CALENDAR of EVENTS
FEB. 18 - MARCH 4, 2005

MEETINGS

CALS FACULTY SENATE MEETING
Date: Wednesday, March 2, 2005
Time: 4 PM
Place: Rm. 126, Jordan Hall
1st Floor Conference Room

CHAIRS' AND UNIT LEADERS' MEETING
Date: Wednesday, March 2, 2005
Time: 4 PM
Place: Rm. 126, Jordan Hall
1st Floor Conference Room

SEMINARS

HORT SCIENCE
Date: Monday, February 21, 2005
Time: 11 AM
Place: Jordan Hall Staff Room
Title: Mechanisms of growth and defense modulated by temperature in *Arabidopsis thaliana*
Speaker: Jain Hua, Ithaca

Date: Monday, February 28, 2005
Time: 11 AM
Place: Jordan Hall Staff Room
Title: Old Order Horticulture in the Finger Lakes-Cornell Cooperative Extension
Speaker: Judson Reid, Cornell Coop. Ext.

ENTOMOLOGY
Date: Tuesday, February 22, 2005
Time: 10:30 AM, Refreshments at 10:15 AM
Place: #310 Baton Lab
Title: "Recent" Advances in Peach Arthropod Management
Speaker: Peter Shearer, Rutgers University

FOOD SCIENCE & TECHNOLOGY
Date: Wednesday, February 23, 2005
Time: 11 AM
Place: FST Conference Rm., 2nd Fl.
Title: Food Safety Management in CJ Corporation
Speaker: Hyunseuk Yang, Visiting Scientist, Geneva

Date: Wednesday, March 2, 2005
Time: 11 AM
Place: FST Conference Rm., 2nd Fl
Title: The Gluten Free Diet: Implication for the Food Industry
Speaker: Eileen Kinsella, Morrisville State College

LTC

Title: Macintoch OS X Basics-
Date: Thursday, March 3, 2005
Time: 9 - 11 AM
Place: LTC
Instructor: Jane Irwin

Title: Microsoft Word
Date: Thursday, March 3, 2005
Time: 9 - 11 AM
Place: Jordan Hall Staff Room
Instructor: Holly King

FITNESS

AEROBICS
Date: Mon. & Fri.
Time: 12:10 - 1 PM
Place: Sawdust Cafe

TAE KARDIO
Date: Mon. & Wed.
Time: 12:10 - 1 PM
Place: Jordan Hall Auditorium.
This is "Bring A Friend" Week. Anyone who wants to give TaeKardio a try, now is the time.

English as a Second Language
ESL meets every Tuesday and Thursday evenings from 6:30-9:30 P.M. in the Sawdust Cafe. The class is presented by Finger Lakes Community College (FLCC), free of charge, and open to the community.

The FLCC spring semester calendar includes a spring break from March 21-25; therefore, the ESL class is not scheduled to meet that week. The last class of the semester will meet on Thursday, May 19.

If you need further information or have questions, please contact Charie at X2210 or e-mail: cah3@cornell.edu.

CLASSIFIED

FOR SALE: Electric lawn mower $250. Cordless 19" Black & Decker, used regularly one season, $495 new in 2004. In excellent condition, for someone with 1/4 acre lawn or less. Call 315-781-0118 or email warrenjana@flare.net

FOR SALE: Child's single bed - includes headboard, footboard, box springs & mattress. $50. Contact Greg English-Loeb at X2345 or gme1

FOR SALE: Have you got that "slip, slidin' away" kind of feeling these days? I am selling four, nearly new (less than 2000 miles), Nokian Hakkapelitta Q snow tires 195-65-15 plus a used good condition spare, all mounted on 15" steel wheels from Volvo 850 series plus Volvo wheel covers. These tires provide outstanding winter traction. $450 takes the whole package or I am also willing to separate. Contact Doug at x2363 or dck2

FOR SALE: Selling for departed British visiting researcher. 1996 FORD TAURUS STATION WAGON. V-6,AT, PS, PB, PW, AC. Has third seat, roof rack and many other extras. Red with beige interior,Very Good Shape, 116 G miles. $2100. Call Terry at x2283, or tds2

FOR SALE: 1993 Dodge Caravan SE, 6-passenger minivan, V6 engine, automatic transmission, air conditioning, power locks and mirrors, radio/cassette, tinted glass. This vehicle has 125,000 miles and has been well maintained. Within the past year it has had new brakes, rotors, belts and a wheel alignment. It runs strong and doesn't leak or burn any oil between oil changes, which have been done every 3000 miles. The appearance is decent for a vehicle of this age. It has a few dings and some minor rust on the passenger side doors. $1,800 or best offer. Contact Doug at x2363 or dck2

FOR SALE: 1996 Ford Escort Wagon, good condition, body is excellent. Originally from Pennsylvania. Automatic transmission, new tires, new batteries, new brakes, 125K miles. Kelly Blue Book - Retail $3,390. Kelly Blue Book - Private Party Pricing $2110. Asking $1750. Contact Cheryl Ten Eyck at cnt1@cornell.edu, 315 789 3493(home) x2379(work)

FOR SALE: Baby lop-eared rabbits. $10 each. jwl2 or 539-3155

FOR SALE: Electric stove, dark red and in very good condition and works well. Contact Rob at rl73

STATION NEWS
New York State Agricultural Experiment Station, Geneva, New York

VOLUME LXXXVI • NO. 4
February 18 - March 4, 2005

BRIEFS

Disaster Relief
A very special thank you to our Experiment Station family for their generous contributions to aid in emergency disaster relief for Tsunami Survivors. A total of $1,049 was collected and given to the American Red Cross for their International Relief Fund.
The Station Club

Foundation Unveils New York Wine Course and Reference
The New York Wine & Grape Foundation has unveiled a "New York Wine Course and Reference" that provides detailed information about virtually every aspect of the state's grape and wine industry, along with numerous photos and illustrations.

The Wine Course includes everything from a general overview of the New York industry to descriptions and maps of its various grape and wine regions, soil and temperature maps, different grape varieties, information about grape growing and winemaking. Available on the web or CD-ROM, this extensive document also includes a dual-tiered "Short Course" (one two-hour class) and "Comprehensive Course" (three two-hour segments) with recommended tastings for wine educators and others with a special interest in New York wines.

"We receive numerous requests for information and guidance from many different sources, and the Wine Course on the web is an efficient and immediate way to answer most of them from any where at any time," said Jim Trezise, the Foundation's President. "Wine educators, wholesalers, restaurant and wine shop managers, and others now have a structured program with comprehensive information for enlightening students

(Continued on page 2)

Cornell Scientists Unravel the Sexual Chemistry of the German Cockroach

Wendell Roelofs teases a male cockroach with synthetic sex pheromone. Inset - close up photo of male cockroach.

The sexual chemistry of the German cockroach has baffled scientists for years. Meanwhile the insect, which is one of the most serious food and residential pests worldwide, has been busily fouling up the planet essentially unhindered. *Blattella germanica* plagues humans in homes, apartments, restaurants, supermarkets, hospitals and any buildings where food is stored, prepared or served. The cockroach is notoriously resilient and difficult to control.

But homeland security for the pesky cockroach has just become a thing of the past. A team of entomologists working at Cornell University's College of Agriculture and Life Sciences, the State University of New York College of Environmental Science and Forestry, and North Carolina State University have succeeded in isolating, characterizing and synthesizing the sex pheromone of the female German cockroach, thus providing an important new tool for the control and management of the pest. The study is reported in *Science* this week.

"We expect this pheromone to provide the basis for powerful new tools to eliminate populations of this insidious pest," said Wendell L. Roelofs, the Liberty Hyde Bailey Professor of Insect Biochemistry at Cornell University. The pheromone, gentisyl quinone isovalerate, or "blattellaquinone," as the scientists call it, has proven to be a highly effective lure in field trapping tests.

"Understanding this new chemical structure should prove invaluable in monitoring and control," said Roelofs.

The team was able to achieve a breakthrough in determining the chemical's molecular structure by locating the pheromone-producing cells in the female, isolating minute amounts of a fairly unstable compound, and then devising an ingenious gas chromatograph collection technique for obtaining pure samples for nuclear magnetic resonance analysis.

The work was conducted by Roelofs and postdoctoral associate Satoshi Nojima at Cornell's New York State Agricultural Experiment Station in Geneva, New York in collaboration with Coby Schal, the Blanton J. Whitmire Professor of Entomology at North Carolina State, his technician, Richard Santangelo, and Francis X. Webster of the department of chemistry at the College of Environmental Science and Forestry.

Volatile "come-hither" chemicals called pheromones are used by insects to attract the

(Continued on page 2)

(BRIEFS, continued)

or training staff."

Development of the Wine Course was coordinated by Susan Spence, the Foundation's Director of Information Services, in conjunction with photographer Randall Tagg (Randall Tagg Photography, Pittsford) and designer John "Book" Marshall (Book Marshall Productions, Rochester). The content and photographs will be updated periodically to reflect new developments and the explosive growth of the wine industry.

While much of the Wine Course is focused on New York, some sections also contain more general information such as the Viticulture and Winemaking sections, as well as "Reading the New York Wine Label" involving explanations of regulations from the Tax and Trade Bureau.

Following a Historical Timeline, Quick Facts, and Viticultural Areas Chart, the document describes the history and characteristics of New York's official Viticultural Areas — Long Island, Hudson River Region, Finger Lakes, and Lake Erie. The section on New York's Grape Varieties is grouped by major species — Native American, French-American, and European — with detailed descriptions of the major varieties in terms of origin, acreage, growing, and winemaking characteristics, wine flavor profiles, and future outlook for demand.

The Viticulture section begins with vineyard establishment and continues to discuss pruning and training, soil management, disease control, and harvesting; while the Winemaking section explains the basics for the process, including special steps for making sparkling wine.

"We hope and expect that the Wine Course will get more people interested in wine in general, and New York wine in particular," said Trezise. "Wine is a fascinating blend of farming, art and science, and our intent is to tell that story in a clear and fun way."

To access the New York Wine Course and Reference, go to www.newyorkwines.org click on Information Station, then News to Use, then NY Wine Course and Reference. For more information about the Wine Course or for a copy on CD-ROM, contact Susan Spence at SusanSpence@nywgf.org.

(COCKROACH, continued)

opposite sex. The chemicals are carried over great distances in "pheromone plumes" and, in the case of the German cockroach, picked up by extremely sensitive olfactory response systems in males. The males follow the females' pheromone plume to the odor source. Mating ensues, and the population grows.

Roelofs is often called the "father of pheromone chemistry." His identification and synthesis of a series of sex pheromones from species such as the Oriental fruit moth, the codling moth, the tomato pinworm, the peach twig borer, and the European corn borer, together with the then-novel approach of using electroantennogram bioassays, led to the development of pheromone mating disruption as an alternative to pesticides.

The work is painstaking. The electroantennogram uses the insect antenna as a biological odor detector; when coupled to a gas chromatograph, it can reveal active components in messy mixtures. Flight tunnels are used to measure the male behavioral responses and then tests are conducted in the field. The synthetic compounds are then commercialized into bio-based products that can be used in homes, agriculture, turf and landscape settings. For his work in pheromone chemistry, Roelofs won the prestigious Wolf Foundation Prize for Agriculture in 1982 and was elected to the National Academy of Sciences.

"Several companies are interested in using the blattellaquinone pheromone in monitoring traps, since there is a great need to find some way of luring these cockroaches into traps and insecticide baits," said Roelofs. He expects the technology to be commercialized and agreements to be made with the Cornell Patent Office.

In addition to fouling food, German cockroaches carry certain bacterial diseases that can result in food poisoning, dysentery or diarrhea. They damage wallpaper and books, eat glue from furniture, produce unpleasant odors and are frequently the cause of childhood asthma.

L. McCandless

Word is Getting Out

News is spreading fast about the discovery of the secrets of the German cockroach's sex pheromone. This week alone, Wendell Roelofs has done telephone interviews with reporters from newspapers, magazines, and radio, including the Los Angeles Times, NPR Radio from Washington, DC, BBC from England, Chemical & Engineering News, Nature, and email reports for reporters from Japan, The Netherlands, and elsewhere.

Save the Date, March 18, 2005

Jordan Hall

Robert L. Andersen

Stone Fruit Symposium:

Current Status of Stone Fruit Breeding in the NE

Winter Warm Up: Chili Cook Off Leaves 'Em Happy Again

The timing couldn't have been more perfect for this year's Chili Cook Off. With the temperature in the 20s and some snowflakes flying, the cozy confines of the Barton Lab lobby played host to happy chili chefs and even happier chili eaters.

The Feb. 4 event, the eighth of its kind at the Station, had its mood set by plastic chili pepper lights strung overhead and Mexican music from the CD player, but what really would have caught the attention of an unsuspecting passerby was the unmistakable aroma of the slow-cooked delights.

Barton lab was packed once again with hungry people for the eighth edition of the Chili cook-off

"The entire building smelled of chili," said Amy Andersen, one of the event's organizers. "It definitely got people's appetites going."

With 22 entrants to heat up the competition, picking a favorite proved a challenge for the 60 or so employees, students and visitors. Ultimately, Beth Gugino won in the meat category with her "Texas Chili con Carne" while Megan Kennelly came in first in the vegetarian category with "Sweet Potato/Pineapple Chili" and Cathy Heidenreich and Diana Parker were chosen as most creative with their "ABC Chili."

Director Tom Burr returned to his old haunts for the big event. The happy guy in the chili pepper shirt is Wayne Wilcox.

Entrants not only distinguished their creations with rich flavors and creative ingredients, but with snappy names like "Chilly, ain't it?" and "Deer in the Headlights Chili." The creative ingredients included deer, buffalo, and, to the surprise of many and the delight of the daring, Doug Knipple's "Aztec Fungi Chili" featured Ustilago maydis, the causal agent of corn smut disease. In Mexico where it's known as "huitlacoche," the pathogen is considered a delicacy.

Among the other inventive entries included Melissa Mundo's chili pizza, "Chili Willy" and Heidenreich's "Chilly Chili Vanilli Cake." Ramesh Pokharel took advantage of the "chili-ness" of a Nepalese dish and entered "Chana Chili Masala."

The cook off is the brainchild of Tim Widmer and Frank Wong, former postdoc and graduate student in George Abawi's and Wayne Wilcox's programs, respectively. The tradition has been carried on by various ad hoc committees since then. This year, John Ludwig joined Anderson and Kennelly on the planning. Paul Robbins supplied the lights and the music.

Second place honors went to: Chris Gee in the veggie category and Hedenriech for creative while the meat category saw a three-way tie for second between George Abawi, Holly Lange and Steve Brind, and Gregg Heidenreich.

Rumors have it that previous and future contestants are already busy working on exciting concoctions for 2006's event...

A. Goldweber

Save The Dates

STATION BOWLING SATURDAY, MARCH 5, 2005

WINE INDUSTRY WORKSHOP 2005 APRIL 5-8, 2005

V & B GALA DINNER AND AUCTION APRIL 8, 2005

2005 WalkAmerica

This year will mark the tenth year the Experiment Station has had a team participating in the March of Dimes WalkAmerica. The Walk is a means to raise money to support research to help prevent premature births and provide research to save babies born prematurely. The 2005 Walk will be held on Sunday, May 1, at the Seneca Lake State Park. If you would like to join the Station Team or have questions, please contact Kathy DeRosa, x2236, kad2

Congratulations

to Jennifer Grant and Keith Waldron (both in IPM) on the birth of their daughter on February 7, 2005. Allison Grant Waldron weighed 5 lbs, 9 ozs. Allison is doing great, Mom & Dad are hanging on for dear life!