroom Research Center and with Dr. Daniel Royse, respectively; **Maryanne Puente**, who assists Dr. Eva Pell on acid rain research; **Teresa Snyder**, Research Technician with Dr. Fred Gildow, and **Mary Hausbeck**, Research Technician and Ph.D. candidate working with Dr. Stanley Pennypacker on Botrytis blight of geranium.

On March 1, 1985, a long-time member of our secretarial staff, **Susanne Hart**, left the department for Dairy and Animal Science. Susanne had worked her way through the clerical ranks in Plant Pathology since her appointment in 1973; this move meant another well-deserved promotion for her. We certainly miss her lively presence in the department! **Linnea Loesch**, a secretary since 1977 in Ag Economics and Rural Sociology, joined us on April 1, 1985, and we are most pleased to count her as a member of the department. In September we welcomed back **Marian Smith** as a part-time employee. Marian had worked with us in the office several years ago.

New Graduate Students

Several students joined the department during 1985. **Leslie Gladstone**, an M.S. candidate working with Dr. Gary W. Moorman, received a B.S. in Horticulture from West Virginia University. She began her studies last fall, and her research topic involves the effects of saline stress on predisposition of

geraniums to Pythium disease. **Mary Hausbeck**, who arrived in the Department last May, is also working with geraniums. Mary is pursuing a Ph.D. degree under the guidance of Dr. S. P. Pennypacker studying the epidemiology of Botrytis cinerea of the cutting-propagated geranium in the greenhouse. Mary received her B.S. and M.S. degrees in Horticulture from the University of Michigan.

Nwanma Beatrice Onyike, also a Ph.D. candidate, arrived in September from Nigeria, where she served as Senior Lecturer in Biology at Alvan Ikoku College. Bea received a B.S. from Michigan State University and an M.S. from the University of Colorado, and will pursue her doctoral studies under the direction of Dr. Paul E. Nelson. Joining us from El Salvador is **Willy Renderos**, a Fulbright Scholar who has undertaken a Masters program under the guidance of Dr. F. L. Lukezic. Willie graduated from the Universidad de El Salvador with a B.S. in Agronomy; his Masters research focuses on biological control of bacterial diseases.

Leonard North began his studies toward an M.S. degree last fall, undertaking a research program on the management and control of diseases caused by Verticillium on the commercial mushroom in cooperation with Dr. Paul J. Wuest. Leonard is a graduate of Nova Scotia Agricultural College, where he received a B.Sc. (Agr.) in Plant Protection.

Mark Sommerfeld, who holds a B.S. in Plant Pathology from Ohio State University, also began his studies in the fall. He is pursuing a Masters degree and will study the interactions between Helminthosporium and BYDV on oats with the guidance of Dr. James A. Frank.

Recent Graduates

Jerry Barclay, who received an M.S. under the direction of Dr. L. C. Schisler, is continuing his Ph.D. studies at Oregon State University, Corvallis. Another graduate with a mushroom speciality, **Douglas Diehle**, moved to Salt Lake City to pursue a career in industry. Doug

worked with Dr. Dan Royse during his M.S. program.

Leslie Delserone, who completed an M.S. program with the direction of Dr. James A. Frank, has begun a Ph.D. program at Cornell University, and is working with Dr. Hans Van Etten; and **Karen Ireland** has become a Michigan State Spartan following the completion of her M.S. degree. Dr. Kenneth Leath served as advisor in her studies on Verticillium wilt of alfalfa, and she is pursuing her Ph.D. under the guidance of Dr. Mel Lacey.

Joe Omielan is headed for the west coast in quest of a Ph.D. in plant physiology at the University of California at Davis. Joe finished his M.S. research concerning the physiology of ozone stress under the direction of Dr. Eva Pell. **Jo Rytter** has returned to her position as biological lab technician at the USDA-Plant Disease Research Lab at Frederick, MD. Jo has completed the course requirements for her M.S. and is currently continuing her project research on biological control of geranium rust in the greenhouse with the guidance of Drs. Moorman and Lukezic.

Deb Breth is currently serving as a fruit extension specialist in New York. Debbie completed her M.S. with the guidance of Dr. Jim Travis. Her research interest involved Cytospora canker and lesser peach tree borer on peach. **Crystal Huff** is pursuing a career with Northrup King as an assistant in the corn breeding program. Crystal, who will receive her M.S. under the direction of Dr. John Ayers, completed a study on the inheritance of resistance to gray leaf spot in corn.

Two of our recent Ph.D. graduates have begun university careers. **Lorraine P. Berkett** is now a faculty member in the Department of Plant Pathology and Soil Science at the University of Vermont, Burlington, and **Norman Lalancette** is serving on a post-doctoral appointment at the Ohio Research and Development Center of OSU in Wooster. Both Norm and Lorraine completed research programs at the Biglerville Research Laboratory under the direction of Drs. K. D. Hickey and Herbert Cole. A third Ph.D. recipient, **A. Sriskantha**, has returned to Sri Lanka to pursue a research career. Sri studied

with Dr. Peter Romaine, and his area of interest included polymerase activity associated with dsRNA viruses in mushroom and also cloning the ssRNA of Bacilliform virus. **Mark Wach**, who also received a Ph.D. under Pete Romaine's direction, now lives on the west coast, pursuing a career with Monterey Mushrooms, Inc. in Watsonville, CA.

Visitors - Seminars

The department was pleased to host two visitors for extended periods during 1985-86. **Mr. Jing Ke**, university teacher and researcher at the Department of Plant Protection, Guangxi Agricultural College, Peoples Republic of China, is currently completing a one-year study leave. Mr. Ke worked with both Drs. Richard D. Schein and Stanley P. Pennypacker during his leave, studying crop epidemiology and computer simulation.

From July 1 to November 1, 1985, **Dr. Anne M. Tronsmo** visited the department from Norway, where she serves as a scientist at the Norwegian Agricultural College. Dr. Tronsmo was appointed Adjunct Assistant Professor of Plant Pathology while in the department. Dr. Tronsmo worked closely with Dr. Kenneth T. Leath and Barbara W. Pennypacker at the U.S. Pasture Laboratory, pursuing her research interests in the area of host plant resistance to fungal pathogens.

Other visitors to the department in 1985 included **Dr. L. V. Edgington**, Professor, Department of Environmental Biology, University of Guelph, who presented a seminar entitled "Systemic Fungicides-- Which Ones Go Which Way Within Plants." Dr. Edgington visited the department as a guest of the graduate students, who had the opportunity to meet with Dr. Edgington to discuss his research program. **Dr. William E. Winner** of the Laboratory for Air Pollution Impact to Agriculture and Forestry, Virginia Tech, also visited in 1985, presenting a seminar on "Elevational Gradients of Ozone Concentrations and Consequences for Plants." **Dr. David A. Wood**, Head of the Plant

Pathology and Microbiology Department at the Glasshouse Crops Research Institute, Littlehampton, England, spoke on "Mushroom Cultivation--Old Biotechnology, New Approaches," and **Malajirao Pawar**, visitor to the Plant Disease Research Laboratory at Frederick, MD, traveled to University Park to speak on "Comparison of Virulence Among Isolates of *Peronosclerospora sorghi*, Causal Agent of Downy Mildew of Sorghum."

Dr. Reinhard Huettl of the Institute of Soil Science and Forest Nutrition, University of Freiburg, West Germany, visited Penn State and spoke to the department on "The Decline Situation in the Black Forest of Germany: Use of Fertilization to Alleviate Symptoms." Dr. Huettl and John Skelly have begun cooperative research on this project, and Dr. Huettl recently returned to the eastern U.S. to conduct field surveys with John and several other researchers.

Dr. Barry Towers (Adjunct Assistant Professor of Plant Pathology), Forest Pathologist with the Pennsylvania Department of Environment Resources, reviewed "Forest Pest Management in Pennsylvania," and several Penn State graduates returned to speak on a variety of subjects. **Dr. Matthew H. Royer** (Ph.D. '82), now working at the USDA Plant Disease Research Laboratory, Frederick, discussed "Current Studies of Karnal Bunt of Wheat"; and **Lyle Forer** (M.S. '72) spoke on "Plant Pest Programs in the Pennsylvania Department of Agriculture (PDA)." Lyle serves as Chief of the Division of Plant Pathology for PDA. **Dr. Douglas Rouse** (Ph.D. '79) traveled to campus from the University of Wisconsin, Madison, where he serves as Assistant Professor of Plant Pathology, and presented a seminar entitled "Plant Growth Models: An Interface Between Epidemiology and Physiology." It was a pleasure for the department to host these alumni during 1985.

Two invited speakers visited the department for our Spring 1986 seminar series. The topic addressed by **Dr. David Gustine**, Research Biochemist at the USDA Pasture Research Laboratory, University Park, was "Regulation of Medicarpin Biosynthesis in Ladino Clover Cells." **Dr. Kurt Leonard**, Professor of Plant

Pathology at North Carolina State University, was a guest of the graduate students in April, 1986, and in addition to meeting with faculty and students he presented a seminar entitled "Southern Corn Leaf Blight Resistance--Is It Vertical or Horizontal?"

Sabbatic Leaves

Donald Davis was on sabbatic leave in Sydney, Australia, from September 1985 through February 1986 with the New South Wales State Pollution Control Commission. While in Australia, he conducted field surveys around point sources of pollutants and established a bioindicator monitoring program for ozone in the Sydney Basin. Climate during the summer (Dec.-Feb.) was ideal for field work--bright sunny days, low humidity, and a constant breeze. His wife and three children accompanied him and enjoyed the Australian experience. The children especially liked the December-January summer holidays! Don's project was funded by the state of New South Wales, Australian-American Education Foundation, and a Fulbright Award.

Paul E. Nelson completed the first half of a two-part sabbatic leave at the National Research Institute for Nutritional Diseases, Tygerberg, South Africa, from July 29 to November 5, 1985. Paul will visit the University of Sydney, Australia, from August 1 to October 31, 1986, as the second part of his leave.

While in South Africa Paul worked closely with **Dr. Walter F. O. Marasas** (Adjunct Professor of Plant Pathology). The objectives of this leave were three-fold: to continue work on the relationship of Fusarium species in corn soils to the occurrence of Human Esophageal Cancer in the Republic of Transkei, to continue studies on the hepatocarcinogenicity to rats of cultures of Fusarium moniliforme associated with feed from outbreaks of equine leukoencephalomalacia in the USA, and to continue work on the taxonomy of toxigenic and nontoxigenic Fusarium species.

Paul attended several conferences while in South Africa, and his invited presentations included a lecture to the South African Society for Plant Pathology at Stellenbosch.

Patricia L. Sanders, Associate Professor of Plant Pathology, returned January 1 from a full year's sabbatic. During 1985, she worked on various aspects of fungicide resistance in populations of Pseudocercospora herpotrichoides on wheat at the Agricultural University of The Netherlands at Wageningen, and in populations of Erysiphe graminis on wheat and barley at the Jealotts' Hill Research Station of Imperial Chemical Industries in Bracknell, England.

While in The Netherlands Pat visited greenhouse flower and vegetable production facilities and cereal-growing regions in both Holland and the United Kingdom. Taking advantage of the nearness of all of Europe, she presented research seminars at the French National Institute for Agricultural Research at Versailles and at the CIBA-Geigy Fungicide Research Division in Basel, Switzerland, and toured these facilities as well as the Bayer Plant Pathology Institute in Leverkusen, West Germany, and the Plant Breeding Institute in Cambridge, England. Pat also had the opportunity to attend the International Turfgrass Research Conference in Avignon, France, and the International Symposium on Crop Protection in Gent, Belgium.

Christmas Tree Pest Management Short Course

The third Christmas Tree Pest Management Short Course was held in Buckhout Lab on 6-7 January; 101 growers attended, mostly from Pennsylvania, but Michigan, Maryland, New York, and Nova Scotia also were represented.

The program consisted of two days of lectures and hands-on labs stressing diagnosis of major insect and disease problems. Weed control, ground covers, pesticide legislation, and pesticide safety also were covered. In addition, a three-hour clinic was held one evening. Growers brought specimens from

their plantations. The course instructors and **John Peplinski**, diagnostician in the Plant Disease Clinic, attempted to diagnose the causes of the problems, with emphasis on demonstrating the techniques of diagnosis.

The program was organized by **William Merrill** and **Nancy Wenner**. Other instructors in the course included **Dr. Paul Heller** (Entomology), **Dr. Larry Kuhns** (Horticulture), and **Dr. Win Hock** (Plant Pathology). They were assisted by **Chip Dowher**, graduate student in Entomology, **Bob Long** and **Diane Karasevicz**, graduate students in Plant Pathology, and **Tina Dreisbach**, undergraduate student in Plant Science.

This course is scheduled to be offered again 8-9 January 1987.

Fusarium Workshop

A Fusarium Workshop was held at Penn State on June 3-7, 1986. Sponsored and funded jointly by the department and through a grant from CSRS, the Workshop was attended by scientists from 12 states, Canada, Colombia, and Denmark. A wide range of backgrounds were included among the participants, including faculty, graduate students, USDA employees, and representatives from seed, chemical, and flower-growing companies.

The main objective of the Workshop was to teach participants how to identify Fusarium species. Therefore, the major portion of the participants' time was spent looking at cultures of Fusarium species. Special lectures were given on identification, isolation, preservation, and special techniques used with Fusarium species.

Instructors for the Workshop included **Dr. L. W. Burgess** (Adjunct Associate Professor of Plant Pathology) from the University of Sydney; **Drs. Thor Kommedahl** and **Carol Windels**, University of Minnesota; **Dr. W. F. O. Marasas**, from the South African Medical Research Council; and **Drs. Paul Nelson** and **T. A. Toussoun**. Special thanks go to **Niki**

Jeschke, M.S. candidate in Plant Pathology, and **Lois Klotz**, Senior Research Aide, for serving as instructors and for their outstanding support in preparing for the Workshop.

Following the Fusarium Workshop, a two-day Mycotoxin Conference was held in State College for plant pathologists, mycotoxicologists, veterinarians, and veterinary pathologists. The meeting provided an excellent, informal forum for research workers from several disciplines involved in research on mycotoxins to exchange ideas and discuss and initiate cooperative research projects. Along with Drs. Burgess, Marasas, Nelson, and Toussoun, several other distinguished scientists served as panel members. These scientists included **Drs. C. S. Card** and **T. M. Wilson** of the Department of Veterinary Science, which co-sponsored the conference; **Dr. R. M. Leach**, Department of Poultry Science; **Dr. Gordon A. Neish**, Head of the Mycology Section of the Biosystematics Research Institute, Ottawa; and **Dr. E. B. Smalley**, Professor of Plant Pathology at the University of Wisconsin.

Field Days

Thousands of people visited Penn State's Rock Springs Agricultural Research Center in August, 1985, to view the exhibits at Ag Progress Days. Featured during this three-day agricultural show were tours to department farm facilities and research plots. **Jerry Stover**, **Larry Jordan**, **Bill Brown**, **Mike Peck**, **Randy Dreibelbis**, and **Dick Hart** assisted with the tours to the Plant Pathology facilities as well as coordinating several evening barbecues for guests from grower organizations and industry.

Our farm personnel also hosted the Pennsylvania Potato Growers and representatives from the Pennsylvania Vegetable Research program for field days during 1985.

News From Alumni and Friends

Many thanks for your letters with information updates. As you read this you will see that Penn Staters and progeny are quite literally scattered to the four winds and are engaged in many diverse activities. We hope that many pleasant memories will be recalled as you peruse this section of your newsletter.

Dr. Henry W. Popp, who served as Head of Botany and Plant Pathology from 1950 to retirement in 1958, celebrated his 93rd birthday recently. Both he and Mrs. Popp continue to live in their home on Adams Avenue, State College. Following what his M.D. reported to be a slight heart attack, Dr. Popp has reduced his gardening activities. After his retirement Dr. Popp established an award that is given to outstanding students in the departments of Botany and Plant Pathology.

William A. Campbell (Ph.D. '35) has now thoroughly and completely retired and has become a southern planter on a small scale; that is, a 60' x 60' garden in the backyard. "Unfortunately, my wife (Eleanor Ebert, M.A. '34) can't retire since she is Mother Spocking grandchildren Meg, almost 4 years old, and Jimmy Spencer, about to enter the Terrible Twos. The Spencers live in Athens so we keep entertained. Son Bill now lives on Lake Jackson in Jasper County, Georgia, about 60 miles distant; son Dr. George Ebert Campbell still teaches at Eastern Kentucky University, where George, Jr. is a sophomore and Amy and Christopher infest the Richmond, KY, High School.

"Age has its interesting moments; we have learned to tolerate physical problems as they arise with a certain amount of disdain realizing that the next bunch of problems may be worse! and less entertaining."

Dr. Campbell can be reached at 260 Milledge Hts., Athens, GA 30606.

Dr. Fred H. Lewis, who was "Scientist in Charge" at the South Mountain Fruit Station, Biglerville, PA, for many years before retirement, writes: "Home continues to be

Arendstville with one month spent on Marco Island, FL. Son Steve is Professor of Nematology at Clemson and is currently serving as secretary of the Nematological Society. Daughter Betty is married to an Air Force Captain and lives near Washington, DC. Son Bob works for a defense contractor near Lancaster, PA. The six grandchildren are a delight (which means spoiled by the grandparents) with the eldest now six feet tall and planning to enroll in pre-med at the University of Virginia in two years."

Activities at home include fishing at every opportunity, some financial interests, and working for community organizations. Both he and his wife, Elizabeth, continue to enjoy life despite declining health for Elizabeth.

Leon R. Kneebone (Ph.D. '50) reports that he, Libby, their three children, and three grandchildren are all well. Trips the past year included the Alpine countries and Scandinavia. Planned for 1986 are visits to son Steve and wife in Hawaii and attendance at the World Methodist Conference in Kenya. Lee finds it hard to believe he has been retired for seven years. He is still engaged in consulting with the mushroom industry from coast to coast and especially enjoys his work with ex-Penn Staters scattered throughout the national mushroom industry.

Dick Stouffer, who left Penn State and the Fruit Research Station, Biglerville, to assume headship of the Department of Plant Pathology, Tifton, GA, reports that he had a great time at the 1985 Symposium on Fruit Tree Virus Diseases held in Bordeaux, France, and was selected to serve as chairman for the 1988 symposium, which will be held in Greece. Younger son Scott was married in October and now lives in New Jersey. Older son Tom is living in Albuquerque, NM. Dick extends a welcome to any Nittany Lions heading south on I-75 to stop by. (This sounds like too good an offer to miss on that Florida trip.)

Paul J. Wuest (Ph.D. '63), who has been associated with the Penn State mushroom program for many years, reports that "mushrooms continue to occupy much of my time although I am involved with teaching

pest management through a plant science course each fall." A videotape focused at pest management for mushroom growers has been taped, edited, and will soon be available. Fungicide application and testing are another major thrust since the only "broad spectrum" material now available will be withdrawn from use in 12-18 months. "Aside from teaching and research I have an M.S. student working on *Verticillium* disease and am chairing local arrangements for an international symposium on edible fungi to be convened at University Park this summer.

"On the personal side, my hair thins and gets a bit more of a grey cast. Jan and I remain rooted on Ellen Avenue with an aging family. Paula is married and living in Knoxville, TN; Greta is the new owner of Scissor Wizards in State College; Phil is a chef at Duffy's, currently in Lima, Peru, for a semester; Becky is enjoying her senior year in high school and enrolled at PSU for this summer. We all wish you well in 1986."

C. Gardner Shaw (M.S. '40), now Professor Emeritus, Washington State, is back in the United States after an assignment in Jordan and writes: "A summary of the first two years of retirement must place far more emphasis on philatelic, piscatorial, and nimrodian activities than on those of a pathological nature. (Pathologically, the most serious problem was personal; operations on both legs to improve circulation have permitted continuance of all other activities in a normal manner.) I did attend the 1984 meeting of the Western International Forest Disease Work Council in Taos, NM, in September, 1984, and keep in close professional contact with my son, Charles G. Shaw III, Forest Pathologist with the U.S. Forest Service in Juneau, Alaska. While visiting him and a my daughter, who also lives in Juneau, I landed a 200 lb. halibut last September. It was six feet plus in length and took two and a half hours to beach. Had a successful deer hunt in October, 1984 (first in 15 years), but no luck this year. My voluminous stamp collection receives the greatest amount of my attention in retirement."

P. L. Patil (M.S. '71). After returning to India, Dr. Patil completed requirements for a Ph.D. degree and is now Professor of Bacteriology, College of Agriculture, Pune, India. He is currently directing the research of three Ph.D. and two M.Sc. students. Last August he presented a paper at the Sixth International Symposium on Biological Nitrogen Fixation held at Corvallis, OR.

Uzi Brodny, who spent two years working in the laboratory of Dr. R. R. Nelson and Dr. R. D. Schein, is back at Tel Aviv University working in the Institute for Cereal Improvement, Department of Botany. He writes: "I am working and very involved in the finding of sources of new germplasm that contain 'general resistance against rusts,' from wild plants, which are the putative progenitors of cultivated cereals.

"These wild cereals that are natives here in Israel have coexisted successfully in nature for thousands of years with the fungal disease pathogens and obviously developed effective protection against diseases.

"We have found that these wild cereals are mainly protected from fungal diseases by 'general resistance.' I am taking part in research studies of mechanisms controlling this 'general resistance,' and, naturally, look forward to the day when we shall succeed!"

James W. Demski (Ph.D. '66), who took root in Georgia after leaving Happy Valley, reports, "I still have an active project in Nigeria on peanut viruses, but after six trips in the last four years with less-than-plush living conditions, my travel lust is diminishing. Other factors such as leaving 30 days ahead of a coup in 1984 and only six days ahead last year also are factors. Nevertheless, I'll probably return in September 1986 and may also visit other African nations."

The University of Georgia has an exchange program with the University of Pernambuco, near Recife, Brazil, and Jim has just returned from a series of lectures on plant virus epidemiology. Research at home is quite busy with efforts to eliminate peanut stripe virus that was, Jim determined, introduced into the U.S. in seed from China.

Wife Marilyn continues to keep busy with fourth-grade students; daughters Brenda and Barbie are approaching college graduation after which Jim's Christmas tree farm (which was featured in an Atlanta journal article a few years ago) may undergo changes.

Donald H. Smith (Ph.D. '66) is currently serving as president of The American Peanut Research and Education Society, a society with about 700 members representing approximately 40 countries. Annual meetings are held in mid-July in one of the eight major peanut-producing states.

Three weeks were spent in West Africa (Niger, Senegal, and Burkina Faso) as part of his responsibility on a USAID-DRSP peanut project. He presented a paper on a method for forecasting groundnut leafspot diseases at the International Symposium on Agrometeorology of Groundnut, Niamey, Niger.

On the home front: Pala Subrahmanyam, groundnut pathologist at ICRISAT, spent a sabbatical working with Don. Wife Bobbie started a new business, "Head to Toe" (which tells it like it is, e.g., facials, manicures, pedicures, sculptured nails, and electrolysis). Son Scot is in his third year at the University of Texas, Austin. Daughter Debbie, after graduating from U. of T., has taken up residence in Austin and works for an advertising agency there. Daughter Donna and husband have a fashion design business (MIDON) in Dallas. They design and manufacture dresses.

C. Lee Campbell (Ph.D. '79) reports a good year in North Carolina for himself and his wife, with a personal and professional highlight in the publication of a textbook entitled "Introduction to Plant Diseases: Identification and Management," by G. B. Lucas, C. L. Campbell, and L. T. Lucas (published by AVI). Lee points out that G. B. Lucas is also a Penn Stater with a B.S. in 1940 and was born in Philipsburg. It is hoped the book will fill a "gap" for students who have a limited background in the biological sciences and expose an even larger audience to the art and science of plant pathology.

Jeffrey J. Morrell (M.S. '79) is now Assistant Professor, Department of Forest Products, Oregon State University, Corvallis. Since leaving Penn State, Jeff completed his doctorate at Syracuse in forest pathology and mycology. After a post-doc in a cell biology lab studying cartilage synthesis in chickens--an enlightening experience--a position in his area of interest was found. He is currently developing methods for prolonging the service life of western wood species by understanding the processes of deterioration. Three research assistants, two research associates, and four graduate students assist on the projects. On the personal side: Jeff has been married four years and he and his wife have bought an old farmhouse that "we're making livable. Thankfully, we have no kids yet (just a dog), and our lives are reasonably sane." Jeff says, "I've slid into what is termed a products pathologist position and enjoy reading the newsletter to see how the other half lives."

W. D. McIlveen (Ph.D. '77) is now supervisor of the Diagnostic Support Unit, Phytotoxicology Section, Air Resources Branch, Ontario Ministry of the Environment, in Toronto. He is in charge of processing samples of vegetation and soil for chemical analysis, the diagnosis of plant injury, and the maintenance of a small herbarium for injured specimens. He has a staff of four: a pathologist, a technician, a statistician, and a histopathologist--**Gabrielle Tung**, who worked at Penn State for R. R. Nelson several years ago. Bill says he crosses paths with **Lee Burpee** (Ph.D. '79) on occasion, Lee now being at Guelph.

Laurence V. Madden (Ph.D. '80) is still a member of the Plant Pathology faculty, Wooster, Ohio. Larry writes, "Many things have happened since last writing. I married Susan E. Heady on July 7, 1984. Susan finished her Ph.D. in Entomology at Ohio State last May and is now teaching general entomology at the Agricultural Technical Institute of Ohio State and conducting research on the behavior of leafhoppers. I am involved with or directing several epidemiology research projects. We are determining the effects of the microenvironment on fungal diseases of grapes and strawberries. Ultimately, these

results will be used for developing disease prediction systems. We recently initiated a large project on studying the mechanisms of rain splash dispersal of fungal plant pathogens. Another project entails prediction of crop losses of potatoes caused by early dying disease. Finally, I am still very much involved in studying epidemics caused by viruses and MLO's. Three post-docs and a graduate student are now working for me on these projects.

"Work has led to a lot of travelling. I spent two weeks in Costa Rica searching for maize viruses and their leafhopper vectors. This past summer I spent two weeks in Chapingo, Mexico, teaching a short course in epidemiology. Of course, I try to find time for vacations. Susan and I spent a week on Andros Island of The Bahamas before Christmas. Although we haven't been to a PSU football game in a long time, we did return to Happy Valley for the Arts Festival last year. Hopefully, we can return again in 1986."

Gary Schroeder (M.S. '80), who worked with Lee Schisler before going forth into the world of business, responds as follows: "For the last several years I have been engaged in research and development for the commercial production and marketing of exotic mushrooms. The market demand for exotic mushrooms in the U.S. has been increasing and this past summer I started my own company, Oakshire Mushroom Farm, to help satisfy that demand. Located in Kennett Square, we are now growing the shiitake mushroom (Lentinus edodes) and hope to introduce additional species in the near future."

Mark Wach (Ph.D. '85), who returned to California after completing his doctorate with Pete Romaine, writes, "This year finds me in my new position as Assistant Research Scientist for Monterey Mushrooms, an Amfac Company. Research is carried out in a new 5500 square foot laboratory located in our Watsonville, CA, facility. Currently, my work focuses on understanding the molecular basis of mushroom quality."

"Let everyone know that Ingrid and I are doing well, and that it's nice to be able to play golf all year 'round."

Barbara Illman (Ph.D. '83) remains in close association with the department as is evidenced by her response to our request for news. "After receiving my Ph.D. in 1983 with Dr. E. J. Pell, I joined the Department of Molecular and Cell Biology at Penn State. My research has been in the areas of molecular biology (with Dr. D. A. Bryant) and protein/isozyme biochemistry (with Dr. F. C. Wedler). In D. A. Bryant's lab I was part of a team that isolated, characterized, and cloned the genes for a protein component (Phycocyanin) of the photosynthetic apparatus of Cyanobacteria. The cDNA is being used to study environmental regulation of gene expression. The current research requires isozyme isolation, purification, and characterization for my biochemical studies on isozyme regulation. My long-range professional goal is to apply these techniques from molecular biology and protein/isozyme biochemistry to study the physiology and genetics of plant response to biotic and abiotic stresses (especially fungal pathogens)."

Rod Vargo (M.S. '76) completed his Ph.D. in 1984 at the University of Minnesota and is now a Field Research and Development Scientist for Mobay Chemical Corporation (the American subsidiary of Bayer A.G.). Most of his work is in the Central Valley near Sacramento, CA, and concerns fungicides or insecticides on irrigated row and orchard crops. He, his wife, Karen, and son, Eric, now two years old, reside in Davis and are enjoying it. (It appears that the trade-off of St. Paul and all that goes with long winters and short summers was a good one for a place with long summers and short winters.)

Barry Towers (Adjunct Assistant Professor), who is now a forest pathologist with the Pennsylvania Department of Environmental Resources, Bureau of Forestry, and located in Middletown, recently completed an assignment to Puerto Rico in an attempt to determine the relationship, if any, between Fusarium solani and Fusarium decemcellulare and a destructive bleeding canker of teak

trees. Fortuitously the best time to study the problem is in January, the dormant season for the trees and a nice time indeed to be away from Pennsylvania.

Carol J. Army (M.S. '84) has joined the small cadre of Penn Staters at the Ohio Agricultural Research and Development Center, Wooster, and reports, "This is a super place to work! I am enjoying my involvement in two quite different projects. The first involves the investigation of the mechanism of the interaction between Pratylenchus penetrans and Verticillium dahliae in the potato early dying syndrome. The second project consists of testing various application methods of Trichoderma spp. as an agent of biological control for radish damping-off caused by Rhizoctonia solani.

"I am finding the community here and Ohio in general a very pleasant place to live."

Jairo Castano (Ph.D. '81) last July moved with his family to Honduras where he is teaching at the Pan-American School of Agriculture near Tagucigalpa. This is a unique university where more than 400 students, mostly from Latin American countries, spend 50 per cent of their time in class and 50 per cent working in the field, the emphasis being "learning by doing." Jairo is in charge of courses in plant pathology and provides support to other projects working to increase productivity of beans and cowpeas.

Plant Science Major

The Plant Science major still lives on, although enrollment has declined as total Ag enrollment declined. In Fall Semester '85 we had 16 students, mainly juniors and seniors. Three of these were in the University Scholars program; two others should have been but they transferred into the program too late.

For those of you who graduated before the Scholars Program came on-line: it is a University-wide honors program that requires a 3.6 GPA; the students must take seven credits of designated honor courses per

semester, they must write a senior thesis which is handled similar to an M.S. thesis, and they must take an oral exam on that thesis from a three-person committee prior to graduation. There are relatively few Scholars in the College of Agriculture, and the Plant Science major has a disproportionately high percentage based on enrollment.

On 14 June 1985 Acting Dean Hinish placed administrative and policy responsibility for the major in the hands of the Heads of Agronomy, Horticulture, Plant Pathology, and School of Forest Resources, and in January 1986 Dr. Felix Lukezic agreed to become coordinator of the major.

Over the past 11 years, approximately 40 percent of the Plant Science graduates have gone on to graduate work in various fields of agriculture and science. As undergraduates they authored or coauthored 18 published papers, while two more papers sit in my files awaiting some final polishing prior to submission. Several of these students presented papers at scientific meetings. The major has a reputation among several top U.S. graduate programs as a prime source of highly qualified graduate students. Considering the relatively small numbers of students involved in the major, this record of accomplishment is unequaled by any other major in any College of Agriculture in the United States. Indeed, no one else even comes close.

The Plant Science major at Penn State has been a unique program, one in which I take great pride and from which I derive a great sense of accomplishment. I thank all of you with whom I have worked over the past 11 years: the program was great because you made it great. I wish all of you continued success in your various endeavors.

--**William Merrill**

Plant Science Students: What Are They Doing Now?

Many Plant Science graduates were in contact with the department over the past

year, and Bill Merrill provides the following summary of their activities:

Heidi Bittman ('81). I saw Heidi at Ag Progress days at Rock Springs. She is still working with her dad at Bittman Orchids, in Downingtown, PA.

Nicholas Bolgiano ('78). Nick received an M.S. in PPATH at Michigan State, started a Ph.D. in Plant Pathology at PSU but then switched to Statistics. A short letter from him indicates he is completing an M.S. in Statistics and will graduate Spring '86. He TA'ed STAT 301 last fall.

Kira Bowen ('80). Note with Christmas card indicates that Kira is in the throes of finishing her Ph.D. in Plant Pathology at Illinois.

Susan Braen ('81). Brief note from Sue stated she was working in the Washington, DC area, but didn't state what she was doing! She completed her M.S. in Natural Resources at Cornell, working with the people at Boyce Thompson on accumulation of fluoride pollutants around point sources.

Steven Brodict ('82). Letter from Steve stated that he is no longer with the Epcot Center Land Pavillion but is now employed by the City of Orlando in the H. P. Leu Botanical Gardens, working on tree and shrub maintenance. Job title is "Horticulturist."

Joanne Conover ('82). Nice note from Joanne indicated that she plans to finish her Ph.D. in Biochemistry at the University of Bath, England, this Spring. She is in the Molecular Genetics group, working on conversion of amyloplasts to protoplasts in potato tubers. She is looking for a post-doc back in the States.

John Grabowski ('77). Letter from John indicates that he has been in commercial mushroom production since graduation and now is manager in charge of compost production with Butler County Mushroom Farms. (I apologize for last year's newsletter, John, that listed you as "Greg." Mixup between your name and Greg Gattone in reading the list--I knew better, but just didn't pick it up in time!)

Ronald Hampton ('81). Letter from Ron stated he now is in the Department of Agronomy at the University of Arkansas working on aphid-sorghum interactions, specifically insect-induced changes in CO₂ fixation and subsequent translocation.

Theresa Kamicker ('80). Via the grapevine, Theresa is with CIBA-Geigy, in charge of pesticide residue studies. Any confirmation, Theresa????

Stephen Leath ('79). Steve (M.S., PPATH, Delaware) finished his Ph.D. in Plant Pathology at Illinois and now is with the USDA, stationed at NC State in Raleigh. Doing what, Steve???

Eugene Milus ('75). Gene finished his Ph.D. in Plant Pathology at Washington State (earlier received M.S. in PPATH there also). Christmas card and letter indicate he is now working for Rohm & Haas Seeds, Inc., in Berthoud, CO, as a "Breeder/Pathologist."

Scott Sebastian ('79). Scott did his M.S. in Agronomy at PSU and his Ph.D. in Agronomy at Illinois. Long letter indicates that he is now employed with the Development Division of DuPont at Wilmington, working on genetics of herbicide resistance, interfacing with groups in molecular biology, cell culture, physiology, and weed science.

Sarah Slover ('83). Christmas card and letter from Sarah indicated that she hopes to finish her M.S. this summer. She is working in corn genetics at Purdue. She was planning on spending two weeks over Christmas break canoeing in the Everglades????

Carl Strausbaugh ('83). Letter from Carl stated that he had completed his M.S. in PPATH at Washington State and is starting his Ph.D. there, studying the resistance of winter wheat to the strawbreaker foot rot. He says he is enjoying the slow pace of western life. (Carl didn't state whether he had assumed role of department social chairman now that Gene Milus and Laura (Seybert) Willett are no longer at Pullman. For a number of years that was a Penn State job!)

Michael Sulzinski ('80). Nice letter from Mike indicated that he had completed his Ph.D. in Plant Pathology (virology) at Cornell, with minor in Biochem. and is now "Molecular Biologist" with Lederle Labs. Rumor has it that he is working on the hi-tech production of a polio vaccine.

Katherine (McCall) Weir ('80). Had a nice long letter with Christmas card from Kathy, who since graduation had been working for Agway at their vegetable seed farm in western PA. She has been responsible for screening new varieties for disease resistance. Last summer Agway terminated their vegetable breeding program, so she is out of a job. She, husband, and two-year-old daughter Laura now live in Rochester PA.

Laura (Seybert) Willett ('78). Received Christmas card with photo of Laura, husband Mike, and son Christopher, but no note as to what she was doing other than being a housewife and mother (which I expect keeps her busy!). They are still at Prosser, WA, where Mike is extension apple specialist for WSU.

David Wilmot ('79). Letter from Dave indicated he completed his M.S. in Agronomy at Illinois in January '80. He is continuing for the Ph.D. there working with tissue cultures to screen soybeans for resistance to *Phialophora* stem rot.

Jennifer Yocum ('84). Letter from Jenny indicates she anticipates finishing her M.S. in Plant Pathology at Delaware this June, working on relation of corn stalk rot to the southern corn stalk borer. **Bob Carroll** (Ph.D. '68) is her advisor. She is TA'ing introductory PPATH labs. She plans to go on for Ph.D., but has not decided between Plant Pathology and Entomology. [Try a dual major, Jenny!]

If your name is not here, **why**? All it takes is five minutes of your time and a 22¢ stamp! We really would like to hear from you.

To all of those who did write: it was GREAT hearing from you. The latch-string is always out if you get back to State College area.

ROSTER OF GRADUATE STUDENTS
January, 1986

| <u>Name</u> | <u>Degree</u> | <u>Advisor</u> | <u>Research Interest</u> |
|-------------------|-----------------------------|----------------------------|---|
| Clarke, Gregory | M.S. | K. Hickey and J. Travis | (Begins Summer, 1986) |
| Dann, Michael | Ph.D. (Plant Physiology) | E. Pell | Air pollution effects on crops; stress physiology |
| Enyedi, Alex | Ph.D. | E. Pell | (Begins Fall, 1986) |
| Fischer, Stacey | M.S. | S. Pennypacker | Cultural and chemical control of early blight on tomatoes |
| Gladstone, Leslie | M.S. | G. Moorman | Effects of saline stress on predisposition of geraniums to <u>Pythium</u> disease |
| Halbert, Charles | M.S. | L. Schisler | Screening of growth regulators for use in mushroom cultivation |
| Hausbeck, Mary | Ph.D. | S. Pennypacker | Epidemiology of <u>Botrytis</u> <u>cinerea</u> of the cutting- propagated geranium in the greenhouse |
| Jeschke, Nikola | M.S. | P. Nelson | Fusarium mycotoxins, taxonomy, biology |
| Jones, Marcus | M.S. | F. Lukezic | Biological control of forage diseases using bacteria |
| Karasevicz, Diane | M.S. | W. Merrill | Dendropathology; bio- deterioration of oak trees following gypsy moth defoli- ation |
| Kleiner, William | M.S. | J. Travis and K. Hickey | (Begins Summer, 1986) |
| Knittel, Romy | M.S. | E. Pell | (Begins Summer, 1986) |
| Long, Robert | Ph.D. | D. Davis | Acid rain effects on forest productivity |

| <u>Name</u> | <u>Degree</u> | <u>Advisor</u> | <u>Research Interest</u> |
|---------------------|----------------------|-----------------------|--|
| Maczuga, Steven | M.S. | B. Christ | Diseases of potato |
| North, Leonard | M.S. | P. Wuest | Management and control of diseases caused by <u>Verticillium</u> on the commercial mushroom |
| Onyike, N. Beatrice | Ph.D. | P. Nelson | Mycotoxins |
| Perez, Julian | Ph.D. | S. Pennypacker | Effect of greenhouse and field conditions on survival of <u>Pseudomonas syringae</u> pv. <u>tomato</u> in Pennsylvania |
| Raid, Richard | Ph.D. | S. Pennypacker | Epidemiology, crop loss |
| Renderos, Willy | M.S. | F. Lukezic | Biological control of bacterial diseases |
| Rodriguez, Rocio | Ph.D. | K. Leath | Role of <u>Phoma medicaginis</u> in the crown and root rot of alfalfa |
| Rytter, Joann | M.S. | G. Moorman | Biological control of geranium rust in the greenhouse |
| Sigulas, Kristen | M.S. | J. Ayers | Disease resistance |
| Smeenk, Jeff | M.S. | J. Bloom | Nematode vectors, tomato ring spot virus, Fusarium - nematode on clover |
| Sommerfeld, Mark | M.S. | J. Frank | Interactions between <u>Helminthosporium</u> and BYVD on oats |
| Spadafora, V. James | Ph.D. | H. Cole | Epidemiology and control of Septoria diseases of wheat |
| Thomas, Garfield | Ph.D. | J. Ayers | Crop loss assessment and pest management in corn |
| Tuttle, Margaret | Ph.D. | S. Pennypacker | Epidemiology and simulation modeling |
| Wenner, Nancy | M.S. | W. Merrill | Christmas tree diseases |

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