



A publication created and maintained by the Plant Pathology Graduate Students at the
University of Florida

Spring 2002 Edition

APS Meeting 2001 – Salt Lake City, Utah

By: *Matt Brecht*

My first big meeting and excursion out west was a great success. This trip served not only as a professional congregation of scientific exchange but also my impromptu vacation. For those of you who have not been to Salt Lake City (SLC), Utah, here are a few things you need to know. Mormons, members of the Church of Jesus Christ of Latter-day Saints, founded Salt Lake City, located in the basin of the Wasatch Mountains in 1847. The Mormons came for a religious purpose, to establish a religious utopia in the wilderness, which they called the Kingdom of God on Earth. The Mormon Church is a dominant force within the city, but a deep division between Mormons and non-Mormons continues, particularly on the social and cultural levels. There is still much to Nelson Anderson's observation in 1927 that Salt Lake is "a city of two selves," a city with a "double personality." The Salt Lake City immediate metropolitan area has a population of 174,000 and is at an elevation of 4330 feet. The state fruit is the cherry, the state flower is the Segoe lily, the state cooking pot is the dutch oven, and the state insect is the honeybee. Summer is usually warm, dry, sunny with low humidity and the whole time we were at the meeting it was absolutely gorgeous!

SLC's liquor laws are weird so let me explain. If you go to a bar or tav-

ern you can only purchase beer which contains no more than 3.2% alcohol content and wine spritzers. Private clubs require a "membership" or you can ask someone to "sponsor" you so you can get in and drink all kinds of regular beer, wine and liquor. At restaurants that sell alcohol you can drink regularly but only with food, and if you buy a beer at the bar it's the low alcohol kind and you can't leave the immediate bar area with it. Liquor, wine and full-strength beer must be bought through a state-owned liquor store. The Utah Department of Alcoholic Beverage Control Commission administers Utah liquor laws. Currently, this commission is composed of five appointed members, four of whom are male Mormon lawyers and teetotalers. You may have noticed that the airport lounges can serve beer, wine and mixed drinks with or without food. There are only a very few of these and surprise, surprise, they are all located at the Salt Lake International Airport and are intended to give visitors a warm first impression. Fun fact: if a restaurant derives more than 30% of its profit from alcoholic beverage sales it can lose its license.

I arrived at the Shilo Inn, located right across from the convention center on Thursday afternoon and immediately noticed a city that was clean, organized and free of eye pollution due to the city's small sign ordinance law. Friday morning I got up early to see if I

could get on the bus for the Utah agricultural tour arranged by the APS pacific division. As a stand by I didn't get on the bus, however another professor drove a car that followed the bus and a bunch of us got to go nonetheless. The driver either accelerated hard or braked hard, there was no maintenance of smooth speed and believe me we kissed the ground every time we stopped. Aside from minor whiplash, the agricultural tour was a lot of fun and a great learning experience. The group saw diseases of apple, cherry, and peach orchards, a foliage and landscape greenhouse operation, u-pick tomatoes, peppers and melons, and onion, cabbage and carrot fields.

On Saturday I went on the MSA mushroom foray, which took us into the mountains. This time I had bus reservations and was accompanied by Dr. Bob Kemerait, Dr. Kimbrough, and others. The local mycology club accompanied the group, and after we broke up into small groups lead by a club member we hiked through the woods and around pristine lakes in search of mushrooms. The view and surroundings were breath taking and the elevation became obvious if you walked to fast. People collected hundreds of mushrooms and at the end of the day the entire collection was identified and put out on tables for everyone to see.

Sunday through Wednesday the APS meeting sessions, symposium, post-

ers, and workgroups were in full swing at the convention center. I won't go into them all but there was definitely something of interest to all, and careful planning of seminars and activities hour by hour was key to having a successful meeting. There were of course breakfast and evening socials and for me the highlight was the evening social our department put on. It drew a large crowd of not only UF graduate students, and faculty, but former graduates, faculty and friends of our department. As many of you are aware three of our faculty received very prestigious awards at the meeting. Dr. Zettler was given the APS Excellence in Teaching Award, Dr. Jones was awarded the APS Fellow and Dr. Kimbrough received the MSA Distinguished Mycologist Award. Congratulations !!!

With serious scientific material and long seminar sessions comes the need to venture out and do some fun things. A group of us rented a car on the last day and went to Antelope Island, which was surrounded by the Great Salt Lake. We enjoyed hiking, seeing wild buffalo, and floating in the hyper saline waters. The super salty water of Great Salt Lake contains billions of brine shrimp, and on top of the water there was billions of brine flies. Denise, Aaron, Fabricio and I floated and swam in the salty goodness and when we got out the air evaporated the water from our bodies making us walking salt crystals. Finally, the lack of humidity in the air out west became apparent after a couple of days. My lips got chapped and no matter how much fluid I consumed I always seemed to be thirsty. However, I did have the best hair-days I've ever had!

The New and Improved PLP NEWS

The PLP News staff has redesigned the front page and has added some new features to the newsletter. We

have also decided to publish the newsletter bi-yearly to reduce the amount of redundant material covered. We plan to publish a fall and spring edition with the possibility of a summer edition. The mission and scope of the newsletter is primarily to inform, but also to through some humor around. Let us know what you think. We welcome feedback and constructive criticism.

Tail Gator 01'

Thanks to all the people who helped with Tailgator 2001(Carol Stiles, Jeff Rollins, Tom Kucharek, Penny Robinson, Matt Pettersen, Patty Hill, Jerry Bartz, Mike Mahovic, Lucious Mitchell). Our poster was well received by people of all ages. We will continue to work on the poster to improve it as we get more experience with these events. The bbq was terrific, the national anthem was one of the most beautiful renditions I have ever heard, and we got some attention from alumni and administrators. Some of our visitors included Art Englehart (former faculty at Bradenton), the former Ag commissioner Doyle Conner and his brother, Mike Martin, Jimmy Cheek, Jane Luzar and Chris Waddill. Our youngest visitor was about 8 years old. Tom Kucharek's hand lenses were a big hit, and everyone was impressed with the dead "Weed from Hell", and the various forms of rotten tomatoes!

Gator Encounter 2002

The College of Agriculture and Life Science annual open house was held on April 6,2002 in the Florida Gym. Gator Encounter, an event for prospective students and their families, teachers and advisors, will give participants an opportunity to view interactive displays from all of our departments and many of our student organizations. Faculty, staff, students and representatives from admissions, financial aid, and housing were

available to answer questions about our diverse programs and transfer procedures in CALS. This was a great opportunity for prospective students to explore their options. The event was free and included lunch.

APS Southern Division Meeting

The American Phytopathological Society (APS) Southern Division held its 79th annual meeting in Orlando, Florida from February 2-5, 2002. This meeting was held in conjunction with the 99th Annual Meeting of the Southern Association of Agricultural Scientists (SAAS). The meeting was held at the Orlando Hyatt. The meeting began with a welcome address by Bonnie H. Owley (president of the Southern Division) and our very own Gail C. Wisler (Chair, Plant Pathology Department at the University of Florida).

The graduate students were represented by Matt Brecht who participated in the highly competitive graduate student competition. Matt's presentation was titled "Effect of silicon (Si) on the components of resistance in St. Augustine grass to gray leaf spot in Florida." Four brave graduate students, Botond Balogh, Ronald French, Eddie Anderson, and Penny Robinson, drove to Orlando to attend the Tuesday session of the meeting. Immediately after the talks were over, they headed back to Gainesville to make it on time for seminar.

Next year, the Southern Division Meeting will be held jointly with the APS Caribbean Division and the Asocia-cion Latinoamericana de Fitopatologia (ALF) at the Pan American Plant Pathology Conference on Padre Island, TX, April 6-11:
<http://firstone.tamu.edu/bp2003.htm>



Upcoming Trip to Milwaukee APS 2002

Native Americans called Milwaukee the "gathering place by the waters" and it's where APS will be for its 94th annual meeting, July 27-31, 2002. The "Genuine American City," Milwaukee is steeped in tradition but is alive with growth and development. From the clean, sparkling waters of Lake Michigan to the rich heritage of ethnic neighborhoods, Milwaukee invites you to discover its uniqueness and diversity. Sessions that will stimulate, invigorate, and challenge your perspective will take place at the Midwest Express Center. The program committee and other APS leaders are dedicated to bringing you: high-quality technical sessions with an emphasis on recent advances and issues in research, teaching, extension, and outreach; Forums for discussing issues in plant pathology and APS; Workshops for the "hands-on" experience; Opportunities to network with colleagues and meet new people.

Milwaukee's new Midwest Express Center is architecturally beautiful and has an extensive art collection. Two of our contracted hotels, the Hilton and the Hyatt, are right across the street from the center, and the Holiday Inn and Ramada are a very close walking distance as well. The Hilton offers an urban water park—the first in the nation—called Paradise Landing. Milwaukee's nationally recognized attractions include a world-renowned zoo, museums, breweries, gardens, and

parks. During the summer, free outdoor concerts take place nearly every night at various downtown venues. The new Riverwalk, where restaurants, brew pubs, offices and urban living spaces line the riverside, offers a great place to relax and sightsee.

Registration materials will be mailed in early April to all APS members, exhibitors, speakers, and others on our mailing list. They will also be available on this web site. Genuine, comfortable, welcoming. If you haven't been to Milwaukee in a while, you'll want to come to get new perspectives on the city as well as APS program content to stimulate your professional life. We hope you'll be inspired, invigorated, and excited about attending.

Second Annual IFAS Graduate Research Symposium

Our gratitude goes to Ronald French and Aaron Hert who solely represented our department in the 2nd Annual IFAS Graduate Research Symposium held on Monday, March 18th at the Reitz Union. Aaron presented his research on bacteriocins while Ronald presented his research on survival of *Phytophthora capsici*.

"IFAS Opportunities" Newsletter for April now online

The April issue of the IFAS Sponsored Programs newsletter "IFAS Opportunities", contains funding information, updates on compliance issues, and news of grant/contract activities. We hope you will find this publication of interest. Simply open the following link below to view the latest issue along with the archived newsletters on our home page available at this address- <http://grants.ifas.ufl.edu/newsletterPage.htm>

Pathogens in the News

Mystery oak disease may threaten nation's forests

By John Ritter, USA TODAY (April 09, 2002)

SAN FRANCISCO — On the rolling hills and low mountains of coastal Northern California, green and lush now after winter rains, live oaks, tan oaks, black oaks and madrones have been dying for more than two years. A mysterious microscopic organism that causes Sudden Oak Death has been found on a widening list of trees. Even the stately redwood, a California icon as well as a valuable timber product, may be vulnerable. But a far more troubling scenario is gaining currency among plant pathologists and federal regulators: that the disease will make its way out of California and infect the forests of the interior United States with potentially disastrous results.

That seemed unlikely until the organism suddenly appeared last fall on a maple tree in the foothills of the Sierra Nevada more than 100 miles away. If confirmed by tests on more samples, that would mean it had somehow moved east from the Pacific coast across the agricultural Central Valley — signaling a highly aggressive pathogen capable of adapting to new environments and different trees.

Dutch elm disease and chestnut blight, scourges that virtually wiped whole species from the American landscape in the last century, began as localized infestations. "Something like this could be transported on a piece of luggage from one place to the next," says Jim Skiera, associate executive director of the International Society of Arboriculture in Champaign, Ill. "If it's as virulent as they say, it could be devastating. It could have a huge economic impact if it hit multiple species."

Lab tests already have confirmed that the Sudden Oak Death pathogen, *Phytophthora ramorum*, kills northern red oak, the dominant hard-

wood in the U.S. timber industry and a preferred species in furniture, flooring, cabinets and architectural interiors.

For the complete article, please go to: <http://www.usatoday.com/news/acovtu.e.htm>

Poetry in Plant Pathology

ON THE NATURE OF GENE JOCKEYS

By Dave Sands

We few, we happy few,
Banded about a band or two
Of genes turned on
And others off,
Like stop and go lights
Flickering throughout a busy city,
And many a mile of C's and G's
Loaded with antisense and the opposite.
Our challenge is clear,
But only to us.
We best disguise ourselves as tourists.

Departmental Canoe Trip

On Saturday, March 16, 2002, twenty nine people from IFAS Plant Pathology and the Doctor of Plant Medicine program went canoeing on the Santa Fe River. It was an opportunity to fellowship with colleagues and also to enjoy some of Florida's natural beauty. The experience was enjoyed by both international students as well as our very own down home gators!

Profile of an Astro-Biologist

Andrew C. Schuerger received his BS (1979) and MS (1981) degrees from the University of Arizona and his Ph.D. (1991) from the University of Florida studying plant pathology. His dissertation included research on the effects of temperature and pH on spore attachment of the fungal pathogen, *Fusarium solani* f. sp. *phaseoli*, to roots of mung bean plants grown in hydroponic sys-

tems. Dr. Schuerger worked for 16 years at The Land pavillion (a hydroponic research and education facility) at Epcot Center, Florida developing disease management programs for viral, bacterial, fungal, and nematode disease of vegetable and agronomic crops. His research interests have closely paralleled NASA's Advanced Life Support (ALS) program in which he has published numerous articles on plant-pathogen interactions in semi-closed plant growing systems. More recently, Dr. Schuerger joined the Dynamac Corporation (a NASA contractor at KSC specializing in environmental and life sciences) to pursue research on the remote sensing of plant stress using spectral reflectance and fluorescence imaging technologies. Furthermore, he received two NASA research (NRA) grants in 2000 to study the survival of terrestrial microorganisms and the growth of plants under simulated Martian conditions.

This brief outline describes the key research areas that Dr. Schuerger is currently pursuing. The topics are arranged in priority from near-term to long-term objectives, although many topics in each section are active at this time. In the near-term, Dr. Schuerger is developing two separate programs related to Mars Astrobiology. First, he is studying the survival of terrestrial microorganisms under simulated Martian environments in order to characterize the effects of UV irradiation on microbial survival on spacecraft components. Results are important to accurately predict the diversity and severity of "forward contamination" of Mars and to predict potential problems with life-detection experiments that might be flown to Mars on landers. Second, he is developing a program related to learning how to grow plants in Mars soils as a prelude to sending small plant biology experiments to Mars as near-term lander experiments.

Long-term research objectives include beginning the development of plant and microbial bioassays required for screening the biosafety of returned Mars samples. The Mars Sample Return

mission will be launched by NASA within the next decade, and its intent will be to bring approximately 1 kg of rock and soil samples back to Earth for detailed analysis. However, prior to releasing the Mars samples to the general scientific community, NASA must assure that the samples pose no risk to Earth's biosphere. Towards this end, bioassays with a variety of plant, animal, and microbial species will have to be performed with the Mars samples. There are currently no active research programs in the US that involve studies on the use of plants as bioassay species for returned Mars samples. The role for plant pathology in this endeavor is obvious.

And finally, Dr. Schuerger is continuing his research on developing an IPM program for the control of plant pathogens in Advanced Life Support systems. The ALS program is directed at developing a bioregenerative life support system that uses higher plants to recycle oxygen, water, and food from waste products generated in long-term human missions to Mars or the Moon. Dr. Schuerger has been involved in this area of research since 1984, and has recently begun the development of a small and light-weight remote sensing imaging system that would automatically monitor plants for biological and abiological stresses.

Funny Business

Submitted by Bill Zettler :

1. Two vultures board an airplane, each carrying two dead raccoons. The stewardess looks at them and says, "I'm sorry, gentlemen, only one Carrion allowed per passenger."
2. Two boll weevils grew up in South Carolina. One went to Hollywood and became a famous actor. The other stayed behind in the cotton fields and never amounted to much. The second one, naturally, became known as the lesser of two weevils.

3. Two Eskimos sitting in a kayak were chilly, but when they lit a fire in the craft, it sank, proving once again that you can't have your kayak and heat it, too.

4. A three-legged dog walks into a saloon in the Old West. He slides up to the bar and announces: "I'm looking for the man who shot my paw."

5. Did you hear about the Buddhist who refused Novocain during a root canal? He wanted to transcend dental medication.

6. A group of chess enthusiasts checked into a hotel and were standing in the lobby discussing their recent tournament victories. After about an hour, the manager came out of the office and asked them to disperse. "But why?" they asked, as they moved off. "Because," he said, "I can't stand chess nuts boasting in an open foyer."

7. A woman has twins and gives them up for adoption. One of them goes to a family in Egypt and is named "Ahmal." The other goes to a family in Spain; they name him "Juan." Years later, Juan sends a picture of himself to his birth mother. Upon receiving the picture, she tells her husband that she wishes she also had a picture of Ahmal. Her husband responds, "They're twins! If you've seen Juan, you've seen Ahmal."

8. These friars were behind on their bell-ringer payments, so they opened up a small florist shop to raise funds. Since everyone liked to buy flowers from the men of God, a rival florist across town thought the competition as unfair. He asked the good fathers to close down, but they would not. He went back and begged the friars to close. They ignored him. So, the rival florist hired Hugh MacTaggart, the roughest and most vicious thug in town to "persuade" them to close. Hugh beat up the friars and

trashed their store, saying he'd be back if they didn't close up shop. Terrified, they did so, thereby proving that Hugh, and only Hugh, can prevent florist friars.

9. Mahatma Gandhi, as you know, walked barefoot most of the time, which produced an impressive set of calluses on his feet. He also ate very little which made him rather frail and with his odd diet, he suffered from bad breath. This made him what? A super calloused fragile mystic hexed by halitosis.

10. And finally, there was the person who sent ten different puns to friends, with the hope that at least one of the puns would make them laugh. Unfortunately, no pun in ten did

Chemical Spills in Fifield

It has been brought to the PLP NEWS team's attention that some chemical spills have gone unreported and abandoned in Fifield Hall. Just a friendly reminder that if you spill anything, please have the courtesy to clean it up and inform the chairman of the safety committee! Remember that your spill may negatively impact other people's safety!

Open House at Lake Alfred (CREC)

The Grand opening of Core Citrus Transformation Facility at the Citrus Research and Education Center in Lake Alfred was held on April 5th 2002. This facility is supposed to serve both academia and a commercial sector. More information about the facility can be found on the following web address:
www.lal.ufl.edu/Core/index.htm

Open House at Quincy (NFREC)

The new facilities at our Quincy location were dedicated on April 3, 2002. Over 350 people attended to hear UF

President Charles Young. IFAS VP Mike Martin and other s helped welcome these beautiful new facilities to our agricultural community.

From the Safety Committee Chairman

Here is your favorite safety chairman again having to respond to another complaint. This time I have some muscle; Ulla Benny, as a safety committee member and one who is quite knowledgeable in laboratory techniques, has offered significant help when I asked for the help. Also, we tapped the resources of Dr. Jeff Rollins.

Last Friday a student was observed by more than one individual in our so-called "library" removing left over food from the morning coffee session with laboratory gloves on. While we would hope that this perpetrator of the crime had not previously been working with radioisotopes, we cannot be sure. This individual may have been wearing gloves to protect his hands from chemicals and if so, he should NOT have kept the gloves on when the task was completed for fear of movement of the chemical or the radioisotope. If the individual's gloves were contaminated with radioisotopes or chemicals, that person has a true case of the dumbs. Hopefully, the individual was wearing gloves for a task where he was trying to protect his prep or membranes from contamination from his own hands.

Hopefully, the problem here is the latter situation where a prep was being protected coupled with a false perception by those that reported their concern that maybe the gloves had been in contact with chemicals or isotopes. Therefore, we advise that gloves be removed and left at the site when a task for their use is completed. And for pity sake, keep your gloved hands off of the cookie platter. Over the years a number of concerns from many people in our

department have been expressed about the movement of individuals in the building from room to room with gloves on. We are not aware of a specific policy about when to wear and when not to wear laboratory gloves, but it seems to us that the gloves should be left at the site when the task is completed and besides, they are unnecessary for the removal of cookies from a serving platter. Maybe some think that the wearing of gloves is a status symbol, but others do not. If this continues to be a problem, we will ask for interpretations and a training program for students and others from EH&S on safety issues related to glove wearing in the laboratories and around the building.

Did You Know ?????

The enrollment for our two undergraduate courses, Plants, Plagues and People (Zettler) and Molds, Mildews, Mushrooms and Man (Kimbrough) account for 17% of all CALS enrollment for 2001!

Drs. Jane Polston and Monica Elliot were promoted to full professor. Congratulations to Jane and Monica!

Awards and Honors

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 :

Ronald French

G.F. Weber Award for Outstanding Undergraduate Student:

Gina Corey

Departmental USPS Awards:

Research: Gary Marlow

Teaching: Mark Gooch

Service: Lucious Mitchell

USPS Superior Accomplishment Award:

Richard Cullen

APS Awards:

Dr. Zettler for teaching and Dr. Jones as research fellow.

MSA Award:

Dr. Kimbrough as distinguished mycologist

UF Undergrad Teaching Award:

Dr. Kimbrough

Research and Team Teaching Award:

Drs. Hiebert, Polston and McGovern

Alpha Zeta Outstanding Graduate Student Award:

Botond Balogh

UFRF – University of Florida Excellence in Research:

Dr. Jeff Jones

Pictured below: Dr. Zettler (left), Dr. Jones (middle) and Dr. Kimbrough (right)



Coffee Break Schedule

4-19 Charudattan & Hiebert

4-26 Gabriel & Jones

5-03 Kimbrough & Rollins

5-10 Kucharek & Song

5-17 Office Staff

5-24 Pring & Chourey

5-31 P.D. Clinic, Zettler, & E.M. Lab

6-07 Bartz, Berger, & Stiles

6-14 Charudattan & Hiebert

6-28 Gabriel & Jones

7-05 Kimbrough & Rollins

7-12 Kucharek & Song

7-19 Office Staff

7-26 Pring & Chourey

8-02 P.D. Clinic, Zettler, & E.M. Lab

8-09 Bartz, Berger, & Stiles

8-16 Charudattan & Hiebert

8-23 Gabriel & Jones

8-30 Kimbrough & Rollins

Recent Publications

Investigation of Seed Treatments for Management of Bacterial Leaf Spot of Lettuce. 2001. Ken Pernezny, Russell Nagata, Richard N. Raid, Janice Collins, and Amanda Carroll. *Plant Disease* vol.86, n.2, p.151-155.

Characterization of *Agrobacterium vitis* Strains Isolated from Turkish Grape Cultivars in the Central Anatolia Region. N. Argun, M. T. Momol, S. Maden, E. A. Momol, C. L. Reid, H. Çelek, and T. J. Burr. *Plant Disease* vol.86, n.2, p.162-166.

Evaluation of *Citrullus* sp. Germ Plasm for Resistance to *Acidovorax avenae* subsp. *citrulli*. D. L. Hopkins and C. M. Thompson. *Plant Disease* vol.86, n.1, p.61-64.

Evaluation of Agar and Grain Media for Mass Production of Conidia of *Dactylaria higginsii*. Gabriela S. Wyss, Raghavan Charudattan, and James T. DeValerio. *Plant Disease*, vol.85, n.11, p.1165-1170.

Pathological Characterization and Molecular Analysis of *Elsinoe* Isolates Causing Scab Diseases of Citrus in Jeju Island in Korea. J.-W. Hyun, L. W. Timmer, S.-C. Lee, S.-H. Yun, S.-W.

Ko, and K.-S. Kim. Plant Disease, vol.85, n.9, p.1013-1017.

**New Graduate Students as
of Fall 2001**

The Department would like to welcome the following students:

Penny Robinson - M.S. (Pernezny)

Whitney Elmore – Ph.D. (Stiles)

Jennifer Gillett – Ph.D. (Kimbrough)

Jennifer Cook – Ph.D. (Charudattan)

Myrian Rybak – Ph.D (Jones)

Abby Guerra – M.S. (Lee)

Karen Chamusco – M.S. (Chourey)

Ryan Donahoo – M.S. (Norman)

Robin Oliver – M.S. (Hopkins)

Misty Nielsen – M.S.

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

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**News Team and Collaborators for Spring
Edition 2002**

Wayne M. Jurick II (Ed)
Ronald French (Past- Ed)
Matt O. Brecht
F. W. Zettler
Penny Robinson
Fabricio A. Rodrigues
James T. Devalerio
Gail C. Wisler
Abby Guerra

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

**PLP News can now be accessed via the internet at:
<http://plantpath.ifas.ufl.edu/>**
