



Plant Pathology Penn State University

Seasons Greetings

Dear Friends,

Please accept our sincere seasonal greetings. The intent of this holiday newsletter is to bring you up to date on the activities of the Plant Pathology Department at Penn State and to have you become better acquainted with plant pathologists in the university community.

This newsletter will become an annual event. In the future, it will include news about those of you who have left Penn State so that alumni, emeriti, and retirees can reconnect. Please take a moment to drop a line when called upon next fall. If you have an e-mail account, let us know your address because we'd prefer to send an electronic version.

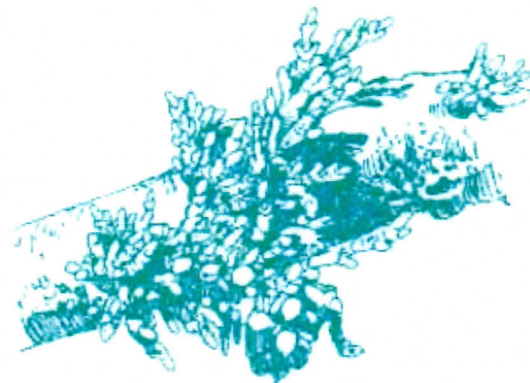
As an overview, the department continues on its upward path to excellence in the land grant mission and its reputation as a center for 21st century phytopathology is growing year by year. Buckhout Lab has a vibrant atmosphere that comes from a sense of purpose by quality people. Please visit the department's web site at <http://www.ppath.cas.psu.edu/> for more information. While there, be sure to take the time to visit other Penn State web sites to learn of current activities in the agricultural college and university.

In reality, the national economic downturn has taken its toll on Pennsylvania and Penn State University.

State support now constitutes a small fraction of the total university budget. The Plant Pathology Department and other units in the agricultural college have experienced a reduction in personnel this fiscal year. Clearly, the department's ability to exploit opportunities, turn out top-notch graduates, seek out and lead new academic initiatives, and serve its constituencies will determine our collective fate.

The success stories of faculty, graduate students, and support staff are told here. As you will see, this group of people has distinguished themselves by their achievements. Plant Pathology at Penn State is alive and well and is ready to face the future as a leader in the discipline. Please support our efforts to remain strong. Best wishes for a fulfilling holiday season and a peaceful new year.

-The Editor



Faculty Notes

John Ayers directs the Penn State Pesticide Education Program, which helps ensure proper use of pesticides on the farm and in urban settings. **Janis Marshall, Sharon Gripp, Kerry Richards, Julie Watson, Rick Johnson, Eric Lorenz,** and **Jimi Gingerick** assist John in this effort. John also serves as director of the Northeastern Pest Management Center, a joint effort of Penn State and Cornell Universities.

Paul Backman recently joined the department as full professor and has research interests in the areas of disease biocontrol and detection of invasive pathogens, including those that may have been purposely released. He has one M.S. student, **Anissa Demers**, who works on biological control of Canada thistle. Currently, Paul is recruiting a new technical assistant.

Mushroom growers depend on **Dave Beyer** to solve their production problems. Dave was promoted to the rank of associate professor in July 2002.

Vija Wilkinson and **Jacki Kremser** assist Dave in the lab and **Jeremy Uncles** joined Dave's lab in the fall semester to work on his M.S.

Barb Christ studies early blight, late blight, and powdery scab of potato and cooperates with other scientists to improve potato cultivars adapted to the northeast region. **Mike Peck** ably assists in field work. Barb currently has four graduate students: **Ruofang Zhang** and **Stefano Costanzo** are working on their Ph.D.s while **Cory Sica** and **Sara Mahoney** are masters candidates. **Xinshun Qu** is a postdoc working on the molecular biology of *Spongospora subterreanea*.

Herb Cole is an assistant to Ted Alter, the Associate Vice President for Outreach and Cooperative Extension. Herb also serves as the Professional Development Regional Coordinator for the Northeast Sustainable Agriculture Research and Education Program (SARE). **Shirley Gryczuk** is a project associate working with Herb in the Northeast SARE program and with SARE's state sustainable agriculture coordinator Jack Watson, the Ag and Natural Resources Program Leader for Penn State Cooperative Extension.

Don Davis contributes considerable expertise in forest pathology and teaches two popular undergraduate courses. He currently is mentoring **Matthew Fromm**, an M.S. candidate and co-advising **Jozsef Geml** with **David Geiser**.

Erick De Wolf is in his second year on the faculty and does research and extension work in field crop pathology, with a specialty in disease forecasting.

Tim Grove supports his research program and Erick has an M.S. student, **Nick Dufault**, investigating the ecology of Fusarium head blight of wheat. **Norm Conrad** is an Extension Specialist who will soon be joining Erick's lab as a Ph.D. candidate.

Hector Flores moved into Buckhout Lab this year and is continuing his international leadership role in root biology. He is actively involved in the undergraduate honors program and teaches a popular course on plants and people. He also teaches a graduate course entitled Plant Metabolism and Biochemistry.

Your editor this year is **Leonard Franci**, who is also the new department head as of August 2002. He came to Penn State from the faculty of North Dakota State University, where he served as a wheat

pathologist. His specialty area is plant disease epidemiology.

Dave Geiser leads the Fusarium Research Center with the able assistance of **Jean Juba**. Dave is working hard to dissect the phylogenetics of the Fusaria with molecular techniques augmented by traditional taxonomy. **Jozsef Geml** and **Ameena Nalim** are working for their Ph.D. degrees while **Ning Zhang** and **Maria Jimenez** are postdocs.

Fred Gildow studies the mechanisms of specificity between viruses and their insect vectors. **Bill Sackett** provides technical assistance while **Kara Maraden** and **Chris Wallis** are students working on plum pox for their masters. Apple and peach growers look to **John Halbrendt** for help with their nematode and virus problems. John is assisted in his efforts by **Eric Anderson** and **Rod Shaffer**.

Seogchan Kang has contributed greatly to departmental expertise in molecular biology since coming to Penn State. **Lori Kroiss**, **Chang Hyun Khang**, **Payungsak Rauyaree**, and **Jean-Phillippe Marelli** are graduate students in his lab.

Gretchen Kuldau conducts research in mycotoxicology with the assistance of **Brian Dombroski**. **Michele Nagy** is an M.S. student with Gretchen working on mycotoxins in silage.

Felix Lukezic is an emeritus professor who is still an engaged educator. Not only does he teach freshman seminar and ag general education courses but also he conveys his love of plants to area kids in remarkable science classroom sessions.

Alan MacNab has concentrated his research activities in recent years on tomato disease management. His extension work in vegetable pathology includes maintaining the tomato disease

forecasting system, which is available on the web.

Tim McNellis is a tenure-track faculty member who is researching plant defense mechanisms to bacteria. **Judy Sinn** and **Phil Jensen** provide superb assistance in the lab while **Justin Dillon** and **Niranjani Jambunathan** are graduate students.

Gary Moorman continues to work on disease problems for the horticultural industry with a research focus on Pythium root rots of greenhouse crops. Currently, he has two students, **Carla Garzon** and **Paola Ramon**.

Eva Pell currently serves the university as the Vice-President for Research and Dean of Graduate Studies. She holds the John and Nancy Steimer Professorship and has a student in the Plant Physiology Program, **Hernan Romero**.

Pete Romaine is involved in the transgenic manipulation of the button mushroom for crop improvement. He is assisted in the lab by a postdoctoral researcher, **Carl Schlagnhauser**, and visiting scholar, **Tan Qi**.

Dan Royse has responsibility for research into the commercialization of new mushroom species. **Pat Collopy** is a Ph.D. candidate in Dan's lab.

John Skelly leads the department's research and outreach program in plant disorders caused by air pollution. **Dick Stevenson**, **James Savage**, and **Jonathan Ferdinand** provide excellent technical assistance. **Caimiao Wei** will receive her doctorate in December 2002.

Teodora Orendovici researches bio-indicator plant lines and **Dave Paar** is an ag education student working on program development for the air quality learning and demonstration center within the new Penn State Arboretum.

Elwin Stewart resigned as department head this year to resume his research in

taxonomic mycology and grape vine decline diseases. He is ably assisted in the lab by **Nancy Wenner** and is guiding **Barrie Overton** and **Priscila Chaverri** to doctorates and **Leslie Long** to an M.S. degree. (Ed. note: Elwin appears entirely too happy in his new position.)

Jim Travis moved to the Fruit Research and Extension Center in Biglerville in 2001 but his responsibility for grape research and statewide extension is still very much in place. Jim is assisted at University Park by **Jo Rytter**, in Erie by **Bryan Hed**, and in Biglerville by **Noemi Halbrendt** and **John May**. He has three graduate students: **Phil Northover**, who now works in Manitoba, **Beth Krueger Gugino**, and **Fritz Westover**.

Wakar Uddin runs a successful turfgrass pathology program and teaches one of the few Internet plant pathology courses. **Mike Soika** assists Wakar with field plots and **Gnana Asir Viji** is a postdoctoral researcher while **Bangya Ma** and **Upeksha Nanayakkara** are graduate students.



Staff News

The office staff is led by **Becky Peplinski**, who also serves admirably as an administrative assistant to the department head. Currently, **Rita Smith** is the receptionist, **Jean Bloom** handles the books, and **Susanne Hart** is in

charge of student programming. **Teresa Shirk** serves as Buckhout facilities, safety, and services coordinator.

John Peplinski manages the Plant Disease Diagnostic Clinic, which processes in excess of 3,000 samples per year for Pennsylvanians.

Tom Rhodes handles the management of the Mushroom Research Center and Mushroom Test-Demonstration Facility, which supports research on mushrooms across departmental lines. He is assisted by **Doug Keith**, **Joseph Martain**, and **Henry Shawley**.

Larry Jordan manages the farm at Rock Springs but has announced his retirement after 41 years (see more below). **Randy Dreibelbis** has learned the ropes from Larry and will fill the role of farm manager. **Roxanne Lease** will split her time between the greenhouse and farm to fill the void mandated by budgetary constraints.

Awards

Departmental faculty, staff, and students have had a long tradition of garnering awards in recognition of their performance. Recent awardees:

- Barb Christ was given the APS Northeastern Division Award of Merit for significant contributions to plant pathology research, teaching, and extension.
- Ruofang Zhang placed 2nd in the graduate student competition at the 86th Potato Association of America Meetings.
- Jim Travis, John Halbrendt, Herb Cole, Elwin Stewart, and Fred Gildow were given the Award of Excellence by the Northeast Extension Directors and Experiment Station Directors as well as the

Secretary of Agriculture for their contributions in fighting plum pox of peach.

- The National Wine Growers Association judged the research contribution by Beth Krueger Gugino as outstanding and invited her to speak at their annual meeting in New York.
- Ameena Nalim won the graduate student research presentation award sponsored by the Mycological Society of America.
- Ameena Nalim won first place and Jozsef Geml took third place in the Health and Life Sciences Division of the 17th Annual Graduate Exhibition.
- Jean Bloom was nominated for employee of the year in the College of Agricultural Sciences and outstanding staff person in the university.
- The Henry W. Popp Graduate Assistantship, the James P. Roberts Scholarship, the Lester P. Nichols Memorial Award, the Harold J. Miller Memorial Grant-in-Aid, and the Arthur Gaspari Memorial Scholarship collectively benefit deserving students. Awardees in 2002 included Ameena Nalim, Patrick Collopy, Beth Krueger Gugino, Barrie Overton, Payungsak Rauyaree, Sara Mahoney, and Chris Burkhart.

Library Endowment Will Preserve Departmental Archive and Enable Access to World Literature

The estate of Albert C. Hildebrandt (B.S. 1939, M.S. 1941) contained a generous gift to Penn State University for enhancement of the departmental library. Dr. Hildebrandt earned a

doctorate from the University of Wisconsin and pioneered tissue culturing while a faculty member there. He was one of the earliest advocates of cell fusion as a means of incorporating new traits into a cell line.

The endowment will enable the department to organize the present collection, bind journals, and update library furnishings. A departmental committee is assessing the best use of funds for sustained enhancement. Possibilities include the application of computer technology for information retrieval, creation of an Albert C. Hildebrandt lecture series, and electronic subscriptions.

This endowment will enable the Plant Pathology Department to become a world leader in library holdings and in opportunities for graduate education, research support, and outreach.

Recent Graduates and Placements

John Pecchia, Ph.D. Lecturer at St. Bonaventure University
Qing Shen, Ph.D. Mycologist with Kennett Square Specialities
Holly Chamberlain, M.S. High School Science Teacher, New Jersey
Patrick Collopy, M.S. Ph.D. Candidate in Plant Pathology, Penn State
Beth Gugino, M.S. Ph.D. Candidate in Plant Pathology, Penn State
Merrilee Anderson, Ph.D. Assistant Professor, Mount Aloysius College
Elizabeth Brantley, Ph.D. Instructor at Penn State Mont Alto
Weimin Gao, Ph.D. Post-doctoral Associate, Oak Ridge National Lab
Kelly Ivors, Ph.D. Post-doctoral Associate, Univ. of California, Berkeley
Cosima Wiese, Ph.D. Assistant Professor, College Misericordia
Erik Goldberg, M.S. 2002

Atherton, Buckhout Descendents Visit Department

Four women with a famous Penn State pedigree visited University Park to reclaim a heritage that they previously knew little about. Mary Frances Buckhout McVay, Harriet Buckhout Ward, and Helen Buckhout Howe are the grandchildren of Penn State President George Washington Atherton and Frances Washburn Atherton and of William A. Buckhout and Mary Louise Harkness Buckhout. Atherton was Penn State's president from 1882 to 1906. Buckhout Laboratory is, of course, named after the women's paternal grandfather, an 1868 graduate and a professor of agriculture who taught botany, geology, horticulture, zoology and forestry. The trio came to University Park for the first time with Mary Ai Li McVay Kuntz, a daughter of Mary Frances McVay who researched her Penn State roots after learning about her prominent relatives.



John Skelly shows visitors a pamphlet by William Buckhout he still uses in his class to illustrate the effects of air pollution on plants. A historical display case was prepared for the occasion.

Recent Retirements

Paul Wuest, who served the mushroom industry as an extension specialist for many years, retired in 2001. Paul is recuperating from a recent fall.

Ken Hickey, fruit pathologist and former scientist-in-charge at Biglerville, retired from his position in 2001. Ken still comes to the lab on a regular basis to help Penn State meet the challenges posed by fungal diseases and emerging threats to the industry.

Larry Jordan, farm manager at Rock Springs, is slated to retire in January 2003. He plans to spend his retirement raising beef cattle on his farm.

Obituaries

Wilford R. Mills, 93, passed away on August 10, 2002. He was born in Hume, NY in 1909, received a B.S. in 1931 and Ph.D. in 1939 from Cornell University. He joined the Penn State faculty in 1941.

Early in his career, he focused his research on potatoes. He acquired an international reputation for his contributions to the breeding of potatoes and control of their diseases.

He developed an interest in agricultural development in Latin America. While a doctoral candidate, he spent two years at the Instituto de Pesquisas Agronomicas in Recife, Brazil. In 1952, under the aegis of the Rockefeller Foundation, he went to Mexico to assist with their potato program. Later he returned to Mexico, spent a sabbatical in Costa Rica, and worked in Uruguay.

Dr. Mills retired as Professor Emeritus of Plant Pathology in 1974. He was also an honorary life member of the International Potato Association.

David R. MacKenzie, 61, Executive Director of the Northeastern Regional Association of State Agricultural Experiment Station Directors (NERA), died of cancer October 23, 2002. He was born in Hamilton, MA, obtained his B.S. in Botany from the University of New Hampshire, and M.S. and Ph. D. in Plant Pathology from the Pennsylvania State University.

Prior to joining NERA in 1995, David MacKenzie was National Program Leader for the U.S. Department of Agriculture's (USDA) Cooperative State Research, Education, and Extension Service (CSREES). In this capacity he managed the agency's biotechnology research programs, giving emphasis to the safe application of the new tools of molecular biology to crop and livestock improvement.

After receiving his Ph.D., David MacKenzie joined the Rockefeller Foundation, working in Mexico with Noble Laureate Norman E. Borlaug, at the International Center for Maize and Wheat Improvement (CIMMYT), and in the Philippines at the International Rice Research Institute (IRRI). He then went on to become head of the Department of Plant Breeding at the Asian Vegetable Research and Development Center in Taiwan, Professor of Plant Pathology at Penn State, and a Department Head at Louisiana State University.

David MacKenzie was also Chair of the Board of Trustees of the International Potato Center (CIP) located in Lima, Peru. He was also a long time consultant to the World Bank in agriculture and natural resources management.

He published several books, more recently on agricultural research management and grantsmanship. His contributions to agriculture were

numerous and exemplary, particularly in research, management and policy-making. His last projects included the development and publication of a Science Roadmap, formation of an agro-security institute, and a manual to help scientists state the value of their research.

Correspondence

If you would like to correspond with retirees, current members of the department, or other alumni, please send your message c/o the departmental office:

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