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PLP News

*From the students of
the Plant Pathology
Department to our community
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The NEWSLETTER of the PLANT PATHOLOGY DEPARTMENT at the UNIVERSITY of FLORIDA

Plant Pathology Department 1952-2002

by Dr. H. H. Luke

Dr. O. F. Beger was head of the first Plant Pathology Department (PPD), which was designated as a unit of the experiment station in 1920. However, the teaching of plant pathology dates back to 1907-08. Since a recent history of the PPD has been written (Roberts, Florida Phytopathological Society Newsletter v.3, n.1, 1992), what follows is not a historical rerun but a description of how the department developed during the past 50 years.

An overview of the south campus and mention of some historic events may be of interest to readers. South of the century tower there was a grove of large orange trees, killed by the cold in the early 1960's. This area is now occupied by the music building. South of the music building is building 866, which was first constructed by the experiment station after World War II. There was a calf pasture and a large silo on the N. E. corner of Newell Drive and Museum Drive where the parking facility is now located. On the S.E. corner of the above mentioned intersection, was WRUF radio station, thus the old name radio road, which is now Museum drive.

When WRUF was moved, the transmitters were located just west of Interstate I-75 near Newberry Road, resulting in the current name Tower Road. There was a little airport (Stengel Field) on the east end of Butler Plaza, where World War II pilots were trained. The "Pitts" Special was designed and built at Stengel field, and was considered the best aerobatic plane for 40 years. The Pitts Special and the U of F were Gainesville's only claim to fame until Steve Spurrier arrived.

Now that you have the lay of the land, let's have a look at how the Experiment Station, the College of Agriculture and the Plant Pathology Department (PPD) developed.

In 1951 Dr. Webber established a PhD. Program in the College of Agriculture and went on a recruiting trip. During the summer of 1952 two prospective graduate students visited the department, and here is what they saw: the teaching staff consisted of two professors (Dr. Webber and Owens) and was located on the 5th floor of Rolfs Hall; no air conditioners, no elevators and a severe bird problem. Equipment con-

sisted of an autoclave that worked on good days, a reliable Bunsen burner and several boxes of litmus paper. There were (Tisdale, Decker, Miller, Anderson, and Mr. West) five professors in the Experiment Station. Mr. West was a Botanist and it is not known why he was in the PPD. The experiment station and the college were completely separated, budget-wise and otherwise. Departments in both groups had their own department chairmen, as well as separate deans and sub-deans. Administrative over-load was one of the reasons the system collapsed under its own weight. Stay tuned for the coming of IFAS!

Soon after Dr. Decker was appointed Chairman of Plant Pathology, the Experiment Stations staff moved out of Newell Hall, so that the Agronomy Department would have space for their members. Plant Pathology moved to three different locations: (1) the old USDA Tung oil lab located between the Agricultural Library and the Forestry building; (2) building 866, an abandoned poultry disease lab just across the street from the McCarty Hall parking lot; and (3) what became known as the virus lab

on the southwest corner of Lake Alice. Thus, plant pathologists were housed in three separate locations until they moved to Fifield Hall. Three plant (forest) pathologists in the school of forestry did not move to Fifield Hall, but enrolled their Ph.D. candidates in the PPD program.

Since the timeline is out of sequence, it may not cause too much confusion to tell you a little story about W.H. Bile Fifield for whom our current building was named. Although Mr. Fifield was Provost of Agriculture, it was difficult to determine how he fit into the scheme of things. Even though he had no budget, except for a secretary and travel, he was widely known as an excellent after dinner speaker and a political facilitator. The following story is a demonstration of his talent. Every year Frances Brannon (Florida Seed and Feed Co.), who was prominent in North Florida Agriculture, invited some people from the experiment station to a barbecue at his warehouse in Ocala, Florida. At the end of his after dinner speech Mr. Fifield said, "Frances, I hope you will note that anyone who would eat burned chicken and drink cheap whiskey in a cold warehouse full of Millorganite desperately needs a pay raise, so we would appreciate your help with this problem." It is not known at the time what effect Mr. Fifield's request had, but a pay raise was approved during the next meeting of the legislature. Unfortunately, this pay raise occurred almost two years later because the legislator only met every two years!

When Dr. Decker departed, the search committee and the staff could not agree on a candidate acceptable to the majority. This is a common occurrence because individuals prefer a chairman with whom they are familiar. The problem became more complex because there were two department members who considered themselves qualified for the job. The stalemate continued for some time, when somewhat out of the blue, not one but two candidates appeared for the interview. The

irony was that neither was qualified. In fact the main interest of one candidate was to identify staff members who were considered as "dead-wood" and stated that he would forth with rid the university of them. Apparently he was not aware of the tenure system! Following this misfortune, the Provost of Agriculture declared that we need not to worry about finding a department chairman, and that he would find one for us, which he did.

Here it seems desirable to comment on a revolution called **IFAS**. As previously mentioned, Agriculture was divided in three segments: the Experiment Station, College of Agriculture, and Extension Services. Since these factions were competing for the same resources (**money**), this did not make for a harmonious situation. It was amazing that it worked as well as it did, but it was still an inefficient organization. It is not known who or what organization had the political power to completely reorganize Agriculture at the U of F. The president was surely involved, but it required political power beyond the University to bring about such a radical change. Nevertheless, an outsider was brought in, and the three groups were put under one command and renamed the "Institute of Food and Agricultural Science" (IFAS). The extension service faculties were still a bit out of the loop, but fit in well because they had dual appointments. Unfortunately, the dual appointment system was changed at a later date. In the final analysis all groups were housed together, by department, under one central command. Ultimately, the title of provost was abolished and replaced by the Vice President of Agriculture. This was more than a name change, because all funds came directly to the Vice President, rather than to the competing organizations.

Since those that control the money call the plays, we now had one quarter back team, which reduced some of the administrative burden and demolished the rivalry of the tripartite system. But we did not live happily ever after, be-

cause that is not the nature of academia, which thrives on diversity, therefore increasing the probability of shooting itself in the foot, which it did...stay tuned.

STUDENT "STORIOLOGY"

Our students are scattered far and wide and occupy an array of positions in Agriculture and other ventures. While some are researchers at universities and experiment stations, other are department chairpersons, deans and subdeans. In the past few years alone, our students or post-docs have taken positions at the University of Georgia; the USDA-ARS in Florida, California, Puerto Rico and France; University of Florida, Washington University, and Oregon State University; EMBRAPA, Federal Universities and in the Instituto Biologico in Brazil; some universities in New Zealand; and private industry in the US. We have graduates from years back who are department chairs, industry directors and international collaborators.

The following trilogy describes the ups and downs of three students and delineates some of the measures used to prepare them for the "real world". The first two stories revolve around a rigorous seminar system designed by Dr. Berger to teach students how to organize, present and form conclusions about a subject to which they were assigned. They were cross-examined about their conclusion that the students did not understand or appreciate the importance of the system. This is a gross understatement but ultimately a few of them did understand.

The gist of this story revolves around two students (student A and B). Student A had several years of experience in a commercial nursery and seemed to know everything worth knowing about plant pathology. He took pleasure in correcting people about their lack of knowledge and droned on about the proper way to control specific diseases of plants. In short, he alienated most of the students and caused professors to wonder why he needed additional knowledge. To get the full flavor

of the grand finale, one must assume that student A finally realized that he might be in deep "doo-doo" when he presented his seminar. Anyway, on the day of reckoning he seemed a bit shaky and a little pale. When he tried to get into the introduction, he turned as white as a sheet and his speech slowed, causing Dr. Charudattan to ask "are you ok???"...no answer another inquiry got no answer, at which time student A slowly sank to the floor in a full faint. Several people departed the premises to have a good laugh, while others hovered around to bring him back to the land of the living.

Student A departed the U of F in such a hurry that he forgot to take his young wife with him. He has not been seen or heard from to this day. Another interesting anecdote about this student...one time when he received a parking ticket, he paid it in person in pennies to show his frustration with the system.

Student B did not end his connection with the PPD in a full faint, but his reaction to the seminar system took an unusual turn student B was a some-time student and a semi-pro basketball player. He was about 6'4", thus was nicknamed "Long John". His claim to fame came about when his basketball team was invited to play the Cuban National Basketball team in Havana. This was in the late 60's mid 70's when few Americans were allowed to visit Cuba.

Long John was not prepared for his scheduled seminar and had a lame excuse for his second scheduled date. The end of the semester was coming and his major professor said, "you will present your talk or else" So he took the "or else" option and has not been seen or heard from since.

Since the first two stories are a bit on the downside, it seen desirable to skip the love triangle and murder story and tell one that has an upside.

This story concerns a student referred to as C, who rightly assumed there would be a need for plant scientists trained in law. The law school he

entered provided C with the opportunity to work in the field as a plant pathologist and attend classes. He often came to class right from the field in work clothes and reeking of mosquito repellent. Because of C's appearance and odor, there were often a lot of empty seats in his vicinity. This provided C with plenty of legroom. His classroom ambiance also generated a lot of curiosity and questions from students and faculty alike. Mid-way through law school, faculty and students were well versed on the basics of plant pathology and C was frequently sought out for disease diagnosis of house and garden plants. C continued to work as a plant pathologist throughout law school. On graduation, he accepted a position as an agricultural lawyer and now heads an agricultural law program.

Let me add one more story. There was a former student who constantly chewed tobacco juice, and once, some of this juice landed on the shoe of a faculty member. This unusual person also had a cat to which he was very emotionally attached to. In fact, when the cat died, he wrapped it up in freeze wrap and stuffed it in his major professor's freezer. Years later, probably during a power failure, the poor cat was discovered. Everyone assumed that this student could not bear to give the cat a proper burial.

Students bring to mind a comment made by the legendary E. C. Stakman who said, "The only time one can evaluate a student is about five years after they graduate". Although this oddity seems to contradict conventional thought, it has some validity. The strong desire to discover the solution to a difficult problem and a strong work ethic, are characteristics that separate those who make important discoveries from those who do not.

Students who want to dwell into research should carefully read the book "The Art of Scientific Investigation" written by W. I. B. Beveridge. I also suggest reading "The 8th Day of Creation" by Watson. This will give the reader a

good understanding of the importance of tenacity and the feeling for what Beveridge called "A prepared mind".

For eons, foreign languages were required for the Doctor of Philosophy (Ph.D.) degree. In fact, most universities required two languages (usually French and German). In the early 1970s, yet another nutty idea emerged from California. i.e., the elimination of the language requirement. What follows is for the merriment of the students because it tells of the demise of the language requirement at the UF PPD. Several department members opposed this change. The stalemate continued for several months. Ultimately, when the department chair noted that the dissenters were out of town, he called a staff meeting and passed a resolution to drop the language requirement. To placate the contras, a requirement of a biochemistry course was added as a replacement. This change caused difficulties throughout UF because the new medical school was not pleased with the biochemistry taught in the Chemistry Department. However, the Chemistry Department was not very interested in biochemistry so the course was moved to the medical school. This arrangement was not satisfactory to the rest of UF because the medical school emphasized medical biochemistry. As a counter measure, the botany department agreed to teach the course, which turned out to be a non-winner for reasons left unsaid. The biochemistry course was moved with success to the Food Science Department. A few years later, advanced statistics was added to curriculum, leaving the students to choose between biochemistry or statistics. Ultimately, special courses for Ph.D. students was left to the discretion of their major professor. Students will probably be amused by the following quote (if they can translate it – ha ha ha ha): "Dumpkopfen haben gewoennen-alors laissez les bon temps roulle".

METALOGUE

Please pardon the disruption of the story-time line. What follows is a bit

verbose but is necessary to make an important point. During the 1970's and 1980's our department should have been recognized as one of the best in the USA. This opinion is substantiated by accomplishments in ten different areas. **First** among these was pioneering work on the biocontrol of water hyacinths with a plant pathogen in combination with an insect. Additional studies obtained wide acclaim, resulting in an International conference on the biocontrol of weeds at UF. **Second**, the plant virus group published a monograph on potyviruses, defined the ultrastructure of plant virus inclusions and demonstrated that viruses can be easily identified using the distinctive structure of inclusion bodies. **Third**, several researchers obtained recognition for their work on bacterial diseases and the pathogen that cause them. This research resulted in a better understanding of the nature of the hypersensitivity response, the identification of resistance to several pathogens, and the use of fatty acid analysis for the identification of pathogens. **Forth**, an in depth analysis of the epidemiology of plant diseases revealed the effect of control measures on disease progress, and designed models to predict the rate of disease development. These discoveries were vital to the development of the Integrated Pest Management Programs. **Fifth**, research on the nature of host-pathogen physiology, demonstrated that a "pathotoxin" initiated disease development by disrupting the function of the plasmalemma, but did not alter the structural nature of it. **Sixth**, studies on the relationship between male sterility and disease development demonstrated strict maternal inheritance of mitochondrial and chloroplast DNAs, determined that the product of a plant gene controls disease reaction, and identified the gene product which confers disease toxin sensitivity. **Seven**, studies on the epidemiology and biocontrol of soilborne plant pathogens produced interesting results on the relationship of inoculum density to disease incidence in various hosts, and described microbial commu-

nities in root systems of crop plants. **Eight**, mycorrhizal studies on plant growth and minerals uptake demonstrated that Ectomycorrhizal organisms are needed by some tropical plants for better growth. These studies attracted interest, resulting in the national collection of Ectomycorrhizae to be moved to our department. **Nine**, studies on post harvest diseases delineated factors that control host range differences of strains of *Erwinia* sp, devised methods to reduce the potential of bacterial soft rot in potato tubers, and determined the efficacy of various halogen compounds for sanitation of wash water system in packing houses. **Tenth**, one of our scientists investigated the nature and function of the NIF gene (or gene cluster), which is a gene that controls nitrogen fixation in legumes. If this "gene cluster" could be transferred to grasses and induced to function, will result in a true revolution in Agriculture. This was so exciting that one of our administrators proclaimed that our scientists would teach plants to produce their own fertilizer. You really don't want to know the end of this, but fertilize companies are alive and well, and nitrogen is still the most expensive component in the mix.

Members of the department received the following awards: Nine fellows, two Ruth Allen, Lee Hutchinson, W.H. Westlin, Cambell, two USDA awards, and the APS Southern Division outstanding plant pathologist of the year. Several students received the F. A. Wood award and other students won the best paper awards at the Southern Division meetings. Recently two members of the department received national and local (UF) recognition for excellence in teaching.

Some department members have demonstrated their writing skills, which resulted in text books and the editing of publications such as "The History of Science". Another publication, "Diseases of Southern Turfgrasses" was so popular that a second printing was necessary. Recently, "Mushrooms of North America", "Biohistory", and a lab man-

ual entitled "Molds, Mildews, Mushrooms and Man" have been mostly recently written.

EPILOGUE

At this juncture, the use of an historic metaphor seems appropriate. During the signing of the Declaration of Independence, some of the delegates became a bit squirrely when they realized that they were about to sign their death warrant. Ben Franklin quickly seized the moment and said "Indeed we must all hang together, or otherwise we shall most assuredly hang separately". They did hang together and won. In the past, the PPD did not hang together and lost the chance of being recognized as one of the best plant pathology departments in the USA.

The upside is that I felt a sense of calm, which has been absent for 35 years. So, I really hope that you all will pull together and give our chairwoman your support, because she has the most difficult job in academia. Moreover, a combined effort will give the great phoenix a chance to rise from the ashes of his own destruction and fly away to heliopolis to realize his rightful place in the sun.

TELIOLOGUE

A noticeable period of time is missing from my observations because I was out of the loop for some time, thus I have no comments. The jargon of the present "Band-wagon" of genetic engineering (G.E.) is so confusing that I feel as though I am in a foreign country.

The rapid shift from traditional plant pathology leaves some traditionalist saying, "What's going to happen when an influential grower (farmer) appears with a diseased specimen that is devastating his crop, and no one knows what the hell it is". Whether Cullen is still around, no problem, otherwise circle the wagon, form a committee and declare, "we are working on it". No seriously, genetic engineering holds more promise of making real progress in biological science than any other discovery since Koch developed the germ theory of disease. But similar thoughts about

other "Band-Wagons" have prevailed for long periods of time. So, will the garish greens and the Frankenfood Freaks derail the G.E. train? Finis!

*Dr. H. H. (Bill) Luke, who wrote this issue's feature article has been affiliated with our department since 1955 and has seen his share of both good and bad seminars. A no-nonsense person and strong advocate of sound critical thinking, he decries the use of more slides than necessary (Seven is plenty!). Whether you agree with him or not on this or other issues, he always provokes one to think. Although retired since 1985, he still regularly frequents our Friday coffee breaks, and as always, continues to challenge us. Bill Luke was our department's first recipient of the coveted APS Ruth Allen Award, which he received in 1973, together with his collaborator Frances M. Latterell. This award was bestowed for their ground-breaking work with Victoria blight of oats. It was demonstrated for the first time that the blight symptoms were induced by a specific toxin (victorin) produced by the causal agent (*Helminthosporium victoriae*). A native of Pavo GA, Bill Luke received his BS in 1950 from the University of Georgia and his Ph.D. in 1954 from the Louisiana State University. Employed by the USDA/ARS since graduation, he first took a position at Stoneville MS before coming to Gainesville. Bill Luke saw action in World War II as a B-17 bomber pilot and, after numerous missions, was forced to land behind enemy lines. He was captured by the Germans and spent time in a prisoner of war camp. Fortunately, he managed to escape and ended up in England.*

Faculty, staff, students, alumni, and colleagues of our department...

Dr. Joseph Reddy from Bangalore, India, is a new postdoc in Dean Gabriel's lab. He did his Masters in Agricultural Microbiology in the University of Agricultural Sciences, Bangalore, in 1997. On August 1998 he went to the University of Idaho at Moscow to pursue his Ph.D. working of the Pathogenicity and Biological Control ability of

Pseudomonas corrugata. He will be given a seminar in three weeks for the Plant Pathology series.

Ronald French obtained first place in the Graduate Student Forum I: Crops and Pest Management at the Soil and Crop Science Society of Florida meeting. The meeting took place from May 22-24 in Clearwater Beach, Florida. Ronald competed against seven other students and his presentation was titled "Survival of *Phytophthora capsici* in commercial field pepper plantings". Congratulations, Ronald!!!

Our department currently has 17 undergraduate students (10 3AG and 7 4AG); 9 are male and 8 are female. Ten are listed under our Biotechnology option and 6 are in the Agricultural Technology option; 1 is undecided.

Since 1994, 35 students have received undergraduate degrees from our department, an average of 4.4 per year.

Of 34 graduate students currently in our department, including those in the PMC program, 13 (38%) have their undergraduate degrees from our department.

Counting Al-Saadi, Brunings, and Chamusco (PMCB), and Davison and Nielsen (DPI), we have 33 graduate students. Of these, 15 (45%) are affiliated with the RECs. (If you don't count those five, 54% are with the RECs.)

Ten of our 33 students (30%) are international. (The countries represented are Argentina, Brazil, Colombia, Hungary, Kuwait, Oman, Panama, South Africa, Surinam, and Venezuela.)

Of our 33 graduate students 13 (39%) have undergraduate degrees from our department, i.e. Anderson, Balogh, Cory, Donahoo, Hermle, Horrell, Hutchens, Jurick, Mahovic, Mailhot, Nielsen, Nodzon, Oliver. If you don't count the 3 PMCB and 2 DPI students,

however, 43% of our students have undergraduate degrees from our department. Indeed, the majority of our 23 domestic students have undergraduate degrees here (52%).

In terms of gender we're pretty evenly split: 18 are male (55%) and 15 are female (45%).

We look pretty good overall in terms of gender and US/international student balance. Formerly what stood out for us was the disproportionately high number of international students we had, but about 1/3 of them were "gifts" to our department in that they brought their own financing with them and generally were of excellent quality. This source of students has since declined markedly, of course. The other two changes are i) the growing number of students working at the RECs (about half) and ii) the large number of our own undergraduates getting assistantships and becoming graduate students in our department (almost half).

Congratulations to Jennifer Gillett for obtaining the prestigious Jack L. Fry Graduate Teaching Award given by the College of Agricultural and Life Sciences. The purpose of this award is to provide an award to a graduate student for their excellence in teaching.

Congratulations to Ronald French for obtaining the Davidson Travel Grant given by the College of Agricultural and Life Sciences. This grant is to provide funding to help defray travel expenses for graduate students presenting a paper at a national or international professional meeting or conference.

Fabricio Rodrigues presented part of his research at the Second International Silicon in Agriculture Conference held in August 2002 in Tsuruoka, Japan. The title of his oral presentation was "Silicon induces a chemical defense response in rice against blast disease".

Congratulations to Ronald French and Fabricio Rodrigues, who passed their qualifying examination in November and December 2002, respectively. Both are now Ph.D. candidates in our Department.

Things to think about...

Don't bother about genius. Don't worry about being clever. Trust to hard work, perseverance and determination. And the best motto for the long march is: "Don't grumble. Plug on!". (Frederick Treves)

When your work speaks for itself, don't interrupt. (Henry Kaiser)

What's money?. A man is a success if he gets up in the morning and gets to bed at night, and in between he does what he wants to. (Bob Dylan)

Don't tell me how hard you work. Tell me how much you get done. (James Ling)

There are two things needed in these days; first, for rich men to find out how poor men live; second, for poor men to know how rich men work. (E. Atkinson)

Submitted by Fabricio Rodrigues

Chili Cookoff 2003



On Monday, January 27, 2003, the USPS Plant Pathology Staff will hold its 15th Annual Chili Cookoff.

The event will take place in Rooms 1304-1308, Fifield Hall. At a bargain cost, attendees will have the time of their life sampling chili con carne (meat), chili sans carne (vegetarian), as well as an exotic chili selection. In the past several dozen participants from inside and outside of our department have cooked up exquisite and original batches of homemade chili. Those who participate in the event by cooking up a batch of their

own chili will participate in a friendly-yet-difficult-to-win competition from each of the categories. Proceeds from the 15th Annual Chili Cookoff will benefit the Departmental Reading Room/Plant Pathology Library. To donate a batch of your own chili, please sign up at the Plant Pathology Front Office in Room 1453, Fifield Hall.

Awards

The PLP News staff would like to congratulate the following people for their recent accomplishments and awards.

F.A. Wood Award for Outstanding Graduate Student:

Fabricio Ávila Rodrigues
Wayne Jurick

G.F. Weber Award for Outstanding Undergraduate Student:

Brandy Williams

Departmental USPS Awards:

Research: Ulla Benny

Teaching: Dana LeCuyer

Extension: Chuck Semer

New Plant Disease is reported

Whitney Elmore, Mark Gooch, and Dr. Carol Stiles are reporting the first incidence of take-all root rot (*Gaeumannomyces graminis* var. *graminis*) on seashore paspalum in the United States. Seashore paspalum has recently become popular on golf courses as well as home lawns in Florida, thus any incidence of newly reported disease is of great importance to both the turfgrass community and sod producers in Florida. Dr. Laurie Trenholm (Environmental Horticulture Dept.) submitted the sample, taken from a home lawn in Hernando County, Florida, to the Plant Disease Clinic in September 2001. *Gaeumannomyces graminis* var. *graminis* is an ectotrophic, root-

infecting fungus which produces brown-black runner hyphae and dark, deeply lobed hyphopodia along stolons and roots of infected plants. Mark Gooch isolated the fungus from the original sample, which later formed hyphopodia, perithecia and ascospores in culture. He gave the isolate to Dr. Carol Stiles, who was interim director of the Plant Disease Clinic at the time. Whitney later used this isolate to inoculate roots of St. Augustinegrass and bermudagrass varieties, as well as 'Sea Isle 1' seashore paspalum. Whitney and Dr. Stiles found the isolate of *G. graminis* var. *graminis* to be pathogenic on all the turfgrasses tested, and detrimental to seashore paspalum, causing take-all root rot. This was the first report of *G. graminis* var. *graminis* on seashore paspalum in the U.S. These findings resulted in a Plant Disease Note, which will be published by early 2003.

International Collaboration

Pete Timmer, CREC, has established a project in São Paulo, Brazil, to investigate foliar fungal diseases foreign to Florida. The program is being conducted at the Instituto Biológico in cooperation with the UNIEMP Institute. Natália Peres, who completed her doctoral degree with Pete's supervision at São Paulo State University in Botucatu in July, is Project Manager for the program. The research program will emphasize investigation of the risks of movement of black spot and sweet scab, as well as control of postbloom fruit drop and Alternaria brown spot. Juan Pedro Agostini of INTA, Montecarlo, Misiones and former UF student, will conduct research on some aspects of black spot project.

Pete Timmer, CREC, has established a project on scab diseases of citrus with J. W. Hyun, of the Korean Rural Development of Jeju Island. Hyun visited Lake Alfred for a month in August and Pete spent a week in Korea in October. Hyun will spend 6 months at CREC in 2003 investigating the infection process, the basis of pathogenicity,

and pathotypes of *Elsinoe* spp. K. R. Chung, CREC, will cooperate on the project.

John R. Edwardson

1932-2002

Dr. John R. Edwardson, Emeritus Professor in the University of Florida's Agronomy Department, died Friday August 9 following an extended illness. He was 79. Dr. Edwardson was born in Kansas City MO and served as Staff Sergeant in the U.S. Army during World War II. He was in the Battle of Huertgen Forest and received both the Purple Heart and the Bronze Star. He received his BS degree and MS degrees in Agronomy from Texas A&M University, where his interests in cytoplasmic male sterility were kindled. After graduation in 1949, he entered Harvard University, where he was a teaching assistant and a research fellow. Dr. Edwardson received his Ph.D. degree in biology in 1954 from Harvard working on fertility restoration in male sterile corn. He joined the Department of Agronomy at the University of Florida as an assistant professor and was promoted to associate professor in 1960 and professor in 1966. He retired in April 1997.

Although his formal training was in agronomy and genetics, Dr. Edwardson made outstanding contributions to the knowledge of plant viruses. His research on cytoplasmically inherited male sterility led to cytological investigations of inclusions induced by viruses in different groups, particularly the Potyviridae, the largest and most economically significant group of plant viruses. Dr. Edwardson and his colleagues developed three-dimensional concepts for potyvirus cylindrical ("pinwheel") inclusions and pioneered the concept, now generally accepted, that all viruses that induced such inclusions are members of the potyvirus group. Ultimately, the exemplary teamwork of Dr. Edwardson and his colleagues led to the purification and molecular characterization of these

cylindrical inclusions, to the development of antisera specific to their proteins, and to their use as valuable diagnostic targets.

During his career, Dr. Edwardson authored 129 publications, two of which were cited as landmarks in plant virology. His publications include *Some Properties of the Potato Virus Y Group*, the *CRC Handbook of Viruses Infecting Legumes*, and *Light and Electron Microscopy of Plant Virus Inclusions*.

Dr. Edwardson served on the International Committee on Taxonomy of Viruses for twelve years and effectively advocated using inclusion bodies for plant virus classification. Dr. Edwardson's numerous publications are frequently cited in textbooks on plant virology and in papers reviewing plant pathology. Further recognition was received in 1992 when he was named a co recipient, along with R. G. Christie, E. Hiebert, and D. E. Purcifull, of the Ruth Allen Award for their innovative and pioneering research. In addition to being a co recipient of the Ruth Allen Award, Dr. Edwardson was a fellow of the American Association for the Advancement of Science and the American Phytopathological Society. *Nicotiana X edwardsonii*, a tobacco hybrid widely used for plant virus research, was developed by one of his colleagues, S. R. Christie, and named in his honor.

His wife, Dr. Mickie Newbill Edwardson, and three children, George, Elizabeth, and Sarah survive him. "Doc" will be missed by all who knew him for his brilliance, humor and unique outlook on life.

Family Matters

Audrey Rose Zettler was born September 18, 2002, in Jacksonville, Illinois, the daughter of Lisa Rellinger and Lawrence Zettler. She was 20 inches long and weighed 7 pounds, 4 ounces. That makes Bill Z. a grandpa!!! Audrey Rose's

parents are both on the faculty of Illinois College.

Sravya R. Keremane, 12 year-old daughter of Manjunath and Chandrika, was the winner of the Million Minutes of Reading in her class level for the last four years. She scored the highest points in Accelerated Reading in her school, Hidden Oak Elementary when she was in fifth grade. Last year, she participated in the science fair, won overall first place in her school, second place in Microbiology at the County and went up to the semifinals in the Discovery Channel Young Scientist Challenge. She was one of the two students who went up to this level from the Alachua County last year. Sravya and two of her friends conducted a two-week summer camp for 4-6 year old children on Reading, Art and Piano. 22 children attended the camp. A donation of \$212 from the participating parents went to the Children's Home Society of Florida. She plays trombone for the school band. Her hobbies and interests are Reading, Indian classical dance, and swimming. Sravya currently studies in the seventh grade at the Howard Bishop Middle School, Academy of Technology and Gifted Studies, Gainesville.

Recent Publications

Rodrigues, F. Á., Vale, F. X. R., Korndörfer, G. H., Prabhu, A. S., Datnoff, L. E., Oliveira, A. M. A., and Zambolim, L. 2003. Influence of silicon on sheath blight of rice in Brazil. *Crop Protection* 22:23-29.

Rodrigues, F. Á., Carvalho, E. M. and Vale, F. X. R. 2002. Severity of *Rhizoctonia* root rot in beans influenced by liming, nitrogen sources and rates. *Pesquisa Agropecuária Brasileira* 37:1247-1252.

Blount, A. R., Dankers, H., Momol, M. T., and Kucharek, T. A. 2002. Severe dollar spot fungus on bahiagrass in Florida. Online. *Crop Management*, doi:10.1094/CM-2002-0927-01-R

<http://www.plantmanagementnetwork.org/pub/cm/research/dollarspot>

Funderburk, J., Stavisky, J., Tipping, C., Gorbet, D., Momol, M. T. and Berger R. D. 2002. Infection of *Frankliniella fusca* (Thysanoptera: Thripidae) in Peanut by the parasitic nematode *Thripinema fuscum* (Tylenchidae:Allantonematidae). *Environmental Entomology* 1(3):558-563.

Pradhanang, P. M., Momol, M. T., Dankers, H., Momol, E. A. and Jones, J. B. 2002. First report of southern wilt caused by *Ralstonia solanacearum* on geranium in Florida. Online. *Plant Health Progress* doi:10.1094/PHP-2002-0611-01-HN.

<http://www.plantmanagementnetwork.org/pub/php/brief/geranium/>

Blount, A. R., Pittman, R. N., Smith, B. A., Morgan, R. N., Dankers, W., Sprengel, R. K. and Momol, M.T. 2002. First report of *Peanut stunt virus* in perennial peanut in North Florida and Southern Georgia. *Plant Disease* 86:326.

Argun, N., Momol, M. T., Maden, S., Momol, E. A., Reid, C. L. and Burr, T. J. 2002. Characterization of *Agrobacterium vitis* strains isolated from Turkish grape cultivars in Central Anatolia Region. *Plant Disease* 86:162-166.

Pradhanang, P. M. and Momol, M. T. 2001. Survival of *Ralstonia solanacearum* in soil under irrigated rice culture and aquatic weeds. *Journal of Phytopathology* 149:707-711.

Xin, J., Beck, H. W., Halsey, L. A., Fletcher, J. H., Zazueta, F. S. and Momol, M. T. 2001. Development of a distance diagnostic and identification system for plant, insect and disease problems. *Applied Engineering in Agriculture* 17 (4): 561-565.

Recent Grants

Jones, J. B., Momol, M. T., Pradhanang, P., Olson, S. M., Miller, S. A. and Scott, J. W. Integrated Management of Bacterial Dis-

eases on Tomato. SR-IPM (USDA-CSREES). 2002-2004.

Mizell, R. F., Knox, G. W., Hewitt, T. D., Momol, M. T. and Bolques, A. Organic Nursery Production: Development and Demonstration. USDA, Organic Program, 2002-2004.

Funderburk, J., Momol, T., Olson, S., McPherson, R. and Pappu, H. Reduced-Risk Tactics for Thrips and Toxopovirus on Solanaceous Crops. RAMP, (USDA). 2000-2003.

People from our Department visit Latin America

University of Florida citrus pathologists Ron Brlansky, Richard Lee and Marty Dekkers of the Citrus Research and Education Center, Lake Alfred, and Manjunath Keremane, a UF plant pathologist in Gainesville, spent two weeks with Ezequiel Rangel at the Laboratorio de Virologia Vegetal, National Institute for Agricultural Research, or INIA, in Maracay, Venezuela. The visit was part of a T-STAR grant on the characterization of citrus leprosis virus and development of diagnostic tests. Citrus leprosis is a problem in the Caribbean and threatens the United States, although it has not been found here in the past 20 years. In Venezuela citrus leprosis was a major problem in citrus production in the 1990s. The disease has been reported in Panama. During the first week in Venezuela the researchers visited citrus areas where the disease is prevalent. They took samples for analysis at UF. They also presented a diagnostic workshop to INIA and University of Central Venezuela researchers on molecular and microscopic diagnostics of plant viruses. Ten researchers and students attended. Lee, Brlansky and Keremane gave presentations on theory of the diagnostic tests, and then all participants performed practical applications in the lab.

Dr. Richard Lee visited also Panama from October 8-13, 2002 to evaluate the project "**Identification and Control of Citrus Pests and Diseases in the Province of Cocle**" and the feasibility of a citrus certification program in Panama considering the presence of leprosis in the one area in the north. People involved on this project were Magali Paceco (Agriculture Economist), Felicitas Sousa (Tissue Culture), Carlos Ramos (Molecular Biologist), Dora Quiros (Entomologist); and German Chacin (Investor). Carlos Ramos, Dora Quiros, and a fellow entomologist are pictured in the picture.

APS Meeting 2003

The Annual Meeting of the American Phytopathological Society will be held August 9-13 in the beautiful queen city of Charlotte, NC. As the largest city in the Carolinas, Charlotte offers everything you'd expect from a city with the friendliness of a small town. The city boasts a commitment to linking the "New" and "Old" South together. No matter what your interests, there is something for you to do in Charlotte. If you need more information, please visit the APS website at www.apsnet.org

Debate on Agricultural Bioterrorism

The Entomological Society of America (ESA) and the International Society for Plant Pathology sponsored a graduate student debate titled "Can we be prepared for deliberate release of biological agents against agriculture". The debate was part of the annual Meeting of the ESA held in Ft. Lauderdale in November 2002.

Ronald French represented our department and together with other entomology and plant pathology graduate students all around the U.S.,

took the Pro (affirmative) position that stated "we can be prepared for an attack". This was the very first time that the ESA was dealing with such a topic. Drs. Wisler and Charudattan were also present at the debate. Although there were no winners or losers, the affirmative side received more votes from the attendees who thought they did a better job at addressing their position.

The Biannual Meeting of the Florida Phytopathological Society (FPS) 2003

The biannual meeting of the Florida Phytopathological Society is tentatively scheduled for May 5-7, 2003 in Ft. Pierce. Stay tuned for upcoming information or contact Pete Timmer (President), Jeff B. Jones (Vice President), Lawrence E. Datmoff (Secretary), or Tim Gottwald for information.

For those of you who missed the last meeting in 2001, here is a brief summary of what took place.

Nearly 120 registered members of the FPS met recently at the CREC in Lake Alfred to discuss plant pathological topics of great importance to Florida. Keynote speakers included Gail Wisler, Chairperson of UF's Dept. of Plant Pathology, Tim Schubert, Dept. Head, Plant Pathology, Div. of Plant Industry, and Blanca Landa, del Castillo, a visiting Fulbright Scholar from Spain. Local arrangements were capably handled by Pete Timmer (Lake Alfred, CREC), the current FPS President. Richard Raid (Belle Glade, EREC), Immediate-Past President, organized the program, which consisted of over 60 scientific presentations. Among those presenting, Camilla Yandoc, Ronald French-Monar, and Matthew Brecht won first, second and third place awards, respectively, in the Graduate Student Paper Competition. Distinguished Service Awards were presented to Dr. George N. Agrios for his leadership in first establishing the FPS in 1989, and to Dr. Tom Kucharek for his outstanding leadership

and dedication to the FPS over the years. Jeff Jones, FPS Vice President, will work with Erin Roskopf (USDA-ARS Ft. Pierce) in organizing the next Biennial Meeting of the FPS to be held in Ft. Pierce in May, 2003.

Friday Coffee Break Schedule Spring 2003

January

- 3 Everyone
- 10 Kucharek & Song
- 17 Pring & Chourey
- 24 PD Clinic, Zettler, & EM Lab
- 31 Bartz, Berger, & Stiles



February

- 7 Charudattan & Hiebert
- 14 Gabriel & Jones
- 21 Office Staff
- 28 Kimbrough & Rollins

March

- 7 Kucharek & Song
- 14 Spring Break
- 21 Pring & Chourey
- 28 PD Clinic, Zettler, & EM Lab

April

- 4 Bartz, Berger, & Stiles
- 11 Charudattan & Hiebert
- 18 Gabriel & Jones
- 25 Office Staff

Facts on North Carolina



Admission to Statehood: November 21, 1789.

Bird: Cardinal.

Flower: Dogwood.

Tree: Pinus

Area: 53,821 square miles (28th in U.S.A)

Border States: Georgia, South Carolina, Tennessee, and Virginia.

Agriculture: Poultry and eggs, tobacco, hogs, milk, nursery stock, cattle, and soybeans.

Industry: Tobacco products, textile goods, chemical products, electric equipment, machinery, and tourism.

Governor: Michael F. Easley (D)

Lowest point: Atlantic coast.

Motto: To be, rather than to seem.

Nickname: Old North State.

Origin of State's Name: From "Carolus", Latin word for Charles and named after England's King Charles I.

Population: 8,049,313.

Topography: Coastal plains and tidewater in two-fifths of state, extending to the fall line of the rivers; piedmont plateau, another two-fifths, of gentle to rugged hills; southern Appalachian Mountains contain Blue Ridge and Great Smokey Mountains.

Flag: That the flag of North Carolina shall consist of a blue union, containing in the center thereof a white star with the letter N in gilt on the left and the letter C in gilt on the right of said star, the circle containing the same to be one-third the width of the union. The fly of the flag shall consist of two equally proportioned bars; the upper bar to be red, the lower bar to be white; that the length of the bars horizontally shall be equal to the perpendicular length of the union, and the total length of the flag shall be one-third more than its width. That above the star in the center of the union there shall be a gilt scroll in semi-circular form, containing in black letters this inscription "May 20th, 1775," and that below the star there shall be a similar scroll containing in black letters the inscription: "April 12th, 1776."

Plant Pathology Graduate Student Speaker 2002

During Fall 2002, the Plant Pathology Graduate Student Speaker for 2002 visited our department and delighted us with TWO seminars. Dr. Steve Goodwin, Adjunct Associate Professor USDA-ARS, Department of Bot-

any and Plant Pathology, Purdue University, gave his first seminar during the departmental fall seminar series on Tuesday, November 12 at 4:05 p.m. His seminar was titled "Evolutionary Relationships and Molecular Genetics of the Septoria Pathogens from Wheat and Barley".

Prior to the seminar, Dr. Goodwin spent most of the day individually meeting with several of our faculty. As with past student speakers, Dr. Goodwin had lunch with out student population. Right after seminar, Dr. Goodwin had the chance to interact with even more members of our department at On the Border Mexican Café.

On Wednesday, Dr. Goodwin gave his second seminar titled "Historical, Biological and Genetic Evidence Supports a Mexican Origin for *Phytophthora infestans*". This seminar represents much of the work he did in Dr. Bill Fry's Lab at Cornell University as a post-doctoral associate during the early 1990's and for which he is world-renowned. Following the seminar Dr. Goodwin had a brief tour of our campus and even got a chance to be just a few feet away from a 5-6 foot alligator that was "resting" in the sands of Lake Alice.

If you would like to contribute an article, a short piece, or a suggestion, please mail us at:

SUMMER-FALL 2002

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The opinions expressed in this newsletter are not necessarily those of the PLPNews Staff.

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