

CORNELL
UNIVERSITY

STATION NEWS

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SEPTEMBER 10-17, 1999

BRIEFS

STATION NEWS

Items for *Station News* should be sent to Pat Blakeslee (pb64@nysaes.cornell.edu), interim *News* editor in Communications.

EMPLOYEE DAY AND BUFFALO
BILLS FOOTBALL UPDATE

The Cornell Annual Employee/Family Day will be held on September 25, 1999. The Cornell-Fordham football game will kickoff at 1:00 p.m. at Schoellkopf Field, followed by a chicken barbecue or vegetarian entree choice, to be served in Barton Hall from 3:30-

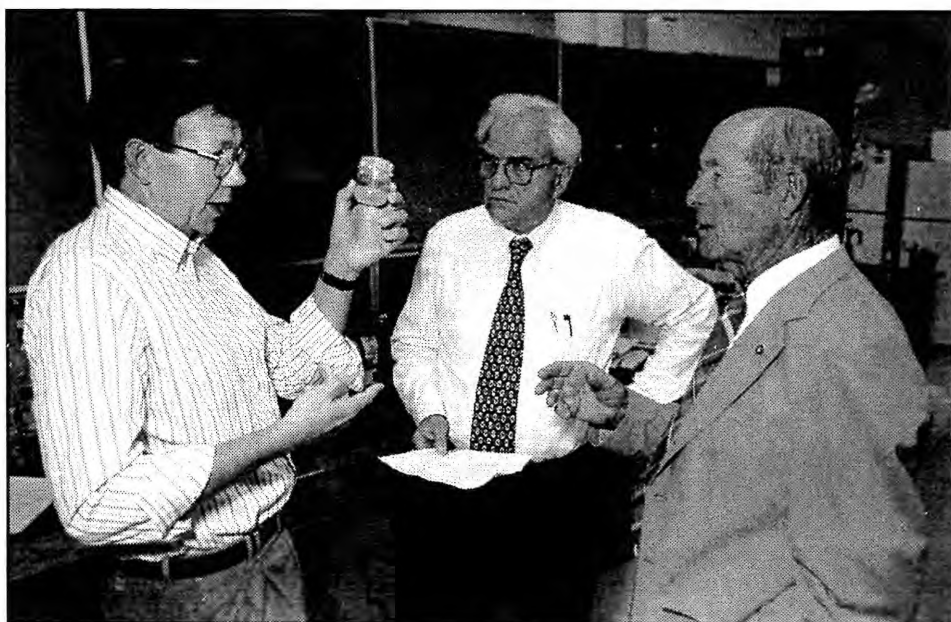
5:30 p.m. This year you can *not* buy meal and football tickets separately.

Patty Gibbs will have the tickets in her office.

You can either e-mail her (peg1) or stop by her office (G32 FST) Monday, September 13 through Friday, September 17. If purchasing tickets by check, please make the check payable to Cornell University.

Also, we have been informed that the Buffalo Bills vs. Miami Dolphins football game on November 14, 1999 has been sold out. Apparently this was advertised in the June Paw Print that is distributed from Ithaca. If you would like to be put on a waiting list, please contact Janet Beebe 8-5-7565. The price is \$55 per ticket.

GO BIG RED!

CHAIRMAN OF THE SENATE FINANCE
COMMITTEE PRAISES STATION

Insect toxicologist David Soderlund [left] shows Senator Ronald B. Stafford (R-45th District) [center] a sample of a transgenic apple plant in tissue culture that resists attack by obliquebanded leafrollers, a serious pest of apples. The significance of this was not lost on visiting fruit producer Roger Forrence [right]. This new tool for insect control is an example of collaborative research between entomologist Roxanne Broadway and plant pathologist Herb Aldwinckle.

Senator Ronald B. Stafford (R-45th District), Chairman of the New York Senate Finance Committee, toured the Experiment Station for five hours on Friday, September 3, with longtime friend Roger Forrence, whose family grows, packs, and ships apples in the Champlain Valley.

Since taking office in 1965, Senator Stafford has played an important leadership role in the State Senate, as Deputy Majority Leader for Legislature Operations (1989-92); and Chairman of the Senate Judiciary Committee (1987-88), the Senate Committee on Codes (1979-86), and the Senate Higher Education Committee (1966-78). He has served as Finance Committee Chairman since 1993.

"Senator Stafford had first-hand experience with agriculture during his youth," said Director Jim Hunter. "He understood the importance of research and extension programs the faculty described. He also seemed to enjoy hearing comments about the importance of the Station that were made by several growers, food processors, and an extension specialist who joined us for lunch. It was a real coup to have him here."

The purpose of the tour was to show the Senator the wide range of Geneva programs from fairly in-depth lab science to field work, as well as demonstrate Geneva's applied work with food processors at the Food Venture Center and the Fruit & Vegetable

(STAFFORD, continued on page 2)

CALENDAR of EVENTS

SEPTEMBER 10-17, 1999

MEETING

Tuesday, September 14, 10:30 a.m.
CALS Chairs' Meeting
348 Morrison Hall

SEMINARS

Tuesday September 21st, 10:30 a.m.
Dissertation Seminar, Dept. Entomology
3rd-floor Conference Room, Barton Lab.
Coffee and cookies will be provided at 10 a.m.

Mark Schmaedick will speak on "Biological Control of *Pieris rapae* in Cabbage by Naturally Occurring Arthropod Predators."

LTC

Tuesday, September 14, 2 - 4 p.m.
DreamWeaver

CLASSIFIED

FOR SALE: 1988 Ford Escort Wagon. Automatic transmission. Power steering/brakes. 79,000 miles. Excellent condition. \$1500. Also, 1986 Chevrolet Nova 4 door sedan. 5 speed standard transmission. Good condition. \$700. Both are well maintained and ready to drive. Call Gregg 946-5531 after 6:00 PM or e-mail geh11.

BOTTLE & CAN DRIVE: The Geneva High School Marching Band/Color Guard will hold a Bottle & Can Drive Saturday, September 18 at the Hydrant Hose Fire Station. Band students will canvas the city for donations or bottles and cans may be dropped off at the firehouse between 9:30 am-1:00 pm.

DESIGN YOUR FUTURE

September 30 & October 7
(Two-session program)
9:00a.m. - Noon
Schurman Hall, Hagan Room
Cost: \$45

Discover what you really want out of life and how to get it.

Session 1: Who You Are and What You Want
Session 2: Getting in Action to Create Your Life

Register on-line at:
<<http://register.cit.cornell.edu:8000/>><http://register.cit.cornell.edu:8000/>

Please register by September 25.

(STAFFORD, cont. 'd)

Processing Pilot Plant. "Our presentations showed the Senator that State support for the Station is a good investment," said Hunter. The legislature appropriated an additional \$350,000 for Geneva in 1999, and \$600,000 in each of the two previous years. "I hope this visit will result in continued support in the future," said Hunter.

After morning visits with several Station scientists and lunch with growers, processors, and extension agents, it was clear that this message got through to the Senator.

"The Experiment Station has a high profile," said Senator Stafford, "and we have to keep it that way. I know there have been cutbacks, and we have got to get the funding back to where it was.

"Agriculture is still the biggest industry in the state," Stafford added. "You are on the cutting edge of science, and you deserve our support."

Both he and Forrence commented on the "high caliber" people they had met and how all the information was put in a perspective that they could understand.

Labs, Fields, and Facilities on Tour

The tour, which began in Hedrick Hall, gave the visitors a comprehensive introduction to current research and outreach efforts at the Station. Grape breeder Bruce Reisch explained the operation of the gene gun, and demonstrated how researchers are developing improved grapevines for the New York wine industry.

In Barton Lab the pair learned about vegetable diseases and extension work from Plant Pathology Chair Helene Dillard and got an update on long-term fungicide research from Pathologist Wolfram Koeller.

Entomologist Jan Nyrop described the mite biological control program underway in grapes and apples. Nyrop delivered a two-fold message, emphasizing that (1) this program is now providing significant monetary dividends to those who make use of the technology, and (2) this work can only be accomplished in an institution like the Station, where relatively long-term undertakings are possible because of the type of support and resources that it has.

At the Surge Space, the group met with insect toxicologist Dave Soderlund, who described the Station's 35-year track record of research on insect control strategies. He

also talked about the economic impact of research, and the patenting, licensing, and eventual practical use of Cornell technology.

At the USDA/ARS Plant Genetics Resources Unit, Bill Srmack explained the technology for cryopreservation of apple. PGRU had also set up a display of apple and grape germplasm from their collection.

Susan Brown, Steve Reiners, Terence Robinson and Alan Lakso accompanied the visitors on a driving tour of selected fruit and vegetable field trials.

Lunch provided the opportunity for the Senator and his party to hear from growers, processors, and extension agents, who articulated how their relationship with the Station translates to economic success.

Jan Vanderheide, from Oswego County Cooperative Extension, Dave Peterson, from Swedish Hill and Goosewatch Wineries, Mike Gardinier, with the growers' cooperative AgriLink Foods, Joe Nicholson of Red Jacket Orchards, and local farmer Laura Pedersen (formerly with Cornell Cooperative Extension) testified to the important role that the Station plays in supporting up-state growers.

"We look to the Station for help with cooperative research projects and count on their help with marketing," Peterson told the visitors. He and the others extolled the Pilot Plant facilities and Food Venture Center (FVC) services.

After lunch, the group visited the Pilot Plant, where food microbiologist Randy Worobo demonstrated how pathogens could be tracked to monitor their survival/death rate in manure and manure-amended soil. FVC director Olga Padilla-Zakour showed samples of New York products manufactured by entrepreneurs and gave a brief tour of the Pilot Plant. She emphasized how the FVC supports the New York food industry and farmers through technology transfer, value added and food safety expertise.

After the tour, the Director was optimistic that the visit would make it possible for him to meet with the Senator to discuss the Station's budget in the future. "I know tours take a lot of people's time and effort," he said. "But legislative support for Geneva is critical in this day and age, and the level of work and commitment here always impresses visitors."

L.McCandless

SODERLUND TO HEAD THE IR-4 TEAM



New IR-4 Director Dave Soderlund [center] with laboratory coordinator, Pim Larsson-Kovach [right] and field coordinator, Edith Lurvey [left].

David M. Soderlund, professor of insecticide toxicology in the Entomology Department at Geneva, has been appointed director of the Northeast Region's Interregional Research Project No. 4 (IR-4) Laboratory, located at the Experiment Station.

Soderlund succeeds Richard A. Durst, professor of chemistry and director of the Northeast IR-4 laboratory since 1990, who was appointed chair of the department of Food Science and Technology (FS&T) on July 1. Because the laboratory facilities and personnel for IR-4 are located in FS&T, Soderlund will have a joint appointment in Entomology and FS&T.

Since joining the faculty at the Station, Soderlund has developed and sustained a comprehensive research program focused on the applied aspects of insect molecular neurobiology that are relevant to the discovery and characterization of new insect control agents and on the molecular genetic analysis of insecticide resistance mechanisms.

"I look forward to working with Dave in this very important Federal program, which provides analytical data for the registration of minor-use pesticides," Durst told FS&T staff in a memo informing them of the appointment, which became effective September 1.

"I consider the directorship of the Northeast IR-4 Laboratory to be a very important position," says Director Jim Hunter, "and I am confident that Dave Soderlund has the professional expertise and the leadership ability necessary to carry out the duties of the position in an exemplary manner. I appreciate his willingness to take on this role while continuing his research program in entomology."

Although details have yet to be worked out, Soderlund expects to divide his time between offices in entomology and FS&T. He will oversee the Northeast region's \$1.3 million budget and work closely with veteran laboratory coordinator Pim Larsson-Kovach, field coordinator Edith Lurvey, and other members of the NE IR-4 team to ensure that realistic goals and priorities are set and the stringent research standards of the program are upheld.

Soderlund feels fortunate to be inheriting such a healthy and productive research program. "The lab is running like a well-oiled machine," he observes. "I thank Dick Durst, Pim Larsson-Kovach, Edith Lurvey, and the entire staff of the Regional Laboratory for that."

IR-4's Strategic Challenges

IR-4 is a federal project, administered by the U.S. Department of Agriculture, to help producers of minor crops, such as fruits and vegetables, by securing the analytical data they need to support the registration of new pest control tools for these crops by the EPA. Headquartered at Rutgers University, it consists of a network of analytical laboratories and agricultural research centers that collaborate to set program goals and provide analytical support to the minor crop industry. These facilities analyse and interpret residue studies conducted under field conditions specified and supervised by IR-4 personnel following strict quality assurance guidelines. At the Station, where the main focus of research is residue studies on food crops, Pim Larsson-Kovach identifies the projects that the NE region will work on and supervises laboratory analysis. Field research is supervised by Edith Lurvey.

"The IR-4 program has become increasingly important because of the Food Quality Protection Act (FQPA) and the need to ensure that effective and safe measures

are available for controlling agricultural pests, including plant pathogens and weeds," says Hunter. The FQPA, enacted in 1996, mandates a careful review of the safety of all existing pesticides by the year 2006, as well as increased restrictions on new pesticides.

"It's pretty clear that some older pesticides that have been the cornerstones of crop-protection strategies will be restricted in their use," says Soderlund. "Minor crop controls stand to take a disproportionate

hit, he says, because they contribute rather heavily to the acceptable daily intake (ADI) of chemical residues set by the EPA while offering a relatively low economic return to the manufacturers. Although minor crops account for more than 40 percent of crop sales in the U.S., individual commodities represent a rather small fraction of the world agricultural market. By providing analytical support needed to support product tolerance petitions to the EPA, IR-4 underwrites part

(IR-4, continued on page 4)

IR-4 serves as a broker for the scientific dialogue between minor crop producers, the agrichemical industry, and the EPA.

(IR-4, cont.'d)

of the cost of keeping existing minor crops protections on the market and helping to expedite the development and registration of new crop protection tools.

"Because it costs about \$30 million to discover and develop a new pesticide, the agrichemical companies need to find markets that allow them to recover their investment and also yield a profit," Soderlund says. "No product in New York State, with the possible exception of corn, can be considered on that scale," he says. As one of 26 states that rely on minor crops for 50 percent or more of their total crop sales, New York has a real stake in the success of IR-4.

IR-4 serves as a broker for the scientific dialogue between minor crop producers and the agrichemical industry. As a member of the project's leadership team, Soderlund will work with growers and researchers to identify pest control compounds that work well and are clearly needed and whose registrations will be supported by the companies that produce them.

Soderlund looks forward to the strategic challenges that he and other members of IR-4's Project Management Committee will face. "I will be involved in shaping policy and setting priorities for IR-4 research in the context of emerging trends in the development of crop protection tools," he says. "I've spent two decades developing expertise in that area as a researcher and a consultant," he explains.

Soderlund joined the Station faculty as an assistant professor in 1978. He was promoted to associate professor in 1984 and full professor in 1992. His professional activities include service on the editorial boards of two professional journals, teaching in Cornell's graduate program in environmental toxicology, and supervision of research by graduate students and postdoctoral fellows. He is the author of more than 100 scientific articles and co-inventor on two patents.

In his new role, Soderlund hopes to make a significant contribution at a critical time.

P. Blakeslee

1999 NORTH AMERICAN GRAPE BREEDERS CONFERENCE September 16 - 18, 1999

The North American Grape Breeders Conference is slated to take place this year at Geneva. Every two years, this group meets in either the United States or Canada to discuss progress in grapevine breeding and in all related projects in genetics and taxonomy. Participants from as far away as Korea, Germany and Israel have already registered to join those of us from New York, California, Florida, Minnesota, Ontario and other exotic locations. Conference arrangements are being handled jointly by the Grape Breeding program (Horticultural Sciences) and the USDA Plant Genetic Resources Unit (Tiffany Fisk, Warren Lamboy, Steve Luce, Pat Mahoney, Bruce Reisch, and Bill Srmack).

Experiment Station as well as USDA - PGRU staff are invited to attend. All oral report sessions are open to the public, but lunches and dinners must be paid in advance, no later than 10 Sept. 1999 (see registration form below).

The following schedule is planned (subject to change in case of inclement weather):

Thursday, September 16, 1999

- 8:45 a.m.** Welcome of participants, oral reports, Jordan Hall Auditorium
- 12.15 p.m.** Lunch, Jordan Hall or Station Pavilion
- 1:00 p.m.** Tour of Experiment Station and McCarthy Farm (grape repository, nursery)

Saturday, September 18, 1999

- 8:00 a.m.** Oral reports, Grape Breeder's conference business meeting
- 10:00 a.m.** Conference adjourns
- Grapevine Crop Germplasm Committee to meet thereafter.*

Friday, September 17, 1999

- 8:15 a.m.** Oral reports - Jordan Hall Auditorium
- 12:00 p.m.** Lunch, Jordan Hall or Station Pavillion
- 1:00 p.m.** Tour of grapevine research at Research South and Robbins Farm
- 6:00 p.m.** "Share your Wine" social hour and an old-fashioned chicken barbecue, Station Pavilion

To reserve a spot, complete the form below and send it with your check to Pat Mahoney, Hort. Sci., by Sept. 10.

Registration Form: 1999 GRAPE BREEDER'S CONFERENCE

Name _____

Phone _____ Email _____

☐ LUNCH, Sept. 16 (\$8/person)

☐ LUNCH, Sept. 17 (\$8/person)

☐ DINNER, Sept. 17 (\$10/person)

Total enclosed _____

Make checks payable to Cornell University.