



CALENDAR of EVENTS
SEPTEMBER 2 - 16, 2005

MEETINGS

CHAIRS' MEETING

Date: Tuesday, September 6, 2005
Time: 9 AM
Place: Director's Office

CALS FACULTY SENATE MEETING

Date: Wednesday, September 7, 2005
Time: 4 PM
Place: 1st Floor Conference Room, Jordan Hall

SEMINARS

ENTOMOLOGY

Date: Tuesday, September 13, 2005
Time: 10:30 AM, cookies & coffee at 10:15
Place: Room 310 Barton Lab Conference Room, Barton Lab
Speaker: Dr. Anurag Agrawal, Ithaca
Subject: Coevolution, convergence, and the organization of plant defenses in milkweeds

CLASSIFIED

FOR SALE: 1993 Yamaha YZ 125 2 stroke dirt bike. Great condition, well taken care of. \$1200. Contact Gemma at gro2 or x2248

FOR SALE: 1995 Eagle Vision TSI 4 new tires, just passed inspection. 104,000 miles \$750 hlv7 or 585-329-2237

FOR SALE: Queen size box spring-split. Like new. \$75. Contact Donna at x2325 or dnr2@cornell.edu

WANTED: Used Sunfish sailboat. Contact Carrie at ckk3@cornell.edu or call 607-255-8879

FOR RENT: 1 bedroom apartment, semi-furnished, 2nd floor. \$450. Available mid August. Security deposit required. Contact Nancy Long X2288 or npl1

FOR RENT: 3 bedroom house across the street from the Station on Pre-Emption Road. \$675 plus utilities. Available for August. Contact Nancy Long X2288 or npl1

FOR SALE: Husky Front Seat and Cargo Liner for 95-04 Blazer/Jimmy/Envoy; black in color, used for 2 years, very good condition, combo retails new for \$130, can be protecting your Blazer/Jimmy/Envoy for \$70. Contact David at x2326 or dbc10

FOR SALE: Black steel grill guard, brand new, never used. Fits Dodge truck. Heavy duty bed mat w/Dodge logo, fits short bed. Brand new. Contact George at x2618 or gwh1

Whale Watch 2005



This young Whale Watch patron wears a serious look as he decides whether or not to open a container containing a live insect.



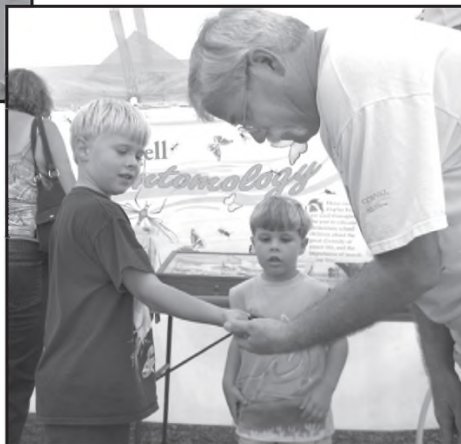
IPM's "Dial A Pest" was a favorite stop at the tent.



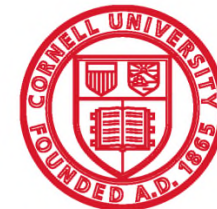
Grace Lynch helps this young man plant a mystery seed to take home. The mystery will be revealed when the seed germinates.



Ann Cobb points out galls caused by the root-knot nematode to a visitor to the "Plant Doctor" area of the Experiment Station tent.



Charlie Lynn proved to be convincing on many occasions promising that the rather large cockroach will not bite.



STATION NEWS

New York State Agricultural Experiment Station, Geneva, New York

VOLUME LXXXVI • NO. 17
Sept. 2 - 16, 2005

BRIEFS

Volunteers Needed for Fun on the Farm

Fun On The Farm is a community event in which the agricultural Community invites the non-farming community to a local dairy farm, where the goal is to build a relationship of understanding and respect between these neighbors. The event is held every other year and features displays and games that communicate how food is produced on today's typical farm.

At the same time environmental, economic, and social issues involved with that production are highlighted. More than 40 exhibitors take part, including agricultural lenders, food processors, maple producers, equipment dealers, veterinarians, and farm service industries. The 4-H dairy club, Future Farmers of America, and the Dairy Princess and her Ambassadors represent young people in agriculture. Many more individuals and businesses donate goods or services to help make Fun on the Farm a fun and rewarding experience for those who attend and participate. And this is where you come in. The Experiment Station will have a presence similar to that of Empire Farm days and Whale Watch at this event with displays, tastings, arts and crafts and other activities.

And like the previous events, we once again need volunteers to man the displays, and preside over the other activities. The date is September 17, 2005 at the Lawnhurst Dairy in Stanley. PLEASE help us out this one more time. Contact Gemma Osborne at x2248 or gro2 if you are willing to volunteer.

New Location for ESL Classes

Over the years the Station has provided classroom space for English as a Second

(Continued on page 2)

Cornell Scientists Find Two New Species of Crane Fly in New York

Crane flies can cause panic in bedrooms at night when the adult flies emerge in September, looking like oversized mosquitoes with extra long legs. But they don't bite. That's the good news.

The bad news is that two exotic species, the European crane fly (*Tipula paludosa*) and a close relative

(*T. oleracea*), which is sometimes referred to as the marsh or giant common crane fly, have invaded New York State and are likely to emerge as two of the most serious insect pests in turfgrass, threatening lawns, golf courses and sod farms.

The crane flies can severely damage all types of turfgrass and forage grass species and are also known to attack seedling nurseries and a wide range of vegetable and small fruits crops. Although the flies emerge in the early fall, it is the larvae in the early spring, and sometimes in the late fall, that devour roots and cause yellow spots and bare patches in grass.

These threatening crane flies are established in Nova Scotia, British Columbia and Ontario as well as along the West Coast, from Northern California to Washington State. European crane fly larvae, known as leatherjackets, were first identified in Erie and Niagara counties by Cornell University entomologists in spring 2004.

"Their arrival here was probably inevitable given that the European crane fly is widespread and firmly established in southern Ontario," said Daniel Peck, assistant professor of soil insect ecology and turfgrass entomology at the Experiment Station in Geneva, N.Y. He detected and identified the pests with Richard Hoebeke and Carloyn Klass, entomologists at the Ithaca campus and Brian Eshenaur and John Farfaglia of Cornell Cooperative Extension.

In 2003, the most recent date for which data is available, the turfgrass industry, which manages 3.4 million acres, contributed \$5.1 billion to the state economy. "Therefore the arrival of this pest is of major significance to the golf industry and other sectors of the turfgrass industry," said Peck. Although the invasion is currently restricted to extreme Western New York, any movement of infested soil could quickly spread the insect across

(Continued on page 2)



Adult European crane flies look like large mosquitoes with extra long legs.



(BRIEFS, continued)

Language (ESL) classes offered by the Finger Lakes Community College Adult Basic Education Program. With the FLCC Geneva Center's move into the former Middle School at 63 Pulteney Street, the amount of classroom space has increased significantly thus allowing the ABE Program to establish a Literacy center in Geneva. Therefore, there is now room to offer the ESL class, which most recently met in the Sawdust Café, at the new FLCC Geneva Center beginning with the 2005 fall semester.

FLCC will continue to provide all levels of ESL instruction, and wants to extend a special invitation to the international students and others at the Experiment Station. Classes begin August 30 and meet on Tuesdays and Thursdays in the morning from 9:00 AM – 12:30 PM and in the evening from 6:30 – 9:30 PM. The classes are free, and students can enroll at any time by simply attending the class of their choice.



Congratulations to Dick Durst and Antje Baeumner on the birth of their baby girl Julia Antje Jutta Durst-Baeumner. Born August 25th at 7:50 AM. Weighed 7 lbs. 6 oz. and was 18 inches long.

And Congratulations also to Betsy Bihn and Courtney Weber on the birth of their son on August 14.

Luke Ansel Weber was 21.5 inches long and 6 lbs. 14 oz. with lots of brown hair!

All are doing well!



(CRANE, continued)

the state. On their own, adult flies do not disperse very far because they are short-lived and relatively poor fliers, Peck said.

With more than 1,600 species of crane flies in North America, only four, including two native species, cause agricultural damage. Distinguishing species of crane flies is difficult for nonspecialists. If a homeowner, farmer, or nursery operator observes damage to grass or a crop, or if they notice a high population density of flies or larvae, Peck says chances are that one of the injurious crane fly species is present. He recommends having the species confirmed by taking a sample to a local Cornell Cooperative Extension Office.

Damaging population densities were seen on at least one golf course in 2004, but healthy grass can support more than 15 to 50 larvae per square foot. Peck said that if these thresholds are exceeded and damage is not tolerable, certain chemical pesticides can be very effective in killing the pests when they are larvae. However, it is only legal in New York state to apply these chemicals when the label specifically states that the product is registered for use against crane flies. Birds and other predators can also drastically reduce populations between late fall and early spring.

Peck says he is currently testing various chemical and biological pesticides with the hope he will be able to make recommendations in the spring, when the larvae are once again on the attack. The most up-to-date recommendations are posted at the Cornell Cooperative Extension Web site <http://cuturfgrass.org/>

S. Lang



The annual SAGES volleyball tournament was held this year on Saturday August 27th. There was good participation from members of SAGES and the Station community as a whole. There were four teams of four players and a wild card player. We had gorgeous weather; not too warm or humid but lots of sun. Congratulations to the winning team (pictured above) of Olvin Valle, Clementine Durantet, Curt Petzoldt, and Surin Samuelian. Many thanks go out to the participants and especially to those who helped set up nets and did various other tasks.



(BRIEFS, continued)

Macintosh OS X Basics

Thursday, September 15, 2005 from 7:30 - 11:30 AM in the Library Technology Center

Mac OS X is like no other Macintosh operating system. Come with questions and answers for tips and tricks you have found as you work with it. This workshop will help you make the most of your Mac and your time. Please bring your Mac tips to share with others. Jane Irwin will be the instructor.

Welcome Cherie!



Cherie Quay is the newest member of the Administrative Service Center team, joining Pat Mahoney in Human Resources. Cherie has been with Cornell since 1999, and comes to Geneva from Campus Life on the Ithaca Campus, where she was an HR Assistant for four and one half years. Cherie will handle all payroll and transaction processing, in addition to providing employee relations support. She'll be working daily from 8 a.m. to 1 p.m., and can be reached at caq1 or extension 2210.

*It's Back to School Time.
Please Drive Safely!*



Laurie Boyden Receives Award

Laurie Boyden, PGRU, won "Best student presentation: Viticulture," at the American Society of Enology and Viticulture (ASEV) annual meeting held earlier this summer in Seattle, WA. Her talk was entitled "Allelic relationship between root-knot nematode resistance genes in a *Vitis mustangensis* hybrid population" and was based on a part of her dissertation research. This award is the counterpart to an award she won for her poster at ASEV in 2003.



L. Boyden

Laurie summarizes the content of her presentation as follows. There is one gene in grape that provides resistance to root-knot nematodes, that gene is called N, resistance is dominant so the allele (version of the gene) that provides resistance is capital N. The N allele is found in several rootstock varieties that are commercially available. In vineyards that have been grown on rootstocks with the N allele for many years, strains of root-knot nematodes have been found that are virulent on N (the N allele no longer provides effective resistance, the nematodes can feed and reproduce on rootstocks that have the N allele). This occurs because having the N allele constantly present places selective pressure on the nematode population, favoring individual nematodes that have a mutation that makes them virulent on N. Those individuals are more able to survive and reproduce than the ones lacking the mutation and out-compete them, so eventually you end up with a lot of nematodes with that mutation, hence a new virulent (on N) strain.

Thus, there are now strains of nematodes that are virulent on N so we need to breed rootstocks that have resistance to these strains. In the *Vitis* collection of the National Plant Germplasm System there is an accession called DVIT 1842 of the species *Vitis mustangensis*. That accession is resistant to N-avirulent nematodes AND the N-virulent nematodes, so we knew the resistance is provided by some allele other than N, but we didn't know whether that allele was another allele of the same gene, or an allele of a different gene. I made two generations of test crosses using this accession and rootstocks with the N allele, and screened the seedlings using N-virulent and N-avirulent strains of root-knot nematodes. Based on how the seedlings segregated for resistance and susceptibility, I was able to show that the allele from *V. mustangensis* DVIT 1842 is not another version (allele) of the N gene, but is a new, different gene. So now there are two known genes for resistance, and that opens up the possibility of pyramiding resistance (breeding both resistance alleles into the same rootstock). The reason that this is desirable is that having both alleles is sometimes better than just having the new (more effective) one, if the two genes act in different ways, or if they interact additively or synergistically. Congratulations Laurie!