

PPCP News

LSU Department of Plant Pathology & Crop Physiology



Update from the Department Head

Gerard T. Berggren, Jr.

Greetings from the Department of Plant Pathology and Crop Physiology! In the next few paragraphs, I would like to bring you up to date regarding the many changes that have taken place in the Department in recent years. Since the production of a Departmental Newsletter is a new undertaking for us (unless you're older than I am and remember Mrs. Exner's "Bot-Pot"), there is much to report.

I'll begin by going back to 1970 when the Department of Botany and Plant Pathology split into two separate administrative units – The Botany Department and The Department of Plant Pathology (Botany was later merged with several other departments to form the Department (continued on p. 2)

Life Sciences Annex



In June, 2001, the long-awaited annex to the Life Science building was opened. This added approximately 14,466 ft² of space to the department of Plant Pathology & Crop Physiology. It includes a "dirty lab" on the first floor where field samples can be processed; three refrigerated rooms; an equipment room for all the incubators, etc. that used to occupy the halls of the old LSB; a conference room where we hold faculty meetings, some classes, morning coffee break, and seminars; and general research labs and faculty offices that are currently occupied by Drs. Clark, Damann, Hoy, McGawley, Overstreet, Rush, and Valverde. We were also pleased to receive \$214,500 to purchase equipment for this new lab space. Shortly after occupying the LSB Annex, the department also received an equipment grant of \$100,000 through the Louisiana Board of Regents that allowed us to purchase instruments for real-time PCR, gel documentation, and a Biolog station. The annex has provided not only an increase in the amount and quality of space in the department, but the sweeping views from the large windows have helped provide a new outlook on the world.

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of Plant Pathology). In the late 1970's, the name was changed to The Department of Plant Pathology and Crop Physiology to more accurately reflect the composition and responsibilities of the department. Currently there are 15 faculty positions in the department (including the department head). Two significant demographic changes occurred in 2001. First, the faculty conducting weed science research programs (two at that time), along with their research associates and graduate students, were relocated from the Department of Plant Pathology and Crop Physiology to the Department of Agronomy and Environmental Sciences. Also, in 2001, the three Extension Plant Pathologists were moved from Knapp Hall to the Department. This was done as part of the AgCenter's plan to reorganize its administrative structure.

Another significant event that occurred in 2002 was the retirement of Dr. Johnnie Snow as Head of the department. Johnnie served in that capacity for almost 10 years. I was asked to accept the appointment as Head in November of 2002 and have served in that capacity since that time.

I'm sure everyone's aware of the devastating effects of hurricanes Katrina and Rita on Louisiana and the south central gulf coast. Following Katrina's destruction of the New Orleans area, scientists from the USDA Southern Regional Research Center were left without facilities due to the flooding. Faculty in the Department of Plant Pathology and Crop Physiology willingly shared facilities with several of these displaced scientists for approximately six months. Drs. Damann, Murai, Cohn, Schneider and Hoy, among others, were prime participants in providing space for these individuals.

Other significant recent events include the filling of two faculty positions in the fall of 2005. One was a new position given the department as a result of the discovery of Asian Soybean Rust (see article elsewhere in this newsletter), and the other was to replace Dr. Ken Whitam, who retired after over 30 years of service in the Louisiana Cooperative Extension Service. Another retirement in 2005 was that of Dr. John P. Jones. Dr. Jones served the LSU system for over 27 years. At this time, his position has been frozen pending budgetary uncertainties for FY2006-07.

Another significant retirement in 2005 was that of Mrs. Patricia Hives. Most of you know Pat as the lady who made sure things were completed on time and correctly (i.e. grades, graduate school forms, visas, etc.). For over 20 years, Pat served as surrogate mother for many graduate students passing through this department.

Following are some comings and goings over the last several years. Our hope, by this newsletter, is to keep in touch with as many former students, faculty, and staff, etc. as possible. We welcome feedback and information for our next edition.

Current Faculty

Gerard T. Berggren, Jr. 1969-74 and, 1977-
 Zhi-Yuan Chen 2005-
 Christopher A. Clark 1977-
 Marc A. Cohn 1978-
 Kenneth E. Damann 1974-
 Donald M. Ferrin 2005-
 Gordon E. Holcomb 1965-
 Clayton A. Hollier 1982-
 Jeffery W. Hoy 1984-
 Edward C. McGawley 1978-
 Norimoto Murai 1985-
 Charles Overstreet 1978-
 Milton C. Rush 1970-
 Raymond W. Schneider 1984-
 Rodrigo A. Valverde 1988-

Retirements (since 1970)

Beatrice Exner
 Joseph A. Pinckard
 Rene J. Steib
 Elias D. Paliatseas
 Norman L. Horn
 Weston J. Martin
 John P. Hollis
 Louis J. Anzalone, Jr.
 William J. Blackmon
 Wray Birchfield
 G. Don Lindberg
 John B. Baker
 Lowell L. Black
 Johnnie P. Snow
 H. Kenneth Whitam
 John P. Jones

Time in Department

1958-1988
 1961-1973
 1951-1980
 1954-1983
 1951-1982
 1947-1982
 1951-1983
 1958-1988
 1971-1988
 1958-1988
 1955-1990
 1953-1992
 1968-1996
 1972-2001
 1974-2005
 1977-2005

Profiles of New Faculty



Zhi-yuan Chen

I received my B.S. (1988) and M.S. (1991) degrees in Plant Physiology and Biochemistry from Peking University, Beijing, China. I came to the Department of Plant Biology, Louisiana State University to continue my graduate study on the molecular biology of carbon dioxide concentrating mechanisms in green algae in 1992. Since graduation in late 1996, my research has been on identifying aflatoxin resistance-associated proteins in maize through proteomics and understanding host resistance mechanisms, a collaborative project between the Food and Feed Safety Research Unit, Southern Regional Research Center, USDA-ARS and the Department of Plant Pathology, LSU AgCenter.

My current research interests are to understand host-fungus interactions in maize/*Aspergillus flavus* (the fungus produces aflatoxins during infection of susceptible crops, such as maize) and soybean/*Phakopsora pachyrhizi* (the casual agent for soybean rust), and to develop strategies to enhance host resistance in maize and soybean to fungal diseases. The approach we are taking is to identify proteins induced after fungal infection through proteomics, especially those proteins uniquely upregulated in resistant lines, but not in susceptible ones, and to characterize these proteins to understand their possible roles in host resistance.



Don Ferrin

I received an M.S. from the Department of Botany & Plant Pathology at Michigan State University in 1976, where my thesis research was on the epidemiology and management of black rot of grapes, caused by *Guignardia bidwellii*, under the guidance of D.C. Ramsdell. I received a Ph.D. from the Department of Plant Pathology at the University of Florida in 1985, where my dissertation research was on the effects of inoculum density (and dispersion) and soil water status on the epidemiology of black shank of tobacco, caused by *Phytophthora parasitica* var. *nicotianae*, under the guidance of D.J. Mitchell. I was a member of the faculty at the University of California at Riverside from 1986-1994, where I was responsible for research and teaching in the areas of epidemiology and diseases of ornamental crops. Additionally, I held positions in industry as a research plant pathologist, laboratory manager and plant disease diagnostician with Yoder Bros., Inc. (1976-1980) and Pacific Plant Health Services (1997-2001).

Most recently I was a research associate with M.E. Stanghellini at UC Riverside (2001-2005), where I was involved primarily with research on soil-borne diseases of desert crops, primarily root rot and vine decline of melons caused by *Monosporascus cannonballus*.

I joined the faculty of the Department of Plant Pathology & Crop Physiology at the LSU AgCenter in October of 2005, where I serve as an Extension Specialist in Plant Pathology with statewide responsibility for all horticultural crops (i.e., turf, ornamentals, fruits, vegetables, sweet potatoes, etc.). Additionally, I am involved in the training of Master Gardeners, pesticide safety education programs, and the plant disease diagnostic clinic. I hope eventually to pursue my research interest in the epidemiology and management of diseases of horticultural crops.



Department Roster, Spring, 2006

Postdocs:

Nandakumar, Rangaraj
Zhang, Shuli

Graduate Students:

Chappell, James (Cohn)
Gutierrez, Dina (Valverde)
Huang, Changwei (Damann)
Kaur, Hemandeep (Cohn)
Kokkinos, Charalambos (Clark)
Lee, Seokhyun (Murai)
Menard, Roger (Jones/Holcomb)
Mumma, Paul (Schneider)
Park, Sunjing (Murai)
Sumner, Joy (McGawley)

Research and Extension Associates:

Berggren, Rose
Bollich, Patricia
DeRobertis, Cathy
Giles, Cheryl
Gray, Erica
Grelen, Lori
Hadziabdic, Denita
Hoy, Mary
Paccamonti, Jane
Pontif, Michael
Robertson, Clark
Savario, Carolyn
Sweany, Rebecca
Wolcott, Maurice

Office Staff:

Carver, Robert, Administrative Coordinator 4
Ernest, Yolanda, Administrative Coordinator 3
Warr, Charletta, Accounting Technician
Wiggins, Sarah, Administrative Coordinator 3



News from Alumni & Friends

Dana Berner, PhD, 1991:

I am currently a Plant Pathologist with the Foreign Disease-Weed Science Research Unit, Agricultural Research Service, United States Department of Agriculture, Ft. Detrick, MD. I have the responsibility of foreign exploration and discovery of exotic plant pathogens for classical biological control of introduced invasive weeds in the U.S. Evaluation of these plant pathogens for efficacy and safety (specific narrow host range) for use in the U.S. is also my responsibility with the final objective of releasing thoroughly evaluated and safe pathogens into the environment in the U.S. Most evaluation work is done in a biosafety level 3 quarantine facility at Ft. Detrick, but I have formal collaboration with scientists in Greece, Russia, Tunisia, and Turkey to collect pathogens and evaluate them under field conditions in the country(ies) of origin. Through these collaborations and others, I have been able to collect nearly 800 disease specimens from weeds of importance in the U.S. From these specimens nearly 400 fungal pathogens have been identified, and thirteen show promise for classical biological control of invasive weeds in the U.S.

Jason P. Bond, PhD, 1999:

Things are going great for me and my new wife Sarah. We got married on Dec 30th. We bought a house in Marion, IL. My wife is a division chair of agriculture and applied sciences at Rend Lake College.

My tenure and promotion was approved just a few weeks ago. Initially I was hired to develop a nematology program at SIU (Southern Illinois Univ.), primarily working on soybean cyst nematode. I added fungal soybean pathogens to my program when John (Russin) was promoted to dept. chair and later dean of research. While my nematology efforts have been diluted, I still have projects on SCN and southern root knot nematode.

Our state and regional soybean boards have been very generous to my program over the past 5 years. Their support allows me to run my program and employ 3 soft money researchers and 1 graduate student.

Ron Brlansky, PhD, 1977:

I am still here at the Univ. of Florida, Citrus Research and Education Center in Lake Alfred. My work is in three main areas: Citrus

tristeza virus and brown citrus aphid interactions, where we are characterizing the genotypes of the virus that are most aphid transmitted, hoping to better understand how the virus is transmitted by the aphid, and why severe strains are transmitted more often over mild ones. I am working on the characterization of citrus leprosis virus, which is not in the U.S., and have found that there are two types, nuclear and cytoplasmic, and our team is finishing the full sequence of the cytoplasmic type and have found that it is probably a new virus group. I am continuing work on citrus greening disease or Huanglongbing (yellow dragon), which was unfortunately found in Florida last year. I have been making a number of extension presentations to growers on the symptoms and management strategies, and hope to continue work on psyllid transmission of the bacterium and on attempts to culture this fastidious prokaryote. Cathy and I still live in Lake Alfred and welcome any visitors if you are in Florida.

Cai Guohong, MS, 1999; PhD, 2004:

I am still a postdoc in Dr. Bill Fry's lab (Cornell). My work includes investigating the tomato-*P. infestans* interaction using microarray, RT-PCR and virus induced gene silencing. A side project is to develop a novel transformation system for *P. infestans*.

Se-Chul Chun, PhD, 1997:

I was awarded Ph.D. under Dr. R.W. Schneider at 1997. Then, I had worked in National Plant Quarantine Service of Korea for 3 years. At present, I am assistant professor of Dept. Molecular Biotechnology, College of Life and Environmental Science in Konkuk University. I am now studying gray mold of grape, fusarium wilt of orchids (*Phalenopsis* sp.), and biological control of sclerotium rot of lettuce.

Gerald Dill, MS, 1977; PhD, 1981:

Still with Monsanto and currently manage the Tech Development Organization in the Southern US. I have been with Monsanto for 23+ years. My wife, Jan and I live in St Louis and are just about empty nesters, as the youngest of our 4 children is soon to graduate college.



News from Alumni & Friends (cont.)

Valmir Duarte, PhD, 1990:

I am glad you survived the hurricane! It has been a long time since Nara and I had dinner with you and Mrs. Linda: December 1990! It was a wonderful time in my life.

I am a full professor (since 2002) in plant pathology at the Departamento de Fitossanidade, Faculdade de Agronomia, Federal University of Rio Grande do Sul. This is the third year as the chairman.

I have four graduate students (3 M.Sc and 1 Ph.D.) working on bacteria (*Erwinia* and *Ralstonia*) of potato. I teach Phytobacteriology and Plant Disease Diagnosis in the graduate course and Plant Disease Management at the undergraduate level. I have been an associate editor of the Brazilian Plant Pathology Journal (*Fitopatologia Brasileira*) since 1997.

After leaving LSU, I took one year in Charlottetown, Prince Edward Island, in sabbatical (V. Duarte, S.H. De Boer, L.J. Ward and A.M.R. de Oliveira. Characterization of atypical *Erwinia carotovora* strains causing blackleg of potato in Brazil. *Journal of Applied Microbiology* 96(3):535-545. 2004).

Conrad (Kent) Evans (Faculty, 2000)

I have been in Utah, on the job, since October 1, 2004. The move was good as Utah State University is a small corner of the world but one that is rather a good one. I was given a really good startup package... to get the lab up and going. My job is mainly extension oriented (70%) but I do fit in research (20%) and there is always the obligatory service.....whatever the heck that is (10%). I do not have a formal teaching assignment (very rare these days). I really like my job, I am the only field pathologist for the state of Utah and they support me well, you can imagine the variety of things I do and see. The flip-side of that issue is that Utah is a low ranking agricultural state so Ag here is small compared to Minnesota or Louisiana. The Biology Department is large but eclectic in composition. Very congenial and very high quality and ranks very high among departments in colleges on campus. I feel a little isolated at times but really admire the quality of the people around me. They range from ecological biologist to population/evolutionary geneticists to the varied number of entomologists (perhaps the largest faction) to medical biology folk.

Life has been good to me, I have a wonderful wife, a beautiful little girl who is 3 years and 4 months old now. We have a wonderful home and are enjoying scenic Utah. Our weather is wonderful here (not humid like there) but we do get earthquakes (we are overdue for one, the last occurring in 1961 I believe....it was 6.1 on the Richter scale). We have a fruit orchard with pear, apples, tart cherries, plums, raspberries, black berries, grapes, and an apricot. Our garden is 50 X 50 ft square and looks out upon the Wasatch mountains.

Chandresekar Kousik, PhD, 1991:

I recently moved to the US Vegetable Lab (USDA-ARS) in Charleston (October 2005) as a Research Plant Pathologist. I will be working on watermelon diseases, primarily; Mature Watermelon Vine Decline (MWVD), *Phytophthora* fruit rot and Downy mildew.

MWVD is a new and emerging disease, particularly in Southwest FL where it has already caused >\$60 million crop loss (2003-2005). My primary goal is to identify the cause and find ways to manage this devastating disease. I have been travelling a lot between SC and FL to conduct this research.

Before moving to Charleston, I worked at Pepper Research Inc. in Florida, breeding bacterial spot resistant bell peppers for about 6 years.

C.S. Kousik (folks here at USDA call me Shaker, pronounced like a salt and pepper shaker, part of my first name)

Diana Greenough, 1985

I've been working the past 17 years (1990-2006) for government agencies in Latin America and at the U.S. Pacific sister land grant institutions in American Samoa and Northern Mariana Islands involving research, extension, and instruction/curriculum development of degree programs in the disciplines of plant pathology and natural resources management. I'm currently based at the University of Hawaii-Manoa College of Tropical Agriculture & Human Resources research station in Hilo, in the Dept. of Tropical Plants and Soil Sciences. My work involves aluminum toxicity testing with Dr. Susan Miyasaka on forages in acid soils to improve sustainable pastures for the beef and dairy industry in Hawaii.



News from Alumni & Friends (cont.)

David Marshall, MS, 1979:

Great to hear from you and Plant Path at LSU! Here is a brief synopsis of my activities since graduating in May of 1979:

I got a PhD in Plant Path from Purdue University in 1982, went to work for North American Plant Breeders, Inc. in Berthoud, Colorado as project leader in pathology and breeding of wheat and barley for the U.S. and Canada. Then in January 1985, accepted an Assistant Professor position in small grains pathology and breeding at Texas A&M University. Became an Associate Professor in 1988 and a full Professor in 1992. In 1992, I was selected for the Texas A&M Plant Path Dept Outstanding Faculty Member, and the Texas A&M University Deputy Chancellor's Award for Excellence in Research. In 1994, I was selected for the Texas A&M University Deputy Chancellor's Award for Excellence in Team Research. In 1995, I was selected as the Collin County, TX Agriculture Man of the Year by the Collin County Chamber of Commerce.

In 1998, I was named Farm Superintendent for the Texas A&M University Prosper Farm in Prosper, TX. In addition to my regular duties, in 2000, I was named Professor in the Agriculture Department at Texas A&M University at Commerce, where I taught introductory Plant Pathology and Introductory Plant Breeding. In January 2002, I joined the USDA/ARS as Research Leader and Supervisory Research Plant Pathologist of the Plant Science Research Unit in Raleigh, NC. I presently have 72 employees in my ARS Unit. I still have ties to LSU, with funds that I provide to Steve Harrison for cooperative research on stripe rust of wheat.

Jairo Narvaez, MS, 1992:

I am working at Syngenta in Costa Rica handling Research and Development for Costa Rica, Nicaragua and Panamá. I work in Banana, Pineapple, Melons, Vegetables, Potatoes, Tomatoes and Leather Leaf. I handle trials in fungicides, insecticides and herbicides for the different crops, in these countries. At this moment, I have been working with this company for ten years. I would like to know what our dear Professors are doing if they are not in the Department.

Gopi Podila, MS, 1983:

Good to hear that you are trying to resurrect the newsletter for LSU Plant Path Alumni.

Just to let you know that I am currently at The University of Alabama in Huntsville as Chair of Biological Sciences Department. My web address is www.uah.edu/biology, which describes the chronology of where I have been and what I did since I left LSU in 1983 with a MS in Plant Pathology. I did my MS with Dr. Rush on Rice Pathology. Currently I am not working on Plant Pathology area, but continue to work on Fungal Genomics and Plant Biotechnology.

Dip Sah, PhD, 1986:

Before coming to California in 2003, I worked as a Regional Research Director at the Regional Agricultural Research Station, Lumle, Nepal. I have also worked as the National Rice Coordinator, head of the Technical Research Division and Outreach Research Division. After completion of my Ph.D. at LSU, I was awarded with the prestigious postdoctoral scientist position at the International Rice Research Institute, Philippines and then with the Alexander von Humboldt Research Fellowship at the Goettingen University, Germany. Currently, I am looking for a research/teaching or managerial job in the U.S.A.

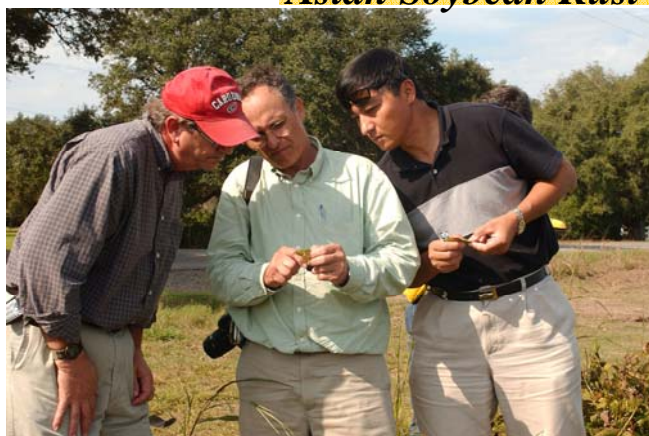
Ken and Sally Stetina:

Kenneth C. Stetina (M.S. 1995) and Salliana R. (Erwin) Stetina (Ph.D. 1996) currently reside in Greenville, MS. Both work at the USDA ARS in Stoneville, MS. Ken is a Plant Pathologist in the Southern Weed Science Research Unit and studies the use of plant pathogens as biocontrol agents of kudzu and other weeds. Sally is a Research Plant Pathologist in the Crop Genetics and Production Research Unit, where she works on cultural and genetic management of reniform nematode in cotton. They can be reached at kstetina@ars.usda.gov (Ken) and [sstetina@ars.usda.gov](mailto:ssstetina@ars.usda.gov) (Sally).

Xiaon Sun, PhD, 1996:

Since 1996, I have been working with Division of Plant Industry (DPI), Florida Department of Agriculture and Consumer Services (FDOAC) as a plant pathologist specializing in diagnosis of plant pathogenic bacteria in both field and laboratory settings. I have been involved in eradicating citrus canker and investigating citrus greening and several research projects on citrus bacterial diseases in Florida.

Asian Soybean Rust Enters our Lives



Ray Schneider showing symptoms to Howard Viator and X. B. Yang (photo courtesy Mark Claesgens, AgCenter Communications)



The 'War Room' - part of the assemblage of LSU AgCenter, LDAF, and USDA, APHIS personnel gathered to deal with the finding of Asian soybean

On Saturday, November 6, 2004, Ray Schneider was giving a visiting Illinois soybean farmer a tour of his research plots at the Ben Hur Research Farm near campus. He told the visitor that he may be interested in seeing some diseases that he had probably not seen before. Little did he know how prophetic those words would become, because that morning Schneider stumbled upon a disease that would change his professional life and focus the attention of the nation's soybean industry on our department. This was the day that Schneider discovered soybean rust, a potentially devastating disease that had been anticipated and feared for decades.

Asian soybean rust is a potentially damaging soybean disease that LSU AgCenter plant pathologists had been monitoring since the disease was first found in the Western Hemisphere (in Brazil) in 2001. As soon as the disease was suspected, plant pathologists from the LSU AgCenter's Department of Plant Pathology and Crop Physiology began implementing a response and action plan. This plan was developed in cooperation with the Louisiana Department of Agriculture and Forestry and the U.S. Department of Agriculture-Animal and Plant Health Inspection Service. A team of APHIS scientists was in the state Nov. 11-12 to work with LSU AgCenter faculty and LDAF regulators to determine the extent of the disease. No regulatory actions were taken.

A national group of plant disease experts converged on the LSU AgCenter November 11, 2004, following confirmation that the Asian soybean rust fungus had arrived in the United States. Scientists from USDA's APHIS (Animal and Plant Health Inspection Service) and ARS (Agricultural Research Service) teamed with the LSU AgCenter and Louisiana Department of Agriculture and Forestry (LDAF) personnel to determine how widespread the disease was. In total, more than 30 professionals participated. The scientists formed four survey groups and traveled to disease-susceptible areas in central and south Louisiana. The teams searched about a 100-mile radius of Baton Rouge November 11, 2004 and took 65 samples. These included 56 samples from soybean plants and nine from kudzu, an invasive plant prevalent in Louisiana, which can serve as a "host" for the fungus that causes the disease. The teams surveyed about 10,000 square miles all together, which included about half of the soybean production areas in the state. They visited 14 parishes in Louisiana and one county in Mississippi. Since this initial discovery, the disease has been confirmed throughout the southern U.S.

An unprecedented nationwide mobilization of personnel and funds took place during the winter of 2004/2005, and by the following spring the nation's soybean industry was ready with sentinel plots, spore traps, fungicide evaluation protocols, and educational materials, including infected leaves that we collected in South Africa and embedded in acrylic resin blocks. These blocks were distributed to every soybean producing county in the US by mid-January 2005. Multi-state collaborative projects are now in place to develop disease forecasting models, improve spore trapping technology, screen for and identify genes for disease resistance, and refine fungicidal control strategies and tactics.



Seminars from Off-campus Visitors

In addition to having many speakers from sister departments on the LSU campus, the department has been honored to have a number of excellent seminars presented by visitors from off campus, including:

2006

Anthony DeLuca, USDA Southern Regional Research Center, New Orleans - "Fungicidal Compounds from Plant Material".

Daniel Collins, Southern University, Baton Rouge – "Urban Forestry Research, Education, Extension Activities at Southern University and A&M College".

John daGraca, Texas A&M University Citrus Center, Weslaco – "An Overview of Citrus Greening".

Ed Cleveland, USDA Southern Regional Research Center, New Orleans – "Genomics for Determining Aflatoxigenic Potential of *Aspergillus* Species".

2005

John Dyer, USDA Southern Regional Research Center, New Orleans – "Production of Industrially Important Fatty Acids in Oilseed Crops: Transfer of Genetic Traits".

Feng Chen, Department of Plant Sciences, University of Tennessee – "Biosynthesis, Regulation and Function of Volatile Secondary Metabolites in *Arabidopsis*".

Hee Jin Kim, USDA Southern Regional Research Center, New Orleans – "Molecular and Cytological Characterization of Three Cu/Zn Superoxide Dismutases, and Regulation of Secondary Wall Cellulose Synthase in Cotton Fibers".

Steven Travis, USGS National Wetlands Research Center, Lafayette – "Estuarine Resource Genetics: A Case Study of Smooth Cordgrass (*Spartina alternifolia*) in Louisiana".

Charles Yang, Director Emeritus, Asian Regional Center, AVRDC – "Soybean Rust: Historical Overview and Personal Experiences in Asia".

In the wake of finding Asian Soybean Rust in Louisiana, Ray Schneider hosted several visitors who presented seminars on different aspects of this disease: Dr. Tadashi Yorinori, EMBRAPA (USDA), Brazil; Dr. Monte Miles, USDA (University of Illinois); Dr. Pat Caldwell, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

2004

Roy French, USDA, ARS and Dept. Plant Pathology, University of Nebraska – "Population Genetics of a Plant RNA Virus".

Zhi-yuan Chen, USDA Southern Regional Research Center, New Orleans – "Understanding Host Resistance in Corn Against *Aspergillus flavus* Infection in Aflatoxin Contamination".

Sead Sabanadzovic, Dept. Entomology & Plant Pathology, Mississippi State University – "New Data on Some Viruses Involved in Grapevine Leafroll and Fleck Complex Disease".



Courses and Curricula

Courses and curricula constantly change with the times. In recent years, as many plant pathology departments have become more and more focused on molecular biology, the faculty in the LSU Department of Plant Pathology & Crop Physiology have felt that we should develop and promote our expertise in practical aspects of plant pathology. With that in mind, we have made some changes in the last couple of years to our course offerings. A new course, called the Practicum in Plant Pathology, was established in 2004. This course is offered every semester and graduate students are allowed to take it up to three times for credit. The course gives students exposure to Louisiana agriculture and diseases through real-world exercises with the various department faculty. It involves field exercises at all times of the year working with the crops and diseases that are appropriate to the different seasons. It also gives students greater opportunity to interact with all the plant pathology faculty in an informal atmosphere. So far, it has been very well received by students.

An undergraduate major in Agricultural Pest Management has recently been instituted. Jeff Hoy and Ray Schneider are responsible for the plant pathology portion. This major is offered jointly with Entomology (T. E. Reagan) and Agronomy (J. L. Griffin and E. Webster). It is a very intensive and rigorous course of study that we hope will attract more interest at the undergraduate level.

Grad Student Travel Awards

The following students received \$500 travel awards from interest from the department's foundation accounts to support their travel to professional meetings:

2006 – Joy Sumner (MS), Michael Pontif (PhD) students of Dr. McGawley for travel to the Society of Nematologists meeting in Lihue, Kauai, Hawaii.

2005 – Joy Sumner (MS) and Michael Pontif (PhD) students with Dr. McGawley for travel to the Society of Nematologists meeting in Fort Lauderdale, FL, and Dina Gutierrez, a PhD student with Dr. Valverde for travel to the American Phytopathological Society meeting in Austin, TX.

2004 - Joy Sumner (MS) and Michael Pontif (PhD) students with Dr. McGawley for travel to the Society of Nematologists meeting in Ithaca, NY, and Susan Callahan, MS student with Dr. Schneider, and Charalambos Kokkinos, a PhD student with Dr. Clark for travel to the American Phytopathological Society meeting in Anaheim, CA.



This award is presented in honor of Dr. Claude W. Edgerton. Dr. Edgerton came to Louisiana State University in 1908, shortly after receiving his Ph. D. from Cornell University. In 1924 he became Head of the newly formed Department of Botany, Bacteriology and Plant Pathology and remained in that position until his retirement in 1950. He was a charter and life member of the American Phytopathological Society. He was vice-president of the Society in 1918 and President in 1925.

He died on April 6, 1965. Later that year, a fund was established in honor by his two daughters, Mrs. Frank Bennett and Mrs. Harry Taylor. On September 25, 1965, the LSU Board of Supervisors passed a resolution establishing the C. W. Edgerton Endowment Fund "from which an annual award will made to an outstanding graduate student in the fields of Botany and Plant Pathology".

C. W. EDGERTON HONOR AWARD RECIPIENTS

An award made to recognize outstanding graduate students in Plant Pathology, Botany, and Crop Physiology

<u>YEAR</u>	<u>STUDENT</u>	<u>FIELD</u>	<u>MAJOR PROFESSOR</u>
1966	Penelope J. Hanchey	Plant Pathology	Harry E. Wheeler
1967	No award		
1968	James H. Brooks	Botany	Clair A. Brown
1969	Randall B. Carver	Plant Pathology	Norman L. Horn, Jr.
1970	No award		
1971	R. Gary Pitts	Plant Pathology	John P. Hollis, Jr.
1972	Gabriel L. Sciumbato	Plant Pathology	Lowell L. Black
1973	No award		
1974	Gerard T. Berggren, Jr.	Plant Pathology	Johnnie P. Snow
	H. Kenneth Whitam	Plant Pathology	Lowell L. Black
	Ted O. Ware	Plant Pathology	Johnnie P. Snow
1975	J. Allen Bourland	Botany	Shirley C. Tucker
1976	A. K. M. Shahjahan	Plant Pathology	M. Charles Rush
1977	Ronald H. Brlansky	Plant Pathology	Kenneth S. Derrick
1978	No award		
1979	John Kao	Plant Pathology	Kenneth E. Damann, Jr.
	Gerald M. Dill	Crop Physiology	Freddie A. Martin
	Michael T. Postek	Botany	Shirley C. Tucker
	James E. Smith	Botany	David J. Longstreth
	Choi-Pheng Yik	Plant Pathology	Wray Birchfield
1980	Joseph F. Yoder	Crop Physiology	G.J. Bethlenfalvay
	James W. Wussow	Botany	Lowell E. Urbatsch



1981	No award		
1982	Roy C. French Kittie S. Derstine	Plant Pathology Botany	Kenneth S. Derrick Shirley C. Tucker
1983	Vernon B. Langston Nancy Gordon Barker	Crop Physiology Botany	Thomas R. Harger Lowell E. Urbatsch & G. Bruce Williamson
1984	Dip N. Sah Barbara J. Hook	Plant Pathology Crop Physiology	M. Charles Rush Lynn M. Kitchen
1985	Choong-Hoe Kim James R. Ault	Plant Pathology Crop Physiology	M. Charles Rush William J. Blackmon
1986	James F. Hadden Robert S. Peregoy	Plant Pathology Crop Physiology	Lowell L. Black Lynn M. Kitchen
1987	Karol S. Elias Mary E. Stovall	Plant Pathology Botany	R.W. Schneider Merideth M. Blackwell
1988	K. Venkata Subbarao Daniel N. Moriconi	Plant Pathology Crop Physiology	Johnnie P. Snow Hector Flores & M. Charles Rush
1989			
(Spring)	Susan A. Langevin	Botany	James B. Grace
(Spring)	J. Stephen Brewer	Botany	James B. Grace
(Fall)	Vidal Rivelli C.	Plant Pathology	Lowell L. Black
(Fall)	Duroy A. Navarre	Plant Pathology	Kenneth E. Damann, Jr.
(Fall)	Kanagasabapathi Sathasivan	Crop Physiology	Norimoto Murai
1990			
(Spring)	Jose I. Ramirez-Domenech	Botany	Shirley C. Tucker
(Fall)	Qingjun Xie	Plant Pathology	M. Charles Rush
(Fall)	Zhijian Li	Crop Physiology	Norimoto Murai
1991			
(Spring)	Elizabeth M.S. Harris	Botany	Shirley C. Tucker
(Fall)	Christine J. Daugherty	Crop Physiology	Mary E. Musgrave
1992			
(Spring)	Frederick W. Zechman	Botany	Russell L. Chapman
(Fall)	Steven Footitt	Crop Physiology	Marc A. Cohn
1993			
(Spring)	John V.H. Constable	Botany	David Longstreth
(Spring)	Joey Spatafora	Botany	Meredith Blackwell
(Fall)	Ramon A. Arancibia	Plant Pathology	Rodrigo Valverde
(Fall)	Stacey A. Bruff	Crop Physiology	Jim Griffin
(Fall)	Yasushi Kawagoe	Crop Physiology	Norimoto Murai
1994			
(Fall)	Nimal Dissanayake	Plant Pathology	Jeff Hoy
(Fall)	B. David Black	Crop Physiology	J. Griffin/J. Russin
1995	Baozhu Guo D. Marshall Porterfield	Plant Pathology Crop Physiology	John Russin Mary Musgrave
1996	Saliana Stetina	Plant Pathology	Edward C. McGawley
1997			
1998	Pongtharin Lotrakul Chris Corkern	Plant Pathology Crop Physiology	Rodrigo Valverde Jim Griffin
1999	Joseph H. Pankey	Crop Physiology	Jim Griffin
2000			
2001	We are missing information for 2000-2002, can anyone help?		
2002			
2003	Lori G. Eckhardt	Plant Pathology	John Jones
2005	Charalambos Kokkinos	Plant Pathology	Christopher Clark

Comings, Goings, and Other Events



In 2005, the department was successful in getting approval to create an extension associate position to manage the Plant Disease Clinic. We were very fortunate to be able to hire Denita Hadziabdic, who joined the department in the Spring of 2005. Denita made great progress in improving the clinic setup and developing the capability to handle myriad diverse samples. She also spoiled those who regularly participated in our morning coffee breaks by providing wonderful baked goodies. Unfortunately, Hurricane Katrina's damage to the New Orleans economy caused Denita's fiancé to have to remain in Tennessee rather than move to Louisiana. Denita resigned her position at LSU in April, 2006 to return to Tennessee and work on a PhD. We already miss her, but wish her the best.

Mrs. Hemandeep Kaur joined the Ph.D. program in Cohn lab in January 2005. She is a native of India and obtained her B.S. in agriculture with honors at Khalsa College Amritsar and an M.S. in vegetable crops from the Punjab Agricultural University. Mrs. Kaur will be investigating the roles of protein kinases and protein phosphatases in the termination of seed dormancy in red rice.

Laura Mckoin passed the final exam for M.Ag. on February 25, 2005 and graduated in May, 2005. She is now working in the Monsanto Cotton Breeding Program at their facility in Leland, MS.

Changwei Huang joined the department in August of 2005 to work on a MS with Bud Damann. She is doing research on the mechanism by which atoxigenic strains of *Aspergillus flavus* inhibit toxin production by toxigenic strains. She has a BS degree from Zhejiang University.

On February 22, 2006, Charalambos Kokkinos passed the final exam for the PhD and on March 15, he was awarded the Edgerton Honor Award in Plant Pathology. He has since completed his dissertation, "Assessment of Interactions among Viruses Infecting Sweetpotato". Chris Clark is his major advisor and committee members include Rodrigo Valverde, Ray Schneider, Ding Shih (Biological Sciences) and Eric Webster (Agronomy). He plans to return to his native Cyprus at the end of May.

Seokhyun Lee (Fall 2002 to present) passed the qualifying examination for a Ph.D. degree on April 7, 2006. He is in the Biochemistry/ Plant Molecular Biology program with Norimoto Murai. His M.S. thesis was entitled "Binary plant transformation vectors derived from Ti plasmid of *Agrobacterium tumefaciens*".

Sunjung Park (Fall 2001 to present) passed the final examination for a M.S. in Biochemistry/ Plant Molecular Biology on April 19, 2006. Her thesis, under direction of Norimoto Murai is entitled "*Agrobacterium tumefaciens*-mediated transformation of tobacco (*Nicotiana tabacum* L.) leaf disks: Evaluation of the co-cultivation conditions to increase the activity of the β -glucuronidase gene".

On May 3, 2006, James Chappell passed his General Exam with flying colors. Mr. Chappell is a doctoral student in the Cohn lab. Members of the examining committee were Ray Schneider (PPCP), Kyle Harms (minor professor-Ecology), Sam Godber (Food Science), James Oard (Agronomy), and John Batista (Biological Sciences). Mr. Chappell's research is focused upon the causes of seed death due to drying in recalcitrant seeds of *Spartina alterniflora*, focusing upon the role of oxidative stress.

Keeping in Touch

We hope this newsletter will become an annual release. We would very much like to hear from our alumni and friends, not only about your professional accomplishments, but also the personal. In the mean time, please visit the department's newly revised website, designed by webmaster Robert Carver: <http://www.lsu.edu/ppcp/>. It has lots of information about current activity in the department, and Robert is working on setting up a page for alumni. Your comments and contributions will be welcome.



Undergraduate Student News

The department has been very fortunate in recent years to have some outstanding undergraduate student workers who became very involved in our research programs. Some highlights:

Laura Mckoin was selected as the Student Employee of the Year on the LSU campus for the 2002-2003 academic year. She was nominated by Mary Hoy and Chris Clark. Laura began as a student worker in the sweetpotato pathology program as a freshman and continued through her graduation in May 2003 with a BS. She became proficient in sweetpotato tissue culture work and soon developed an interest in doing independent research. She became the resident expert on aphid transmission of sweetpotato viruses. She demonstrated that *Sweet potato feathery mottle virus* was efficiently transmitted by both *Aphis gossypii* and *Myzus persicae* but that *Sweet potato virus G* was more efficiently transmitted by *A. gossypii*, and that *Ipomoea vein mosaic virus* was not readily transmitted by either aphid. She then was one of the first students to complete the new Masters of Agriculture program in 2005. She did an independent research project in which she studied the distribution of aphids in sweetpotato fields. She found that in northeast Louisiana, *A. gossypii* was common and was more frequently found on morning glory plants in sweetpotato fields than on the sweetpotatoes, while in south Louisiana, *M. persicae* was commonly found on the sweetpotato plants and not on the morning glories. Laura is currently working for Monsanto at their research facility in Leland, Mississippi.

Monty Arta Aghazadeh has been named as the Slater Fellow and received the Graduate Fellowship of \$5,000 from the Honor Society of Phi Kappa Phi. He was selected as the top recipient among the 60 Graduate Fellowships. Monty came to Murai's laboratory in 2002 and has been doing the undergraduate research as a participant of the Chancellor's Future Leaders in Research Program for the last four years.

One of our research interests is to produce pharmaceutical proteins in transgenic rice seeds. To this end we are constructing a new binary vector of Ti plasmid of *Agrobacterium tumefaciens* to improve the copy number, cloning and transformation efficiency. Monty has been working to introduce four site-directed mutations by PCR to the neomycin phosphotransferase gene of Tn 903. He has so far learned to obtain the DNA sequence of Tn 903 from the Genbank, to identify transcription initiation and termination sites, to design eight primers for site-directed mutagenesis, and to introduce successfully four mutations.

Monty is writing the Honors Thesis and is going to graduate this spring. He has maintained a GPA of 3.96 majoring in Biological Sciences. He has been accepted so far by the Medical Schools of Vanderbilt, Duke and Emory University. He is looking forward to developing his research experiences in the medical school.

Archana Jha recognized as "Student Employee of the Year 2005-2006" at LSU. Archana Jha, an undergraduate biochemistry major from Nepal, was nominated for this honor by Rebecca Sweany and Cathy DeRobertis, research associates in Ken Damann's lab. Archana began her undergraduate research career helping to shell, and grind corn and extract the meal for aflatoxin analysis. She soon demonstrated an aptitude for research and began a project on screening non-toxicogenic isolates of *Aspergillus flavus* for ability to inhibit aflatoxin production by a single highly toxigenic isolate using an *in vitro* suspended disc assay (Wicklow et al. 2003. Mycol. Res. 107(5):617-623). She was awarded a Louisiana Biological Research Network (LBRN) research award for the summer of 2005 in which she identified 8 isolates that completely inhibited toxin production and 3 that were highly inhibitory from among 40. She produced a poster from her work, which she exhibited at LBRN in Baton Rouge, and in Seattle, Washington, at the annual meeting of Sigma Xi. Several of these isolates will be field tested this summer to determine their aflatoxin biocontrol efficacy in corn. In addition, her work provided the basis for Chang Wei Huang to begin M.S. research looking at the mechanism(s) of the inhibition. During the late Fall and Spring of 2006, Archana received a Louisiana AgCenter Biotechnology Education for Students and Teachers (BEST) program stipend to fingerprint a collection of the known vegetative compatibility groups (VCG's) of *A. flavus* by RFLP analysis, using the pAF28 retrotransposon as a probe (McAlpin & Mannerelli, 1995. Appl. Environ. Microbiol. 61:1068-1072). Isolates within a VCG have highly similar RFLP fingerprints. For this summer she has received a Howard Hughes award to apply the RFLP fingerprint technology to some of our Louisiana *A. flavus* isolates which fail to show vegetative compatibility with any of the known previously characterized VCG's of the fungus, but form compatible groups among themselves. Archana has demonstrated extraordinary skill and dedication to her "student worker" job, and as you can see, has been highly productive and deserving of the "Student Employee of the Year" award.



Foundation Information

While our primary departmental support is from public and private funding, we do have several Foundation accounts whose proceeds are used to enhance departmental activities, such as student support and recognition, bringing in guest speakers and hosting alumni socials at APS meetings. While we have not actively sought contributions to the Foundation accounts in the past, we are now asking that you consider helping us with your gifts. Gifting opportunities include the following:

C. W. EDGERTON MEMORIAL FUND

The Edgerton Endowed Fund was established by family members of the late C. W. Edgerton who founded and headed the Department of Botany, Bacteriology and Plant Pathology in 1924. Dr. Edgerton also authored the book *Sugarcane and Its Diseases*. Proceeds from this fund are used to recognize outstanding students with a plaque and monetary award.

E. L. FORBES MEMORIAL FUND

This is an endowed fund that was established by the Forbes family to honor the late Erwin. L. Forbes, who was a long-time department member and sugarcane pathologist. Dr. Forbes also served for a time as an assistant director of the Louisiana Agricultural Experiment Station. Proceeds from the fund are used to enhance departmental activities.

W. J. MARTIN MEMORIAL FUND

The Martin Endowed Fund was established by Norma Martin, wife of the late W. J. Martin, in recognition of his service to the department and university. Dr. W. J. Martin served for many years as the sweetpotato pathologist and also served as the department head. Proceeds of the fund are to be used as supplemental funding for a graduate student, preferably one working on sweetpotatoes.

Additional information on giving to the Department of Plant Pathology and Crop Physiology can be obtained by contacting Gerard Berggren at 225-578-1366 or gberggren@agctr.lsu.edu.

Items of Note

Dr. Gordon E. Holcomb is serving a three year term as an associate editor of the APS journal *Plant Disease*. He is also a regular manuscript reviewer for the *New Zealand Journal of Crop and Horticultural Science* and the journal *HortScience*.

In 2002, The Tipton Team Research Award presented by the LSU AgCenter Experiment Station was awarded to The Sweetpotato Team, which included plant pathologists Chris Clark and Rodrigo Valverde.

In 2003, the USDA Risk Avoidance and Mitigation Program (RAMP) awarded \$2 million dollars to a team of entomologists, plant pathologists, and weed scientists led by NC State and including LSU, Mississippi State, and Auburn for a four-year project on "Development of Grower Decision-making Tools to Reduce Risk and Enhance Sustainability of Southern Sweetpotato Pest Management Systems". Chris Clark is the PI for the LSU AgCenter.

Our Department Head, Dr. Jerry Berggren was honored with the "Distinguished Alumnus Award" in the College of Arts & Sciences for 2003 from Southeastern Louisiana University.

Items of Note (continued)

In 2000, two international scientists visited Rodrigo Valverde to seek training in virological techniques and to establish collaborative links. Dr. Max Melnychuck, National Agricultural University, Ukraine and Dr. Rodolfo De La Torre a plant pathologist of the Universidad Nacional Autonoma, Mexico.

In 2002, R.A. Valverde was awarded a research fellowship by the Government of Spain to conduct sweet potato virus research with the "Consejo de Superior de Investigaciones Cientificas" in Granada, Spain.

In 2005, R.A. Valverde, was presented an award for scientific accomplishments by the Costa Rica Society of Plant Pathologists (July 1, 2005)

Dr. Henk Hilhorst (University of Wageningen, Holland) visited Marc Cohn's group at the end of April 2006. In addition to ongoing collaborative studies, Dr. Hilhorst guest lectured in PLHL 4444 (Seed Physiology) on the role of hormone balance in the induction and maintenance of seed dormancy.

M.C. Rush and R. Nandakumar (Postdoc in Dr. Rush's lab) attended the 31st Rice Technical Group Meeting Feb. 26-March 1, 2006 at Woodlands, Texas. They both presented research papers at the meeting.

James Chappell (a doctoral student in the Cohn lab) gave his first oral presentation of his research at the recent Southern Division-American Society of Plant Biologists annual meeting in Daytona Beach, FL. His presentation [Is Lipid Oxidation the Cause of Death During Drying in Recalcitrant Seeds of *Spartina alterniflora*: A Comparative Physiological Approach] was runner-up in the Best Graduate Student Paper Competition.

With collaborators in Germany, Cohn co-authored a major review paper published at the end of 2005: Kucera, B., Cohn, M.A. and Leubner-Metzger, G (2005) Plant hormone interactions during seed dormancy and release. *Seed Science Research* 15:281-307.

In collaboration with P.K. Subudhi (Dept of Agronomy), the Cohn lab received funding for a 5 year grant for the project, Marker-aided Development and Characterization of an Introgression Library to Discover Alleles for Weediness: Red Rice as a Model System, from the USDA-NRI Competitive Grants Program.

Congratulations to X. B. Yang (PhD, 1989) on being chosen as a fellow of The American Phytopathological Society in 2005.

At Right: Pat Hives at the reception honoring her many years of service to the department.





The real reason the faculty have increased in stature:



The department has been blessed by Clark Robertson, research associate with Ray Schneider and part-time cake maker. A couple of examples of his talent are left: the cake from the J. P. Jones retirement party (the butt rot was edited out), and right: from Pat Hives' retirement reception.



At left is J. P. Jones as he appeared when last we saw him at his retirement reception. Above is J. P. Jones with some of the other kids who lived on his block in 1986. Left to right are Zoe Liu (MS, 1987), Gene Pace, Gordon Holcomb, Cheryl Pace, Bud Damann, Ken Derrick, John Jones, Chris Clark, and Jing-yi Lo (PhD on that very day in 1986).

At right is a photo sent by John Russin of You-Keng Goh (PhD, 2001). No explanation was given as to why he was standing in a hole, but we trust that with a PhD in plant pathology from LSU that he was able to find his way back out.





Department Crawfish Boil—May 12, 2006



Everyone knows a watched pot never boils...



...but someone was in charge (chief chef Jerry)



...who with minimal help....



...and lots of supervision...



...served exactly on time, crawfish



Enjoyed by one...



And all!



Recent Publications from PPCP

To let you know what has been going on in the way of research in the department, below are some recent publications in refereed journals and/or book chapters. We decided not to go all the way back to the last newsletter, but just included those from the current millennium:

Bond, J.P., E.C. McGawley and J.W. Hoy. 2004. The impact of nematodes on sugarcane cultivars. *Nematropica* 34: 235-243.

Bond, J.P., McGawley, E.C., and Hoy, J.W. 2004. Sugarcane growth as influenced by nematodes and *Pythium arrhenomanes*. *Nematropica* 34:245-256.

Brown, R. L., Chen, Z. -Y., Cleveland, T. E., and Bhatnagar, D. 2005. Molecular aspects of corn resistance mechanisms against aflatoxigenic fungi. In: Genetic Resources and Biotechnology, Vol II (D. Thangadurai, T. Pullaiah and P. A. Balatti, eds.), Regency Publications, New Delhi, India, pp.281-294.

Cai, G., Gale, L. R., Schneider, R. W., Kistler, H. C., Davis, R. M., Elias, K. S., and Miyao, E. M. 2003. Origin of race 3 of *Fusarium oxysporum* f. sp. *lycopersici* at a single site. *Phytopathology* 93:1014-1022.

Cai, G., and Schneider, R. W. 2005. Vegetative compatibility groups in *Cercospora kikuchii*, the causal agent of Cercospora leaf blight and purple seed stain in soybean. *Phytopathology* 95:257-261

Carroll, H.W., Villordon, A.Q., Clark, C.A., La Bonte, D.R., and Hoy, M.W. 2004. Studies on Beauregard sweetpotato clones naturally infected with viruses. *Int. J. Pest. Mgmt.* 50:101-106.

Carter-Wientjes, C.H., J.S. Russin, D.J. Boethel, J.L. Griffin, and E.C. McGawley. 2004. Feeding and maturation by soybean looper (Lepidoptera: Noctuidae) larvae on soybean affected by weed, fungus, and nematode pests. *Journal of Economic Entomology* 97:14-20.

Chen, Z. -Y., Brown, R. L., and Cleveland, T. E. 2004. Evidences of an association between stress tolerance and host resistance in corn against *Aspergillus flavus* infection and aflatoxin contamination. *African J. Biotechnol.* 3:693-699.

Chen,Z-Y, Brown, R L, Cleveland, T E, Damann, K E, and Russin, J S. 2001. Comparison of constitutive and inducible maize kernel proteins of genotypes resistant or susceptible to aflatoxin production. *J. Food Prot.* 64:1785-1792.

Chen, Z-Y, Brown, R L, Damann, K E, and Cleveland, T E 2002. Identification of unique or elevated levels of kernel proteins in aflatoxin-resistant maize genotypes through proteome analysis. *Phytopathology* 92:1084-1094.

Chen, Z-Y, Brown, R L, Damann, K E, and Cleveland, T E. 2004. Identification of a maize kernel stress-related protein and its effects on aflatoxin accumulation. *Phytopathology* 94:938-945.

Chen, Z. -Y., Brown, R. L., Rajasekaran, K., Damann, K. E., and Cleveland, T. E. 2006. Evidence for involvement of a pathogenesis-related protein in maize resistance to *Aspergillus flavus* infection /aflatoxin production. *Phytopathology* 96:87-95.

Chen, Z. -Y., Rajasekaran, K., Brown, R. L., Bhatnagar D., and Cleveland, T. E. 2006. Removal of aflatoxin contamination from food and feed crops. In: Plant Genetic Engineering Vol. 8:Metabolic Engineering and Molecular Farming II (Eds. Jaiwal P. K. and Singh R. P.). Studium Press, Houston, TX., pp 73-110.

Chun, S.-C., Schneider, R. W., and Chung, I.-M. 2003. Determination of carbon source utilization of *Bacillus* and *Pythium* species by Biolog microplate assay. *J. Microbiol.* 41:1-7.

Clark, C. A., Fuentes, S., Hurtt, S., Moyer, J., Salazar, L., and Valverde, R. A. 2001. Some symptoms caused by viruses and virus-like agents in *Ipomoea batatas* and related species. Centro Internacional de la Papa/LSU Agricultural Center. Lima, Peru. 14 pp.

Clark, C. A., and Hoy, M. W. 2005. Effects of common viruses on yield and quality of Beauregard sweetpotato in Louisiana. *Plant Dis.* 90:83-88.

Cohn MA. 2002. Seed dormancy in red rice. A balance of logic and luck. *Weed Science* 50:261-266.

Daugrois, J.H., Hoy, J.W., and Griffin, J.L. 2005. Protoporphyrinogen oxidase inhibitor herbicide effects on *Pythium* root rot of sugarcane, *Pythium* species, and the soil microbial community. *Phytopathology* 95:220-226.

De La Torre-Almaraz, R., Cervantes-Diaz, L., Hobbs, H., and Valverde, R. 2002. Phenotypic variation of some Mexican isolates of tomato spotted wilt virus (TSWV). *Agrociencia* 36:211-221.



Recent Publications from PPCP (continued)

De La Torre-Almaraz, R., Valverde, R. A., Mendez-Lozano, J., Ascencio-Ibanez, J. T., and Rivera-Bustamante, R. F. 2002. Preliminary characterization of a geminivirus in tomatillo (*Physalis ixocarpa* B.) in the central region of Mexico. *Agrociencia* 36:471-481.

Elliott, M.... Schneider, R. W. (23 authors). 2001. Viability and stability of biological control agents on cotton and snap bean seeds. *Pest Manag. Sci.* 57:695-706.

Footitt S and MA Cohn. 2001. Developmental arrest: from sea urchins to seeds. *Seed Science Research* 11: 3-16.

Harrison, H. F., Peterson, J. K., Clark, C. A., and Snook, M. E. 2001. Sweetpotato periderm components inhibit in vitro growth of root rotting fungi. *Hortscience* 36: 927-930.

Holcomb, G. E. 2001. First report of occurrence of Sclerotinia blight on petunia in Louisiana. *Plant Disease* 85:95.

Holcomb, G. E. and Carling, D. E. 2002. First report of web blight caused by *Rhizoctonia solani* on *Catharanthus roseus* in Louisiana. *Plant Disease* 86:1272.

Holcomb, G. E. 2003. First report of petunia blight caused by *Choanephora cucurbitarum* in the United States. *Plant Disease* 87:751.

Holcomb, G. E. 2004. First report of southern blight of *Ruellia brittoniana* caused by *Sclerotium rolfsii* in Louisiana. *Plant Disease* 88:770.

Holcomb, G. E. 2005. First report of Sclerotinia stem rot and death of *Osteospermum* sp. hybrid cultivars caused by *Sclerotinia sclerotiorum* in Louisiana. *Plant Disease* 89:911.

Holcomb, G. E., Valverde, R. A. and Gutierrez, D. L. 2006. A disease of *Phlox paniculata* caused by *Alfalfa Mosaic Virus*. *HortScience* 41:474-476.

Holmes, G. J., and Clark, C. A. 2002. First report of *Geotrichum candidum* as a pathogen of sweetpotato storage roots from flooded fields in North Carolina and Louisiana. *Plant Disease* 86:695.

Hoy, J. W., Bischoff, K. P., Milligan, S. B., and Gravois, K. A. 2003. Effect of tissue culture explant source on sugarcane yield components. *Euphytica* 129:237-240.

Hoy, J. W., and Flynn, J. L. 2001. Control of ratoon stunting disease in Louisiana with seedcane produced through micropropagation and resistant cultivars. *Proc. Int. Soc. Sugar Cane Technol.* 24:417-421.

Hoy, J. W., Richard, C. A., Jackson, W. R., and Waguespack, H. L., Jr. 2004. Effects of cultivars, fungicides, and fertilization at planting on yields obtained from whole stalk and billet planting in Louisiana. *J. Amer. Soc. Sugar Cane Technol.* 24:70-80

Kim, K D, Russin, J S, Snow, J P, and Damann, K E. 2001 Toxic culture filtrates produced by *Calonectria illicicola*, causal agent of red crown rot of soybean. *Phytoparasitica* 29:115-123.

Kucera, B, MA Cohn, G Leubner-Metzger. 2005. Plant hormone interactions during seed dormancy release and germination (Invited Review) *Seed Science Research* 15: 281-307.

Kuruppu, P. U., Schneider, R. W., and Russin, J. S. 2004. Factors affecting soybean root colonization by *Calonectria illicicola* and development of red crown rot following delayed planting. *Plant Dis.* 88:613-619.

Kuruppu, P. U., Schneider, R. W., and Russin, J. S. 2004. Effects of soil temperature on microsclerotial of *Calonectria illicicola* and soybean root colonization by this fungus. *Plant Dis.* 88:620-624.

LaBonte, D. R., Cannon, J. M., Clark, C. A., Villordon, A. Q., Wilson, P. W., Hammond, A. H., and Story, R. N. 2003. 'Bienville' sweetpotato. *Hortscience* 38:473-474.

La Bonte, D., Clark, C., Villordon, A., Cannon, J., Hoy, M., Sistrunk, M., Freeman, E., and Roberts, G. 2004. Yield of four generations of virus-tested sweetpotato. *HortTechnology* 14:1-3.

Lewis, S.A., D.J. Chitwood, and E.C. McGawley. 2003. Nematode Biology, Morphology and Physiology in *Dekker Encyclopedia of Plant and Crop Science*, Robert M. Goodman, ed. Marcel Dekker, NY. Pp. 42-47.

Lopes, S A, Damann, K E, and Grelen, L B. 2001. *Xanthomonas albilineans* diversity and identification based on rep-PCR fingerprints. *Current Microbiology* 42:155-159.

Lopes, S A, Damann, K E, Hoy, J W, and Grisham, M P. 2001. Infectivity titration for assessing resistance to leaf scald among sugarcane cultivars. *Plant Disease* 85:592-596.

Lopes, S., Damann, K. E., Hoy, J. W., and Grisham, M. P. 2001. Infectivity titration for assessing resistance to leaf scald among sugarcane cultivars. *Plant Dis.* 85:592-596.



Recent Publications from PPCP (continued)

Lotrakul, P., Valverde, R. A., Clark, C. A., and Fauquet, C. M. 2003. Properties of a Begomovirus isolated from sweet potato infected with *Sweet potato leaf curl virus*. *Revista Mexicana de Fitopatologia* 21-2 : 1 2 8 - 1 3 6 .

Lotrakul, P., Valverde, R.A., Clark, C.A., Hurr, S., and Hoy, M.W. 2002. *Sweet potato leaf curl virus* and related geminiviruses in sweet potato. *Acta Horticulturae* 583:135-141.

Mcharo, M., LaBonte, D. R., Clark, C., Hoy, M., and Oard, J. H. 2005. Molecular marker variability for southern root-knot nematode resistance in sweet potato. *Euphytica* 144:125-132.

McGawley E.C. and C. Overstreet. 2001. Disease interactions. Pp. 326-330. In: *The Encyclopedia of Plant Pathology*. O.C. Maloy and T. D. Murray (eds), John Wiley & Sons

McGawley, E.C., M.J. Pontif and J.B. Sumner. 2004. Efficacy of Agri-Terra against phytoparasitic nematode species indigenous to Louisiana. Proceedings of the Fifth International Conference on Alternatives to Methyl Bromide, 27-30 September, 2004, Lisbon, Portugal. 178-184.

Overstreet, C. and E. C. McGawley. 2001. Black root rot. Pp. 1019-1021. In: *The encyclopedia of Plant Pathology*. O.C. Maloy and T. D. Murray (eds), John Wiley & Sons.

Overstreet, C. and E.C. Overstreet. 2001. Sting nematode. Pp. 45-46. In T.L. Kirkpatrick and C.S. Rothrock (eds.) *Compendium of Cotton Diseases, 2nd edition*. Published by the American Phytopathological Society Press, St. Paul, Minnesota.

Overstreet, C. and E.C. McGawley. 2001. Introduction to cotton nematodes. Pp. 38-40. In T.L. Kirkpatrick and C.S. Rothrock (eds.) *Compendium of Cotton Diseases, 2nd edition*. Published by the American Phytopathological Society Press, St. Paul, Minnesota.

Pankey, J. H., Griffin, J. L., Colyer, P. D., Schneider, R. W., Miller, D. K. 2005. Preemergence herbicide and glyphosate effects on seedling diseases in glyphosate-resistant cotton. *Weed Technology* 19:312-318.

Rodrigues F. A., L.E. Datnoff, G.H. Korndorfer, K.W. Seebold, and M.C. Rush. 2001. Effect of silicon and host resistance on sheath blight development in rice. *Plant Dis.* 85:827-832.

Salassi, M. E., Breaux, J. B., and Hoy, J. W. 2004. Estimated cost differences between whole-stalk and billet planting methods in Louisiana. *J. Amer. Soc. Sugar Cane Technol.* 24:250-257.

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Please Help Us Find These Folks

Over the years, people have moved, our faculty and staff have changed, and in the process, we have lost touch with some of our alumni and friends. If you know what has happened to the people below, please drop us a line and let us know their addresses, e-mail addresses, etc. Please send that information to Sarah Wiggins (SWiggins@agcenter.lsu.edu) Dept. Plant Pathology & Crop Physiology, 302 Life Sciences Building, Louisiana State University, Baton Rouge 70803-1720.

Ann Marie Webber (2004)
Carol Carter Wientjes (2000)
Daniel Alan Peters (2000)
Joseph Harry Pankey (2000)
Zhi Yin (1999)
Silvio Aparecido Lopes (1996)
Nimal Mudiyan Dissanayake (1996)
Geoffrey Linkemer (1995)
Bryan David Black (1995)
Niancheng Ding (1994)
Ambalavanan Sankaralingam (1993)
Lee Michael Prochaska (1993)
Andrew John Lanie (1993)
Mark Monroe Jones (1992)
Yong-Hwan Lee (1991)
Reed J. Lensce (1990)
Vidal Rivelli (1989)
Keisha Collings Hadden (1989)
Robert S. Pergoy (1988)
Roland Chris Y. Massaquoi (1988)
Daniel Nilo Moriconi (1988)
Chih Ping Chao (1988)
Lalitha Rao Burra (1988)
James Robert Ault (1987)
Frank Richard Spooner Jr. (1986)
Meghanathan Pillay (1986)
Jing-Yi Lo (1986)
Lydia N. Bougere (1953)
Abdul Aziz (1953)

Alice Karikurubu (1984)
Carlos J. Porras (1983)
Henry Clifford Hill (1979)
Harith Bin Hussain (1979)
Edger R. Butts (1976)
Luisa E. Tellez (1970)
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Nopporn Nabheerong (1969)
Dorrehiah Elsayed Salem (1968)
Sadic Ahmad Al-Hassan (1968)
El Sayed Megahed (1966)
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Mosaad El-Hifney (1965)
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F. Malekzadeh (1962)
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Elias D. Paliatseas (1954)
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Maria Carmen Campa-Pena (1953)
Lydia N. Bougere (1953)

Elliott H. Purlson (1952)
Yousef Azab (1952)
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Carol T. Ernest (1949)
John Howard Bond (1949)
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Mathew C. Hunter (1945)
Eva Sedonia Stanford (1944)
Carolyn Peyton Oliver (1944)
Spencer C. Arruda (1942)
John Young Miles (1941)
Kam Hau Lei (1941)
Francis LeHenee Bonner (1941)
Germaine Ploux (1940)
Conan H. Millstein (1940)
William M. Carlton (1940)
Alma Levins (1939)
Sudie Christine Burkes (1939)
Muriel Ruth Whitehead (1938)
Sam Smith (1938)
Fletcher Whitfield Rogers (1938)
Catherine Edwards Michael (1936)
Joseph Davis Smith (1935)
Andres Ramon Lopez (1935)
Mary Franklin Kendrick (1935)
James Andrew Baker (1934)
Maude Chaney (1933)
M. Louise Dyson (1932)
Edwin Charles Simon (1931)
Ta Ching Loh (1930)
Jose Tombo Jimenez (1926)