



STATION NEWS

New York State Agricultural Experiment Station, Geneva, New York

VOLUME LXXXVIX • NO 13
June 6 - 20, 2008

BRIEFS

New Sages Officers Named

I'm happy to announce the new SAGES officers for the 2008-2009 school year!

President: Jonathan Oliver
(Plant Pathology)

Vice President: Nick Jackowetz
(Food Sciences)

Secretary: Fatemeh Mastouri
(Hort Sciences)

Treasurer: Michelle Moyer
(Plant Pathology)

Social Chair: Craig Austin
(Plant Pathology)

GPSA Representative: Meera Iyer
(Food Sciences)

Three of the four departments are represented in the SAGES executive committee and we're looking forward to a great year!

Megan Lang

Station Club Offers Jump Drives

Station Club is pleased to offer a new item of merchandise. It is a 1 GB flash drive with "NYSAES" and web site address on the cover. The flash drive is in a sporty red and silver design.

Flash drives will be available on Thursday, June 12th at the Station Club lunch and merchandise sale (at the Sawdust Cafe at Noon). The member price is \$18, and non-member price is \$20.

There is a limited quantity, so please come early if you want to purchase one.

The Station Club

Experiment Station Provides Crucial Support in the Fight against Plum Pox

When two plum trees and one peach tree in Niagara County in up-state NY tested positive for plum pox in 2006, a team dedicated to the eradication of the virus sprang into action. The team includes individuals from the USDA Animal and Plant Health Inspection Service (APHIS) and the New York State Department of Agriculture and Markets. In late 2006, they contacted Dr. Marc Fuchs at the Experiment



Plum pox symptoms (ring patterns) on plum leaf.

Station to ask that he participate in their efforts to identify and eradicate the virus. Fuchs and his colleagues agreed and immediately started to devise a sample testing system. This system not only provides an invaluable service in a crisis situation, but also exposes the sixteen students working to implement it with valuable experience in a laboratory setting.

Plum pox was seen first in Bulgaria in 1915 and is now the major disease of *prunus* trees in Europe, affecting plums, peaches, nectarines, and apricots as well as ornamentals. The virus was not identified in North America until the late 1990s; a peach tree in Pennsylvania tested positive for plum pox in 1999, followed by positive test results from an orchard in the Canadian province of Ontario in 2000. Because the disease can be spread by aphids, regulatory officials in New York State were on the lookout. Their efforts to identify plum pox became an active eradication program in 2006. At this point, APHIS declared an agricultural emergency in New York State, freeing up funding for eradication efforts that include an in-depth survey of *prunus* orchards as well as susceptible *prunus* ornamentals in parks and backyards.

Fuchs provides a crucial service by analyzing samples from *prunus* trees to identify plum pox infection. The samples collected by agents from APHIS and Ag. & Markets are sent to Fuchs's lab where they undergo rigorous testing. The lab analyzes all samples collected in New York State, which last season amounted to 91,000 samples. Fuchs expects to analyze over 110,000 samples this season.

Fuchs's lab, and all labs associated with the survey, are required to follow strict protocols for sample collection and analysis. Samples are submitted with only a bar code to identify them; Fuchs and his lab crew do not know where the samples come from. With this blind testing, the lab can be sure they are not biased by grower or location. Once a sample tests positive, it is sent to the USDA's National Germplasm Resources Laboratory in Beltsville, MD for a

(Continued on page 2)



SUNY Lifesaver Program

In 2001, EH&S set a goal of equipping all occupied buildings with automated external defibrillator (AED) by 2008. Over the past seven years many challenges have arisen and have been addressed. The effort is now under the auspices of SUNY Lifesaver Program instead of the American Heart Association as it was when it began. Over the seven-year period, as Emergency Health Care Providers (cardiologist who oversee the program) have relocated, we have had to appoint three new Emergency Health Care Providers. In 2001 we started with one AED unit in the Greenhouse Head House and now have a total of 12 units throughout the campus. The number of defibrillator program participating employees, who are trained and certified to use the equipment, has grown from 14 to 54. With strong support from the Ithaca EH&S and the Station community, we have met the challenges and would like to proudly announce that we have reached our goal.

Soon Kong

A defibrillator is an electronic device with a built-in computer that can assess victims of heart attack, cardiac arrest, and judge the needs of heart defibrillation. When the defibrillation is needed, it administers a shock to re-establish a heart rhythm that will generate a pulse. These devices are simple to operate and they can be used by non-medical personnel with proper training. EH&S plans to offer more training classes in the near future. See chart below for location information.

(PLUMPOX, continued)

confirmation test. If the sample tests positive again, the corresponding tree must be removed along with every susceptible tree within a 50-meter radius. A positive sample can prove to be devastating for the grower, destroying his/her orchard along with his income.

Yet growers have been very cooperative. They understand the threat posed by the plum pox virus—a threat that has the potential to destroy *prunus* orchards across the country. The government also provides compensation for tree removal and loss of production which growers agree is fair. Ongoing extension efforts to educate growers and keep them informed insures that growers are included as part of the team. In order to emphasize the importance of their work, Fuchs's lab crew visits sites where orchards had to be destroyed because of a positive test result.

The huge number of plum pox survey samples done over a survey season (3.5 months) and the short timeframe for analysis (one week) posed a significant organizational challenge. Fuchs has two goals for the sample analysis program: to have zero tolerance for failure, and to do the best possible work with the highest scientific rigor. The sample-analysis system is highly automated in order to limit mistakes, but the work is very repetitive and it is easy to get distracted. Samples get a bar code when they come in and are weighed and ground before going through the actual Enzyme-Linked ImmunoSorbent Assay (ELISA) testing. ELISA is an immuno-biochemical technique used to detect the presence of plum pox virus in leaf tissue using antibodies directed specifically to that virus.

The process requires a lot of manpower so Fuchs hired an assistant, Rosemary Cox, to run the lab and supervise the students who work in it. Last year, Cox had ten full-time helpers, all high school or college students. This year, the crew has expanded to sixteen and there are now two labs for analysis. With the number of samples expected to rise this year from 8,000 to 12,500 per week, the team will have plenty of work to do. "It's insane but fun," Cox says. "It was unexpected," says Fuchs. "But none of the summer helpers complain. They know what they are doing is important. And they like working in an environment that offers opportunities for stewardship and teamwork . . . and in an air conditioned facility."

Last year 16 trees in New York State tested positive for plum pox. As a result, twenty-six acres of orchard were destroyed. Yet there is hope that through stringent surveying and identification efforts, plum pox can be eradicated in New York State. Along the way, some local students will gain an appreciation for the work done at the Experiment Station, and perhaps even develop an interest in science.

L. Keller

The AED locations are as follows:

BUILDING	BLDG CODE	LOCATION
Jordan Hall	4901	Near room 118B
Hedrick Hall	4904	Near the 2 nd floor elevator
Sturtevant Hall	4905	In the stairway, between 1&2
Old Greenhouse Range	4910	Near the manager's office
Food Research Lab	4934	Near the 1 st floor elevator
Barton Lab	4935	Near the 3 rd floor elevator
Heating Plant	4936	In the boiler room
General Service	4941	Near the conference room
Surge Lab	4955	Near room 106
Vegetable Research	4966A	In the main office

When you have a moment, please visit the AED location site and see the list of participating staff members from your building.



Anuar Morales Receives 2008 Michael Villani Award

The 2008 Michael Villani Award was presented on May 18 to Anuar Morales, a graduate student working in Dr. Dan Peck's research group in the department of entomology.

The Villani Award is a stipend in the amount of \$1,000 given annually to a graduate student in the department. The award is named in honor of Dr. Mike Villani who tragically passed away in 2001. Charlie Linn, senior research associate in the department,



Anuar Morales, flanked by Charlie Linn (left) and Dan Peck (right), is presented 2008 Michael Villani Award Certificate.

said, "Mike set up the award to provide funds for graduate students to help them with their research efforts. There was, however, a unique aspect to the selection process that was stipulated by Mike when he set up this award; the recipient was to be chosen by the permanent technical staff and academics (not including faculty) rather than the faculty, which is ordinarily the case in an award of this nature."

Linn went on to say that Villani had a deep affection and great concern for all the people in the department. "It was Mike's wish that the vote was cast by the people who did the work," Linn said. "He believed that mentoring between the faculty and the student is important, but it is also important that a bond is formed between the technical staff and the student."

"The discipline of soil insect ecology, and the efforts in our lab, have benefited immensely from the contributions that Mike Villani made over the course of his career at the Experiment Station. Of all our lines of research, it is Anuar's that most closely builds from that," said entomologist Dan Peck, Morales' major professor. "One line of Anuar's research focuses on broadening our understanding of how soil insects orient to soil-borne antagonists, such as pathogens. Using his hallmark x-ray approach, Mike Villani showed how Japanese beetle grubs can perceive and avoid fungal entomopathogens. Anuar has been able to repeat those results, and build on them to reveal the same capability in other soil insect pests and to a broader range of antagonists, including insecticides and other fungi." Peck went on to say that thanks to the Station's capital support of a digital imaging

(VILLANI AWARD, continued)

system, Anuar is now able to make thousands of images to track the response of grubs over time, and that in other aspects of his current research, he is investigating how chemical insecticides and biological control agents might be combined in a synergistic fashion to open new opportunities for biologically based pest management in turfgrass. "Anuar has limitless ways to make use of this experience in the future, as he moves on to PhD research and then into a career in plant protection. He has a genuine interest in conducting research that will have a direct benefit to pest management practitioners but at the same time carry relevance to a range of crops and managed systems, temperate and tropical. Beyond his high level of technical expertise in insect pathology, Anuar has brought to our lab a boundless willingness to contribute to the success of all of our projects."

"I am honored to have received this award. Mike Villani, along with being an exceptional scientist in the area of soil-insect ecology, was an exceptional person as well," Morales said. "The award is especially meaningful to me since soil-insect ecology is also the area in which I am conducting my research, and in doing that research, I am using some of the same techniques Mike did. Also the fact that the recipient of this award is decided upon by the non-academic staff in the department, just adds to the honor. To receive this award and to be associated in some way with Dr. Villani is one of the proudest moments in my career."

Morales was the recipient of the Rawlins Endowment from the Entomology-Ithaca department and a Graduate School Travel Grant. He is also the student representative at entomology - Geneva faculty meetings.

J. Ogradnick



Station Club Annual Father's Day Lunch & Sale Thursday, June 12, 2008 Noon in the Sawdust Cafe

Grilled hot dog, pasta or macaroni salad, chips, watermelon slice and beverage for \$5. Please stop by to have some lunch and do some shopping. Gift certificates are also available. We hope to see you there!



CALENDAR of EVENTS JUNE 6 - 20, 2008

LTC

Date: Thursday, June 12, 2008
Time: 9 - 11 AM
Place: LTC
Title: Photoshop Series Part I
Instructor: Jane Irwin, Geneva

Date: Thursday, June 19, 2008
Time: 10 AM - 12 PM
Place: LTC
Title: EndNote/RefWorks
Instructor: Jim Morris-Knowler, Ithaca

YOGA FOR EVERYONE

Day: Monday Nights
Time: 5:30 - 6:30 PM
Place: Jordan Hall Auditorium
Cost: \$25 for four sessions, first class is free
Instructor: Margaret Newland & Leigh Pitifer
 Beginner thru advanced

TAEKARDIO AND BOKKENKICK

Days: Monday, TaeKardio
 Wednesday, Bokkenkick
 Thursday, TaeKardio
Time: 12 - 1 PM
Place: Jordan Hall Auditorium
Cost: \$25 for 6 weeks
Instructor: Tina Felice, Geneva Martial Arts
 Due to the warm weather and busy schedules, classes will not be held on campus after June 19. Please contact Geneva Martial Arts if interested in taking Summer classes at their facility. Classes will resume here in September.

ENGLISH AS A SECOND LANGUAGE

Classes are free and include conversational English, writing skills and real-life communications.

Instructor: Susan Deidrich
When: Every Tuesday & Thursday from 4:30 - 7:30 PM
Where: The Food Science and Technology Building Lunch Room.

New students are welcome to join at any time. Just show up for any session. Classes are flexible so that students may attend either or both sessions each week.

CLASSIFIEDS

FOR SALE: Ford Escort TLX '97, 55,000 miles, auto, AC, PW, PL., 4 doors. Two owners, keyless entry, very good condition. Asking \$2500. Contact Mei at my256, x2414, or 315-719-7259.

FOR SALE: 28" cut 8 hp Snapper Hi-Vac mower in good condition for \$250; and the other is an older Troybilt Horse tiller, 6 hp for \$400; in good shape. Contact Holly at hlw7 or x2420.

SHORT TERM HOUSING NEEDED: Two adults and grandson: Arrive around August 1 for three weeks. Prefer two bedrooms, furnished. Contact Kathy at kad2 or x2236.

FOR RENT: Large Lovely Cottage on SW shore of Canandaigua Lake. 45 minutes from Geneva. Large front deck and lawn overlook-

ing the lake, and cantilevered dock w/seating at water's edge. Fully heated. Gas grill, canoe & rowboat included. BYO linens and towels. Sleeps 8 adults. \$2,300/wk + sec. Off-season rates. Interested? Contact Elaine at elg2.

FOR RENT: Cozy Beach House on SW shore Canandaigua Lake. It's right on the water, also nice beach area. Gas grill, canoe & rowboat included. BYO linens and towels. Sleeps 8 adults. \$1,300/wk + sec. Off-season rates. Interested? Contact Elaine at elg2.

FOR RENT: Lakeside Cottage, weekly availability. West Side of Seneca Lake, 3.5 miles south of Geneva, 2 bedrooms, 155 ft. of lakefront, large deck, no pets, \$1,000/week between May 14 - June 30 and after labor day, \$1,100/week between July 1 and September 1. Contact Ed Lavin at x 2241 or EHL2@cornell.edu.

Cornell Retirees Association's Annual Meeting
Tuesday, June 10
11:30 AM
Clarion Hotel
1 Sheraton Drive,
Ithaca
Special guest speaker
is President
David J. Skorton



Seabreeze Amusement Park Tickets Available
Save \$3.00!
Adults: \$20.39
Kids (under 48"): \$19.37
Contact Nancy Long @
x2288 or NPL1

SAVE THE DATE

21st Annual Station Club Golf Tournament

Big Oak Golf Course
Friday, July 11, 2008 4:15 PM

No golfing skills are required for this friendly Station event.