

# STATION NEWS

THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION



## THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION

### STATION NEWS *PUTTING SCIENCE TO WORK FOR SOCIETY*

The mission of The Connecticut Agricultural Experiment Station is to develop, advance, and disseminate scientific knowledge, improve agricultural productivity and environmental quality, protect plants, and enhance human health and well-being through research for the benefit of Connecticut residents and the nation. Seeking solutions across a variety of disciplines for the benefit of urban, suburban, and rural communities, Station scientists remain committed to "Putting Science to Work for Society", a motto as relevant today as it was at our founding in 1875.



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## DEPARTMENTAL NEWS

### ADMINISTRATION

**DR. LOUIS A. MAGNARELLI** was interviewed by Abe Katz of the New Haven Independent about mosquitoes (April 4); was interviewed by Greg Little of WQUN radio about the Experiment Station's open house program (April 26); and welcomed state residents during the Station's open house and gave a brief report on research (April 27).

### ANALYTICAL CHEMISTRY

**DR. JASON C. WHITE** and staff participated in an FDA Incident Response Drill (April 1-8); participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Hartford (April 4); hosted Professor Jaco Vangronsveld and Dr. Nele Weyens of Hasselt University in Belgium (April 11-13); met with individuals from the Green Farms Academy High School (12 students and 2 instructors) (April 12); participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (April 13); participated with Department staff in a FDA FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (April 14); participated in a conference call of the organizing committee for the 8<sup>th</sup> International Phytotechnologies Conference in Portland, OR from September 13-16 (April 14 and 20); met with three representatives of the Natural Resources Conservation Service (NRCS) (April 18); met with Ms. Stacey Kinney of the CT DPH regarding our collaborative project for the simultaneous chemical and microbial surveillance of food products (April 19); visited the laboratory of Professor Baoshan Xing of the University of Massachusetts Amherst (April 26); presented a seminar at the CAES Annual Spring Open House entitled "Role of the Connecticut Agricultural Experiment Station Department of Analytical Chemistry in the Deepwater Horizon Oil Spill Response" (~ 80 attendees) (April 27); and hosted three tour groups in the Department Laboratories for the CAES Annual Spring Open House (April 27).

**DR. CHRISTINA ROBB** participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (April 13).

**DR. BRIAN EITZER** participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (April 13); and presented a seminar at the CAES Annual Spring Open House entitled "Examination of the Role that Pesticides Play in the Decline of Honey Bees" (April 27).

**DR. WALTER KROL** participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (April 13); and presented a poster entitled "The Deepwater Horizon Oil Spill: The Role of the Connecticut Agricultural Experiment Station" at the Quinnipiac University Earth Day Celebration (~ 600 attendees) (April 14).

**MR. CRAIG MUSANTE** presented a seminar at the CAES Annual Spring Open House entitled "Nanoparticle Contamination of Agricultural Crops" (April 27).

### ENTOMOLOGY

**MS. TIA BLEVINS** participated, along with **DR. VICTORIA SMITH** and **MR. PETER TRENCHARD**, in Remote/Wilderness First Aid, a course sponsored by the US Forest Service, held at the Rachel Carson Office Building in Harrisburg, PA (16 participants) (April 1); participated in the 37<sup>th</sup> annual Horticultural Inspection Society, Eastern Chapter's meeting in Worces-



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ter, MA. As Treasurer, she presented the financial report to the members (April 11-14).

**MS. KATHERINE DUGAS** conducted an Asian longhorned beetle and Emerald ash borer event and gave a talk on insects during the Cub Scouts Going Buggy Camp at Camp Tadma in Bozrah (200 attendees) (April 9); gave an Asian longhorned beetle and Emerald ash borer talk to a Cub Scout Pack and their leaders at the Fawn Hollow Elementary School in Monroe (60 attendees) (April 11).

**MS. ROSE HISKES** participated in the Eastern Plant Board Meeting in Worcester, MA, as the Cooperative Agricultural Pest Survey (CAPS) State Survey Coordinator (April 12-14); gave a talk on Butterfly Gardening, the Asian longhorned beetle, and the Emerald ash borer at the Cheshire Library (23 attendees) (April 19); staffed an Insect Inquiry Office and Forest Pest table at The Connecticut Agricultural Experiment Station Spring Open House (75 attendees) (April 27).

**MR. IRA KETTLE** gave a honey bee educational talk with live honey bees, spoke on the importance of honey bees as pollinators, and had a question-and-answer period after the lecture (as usual, the children were very interested in the bees), at an after-school agricultural program at Lake Street School in Vernon (25 youths and adults attended) (April 11); showed bees and spoke on the importance of pollination by the honey bee in Connecticut and the nation at Agricultural Day at Chester Elementary School in Chester; the students and adults enjoyed the display a lot (275 students and 20 adults attended) (April 27).

**DR. CHRIS MAIER** was interviewed about the brown marmorated stink bug by Theresa Sullivan-Barger, a freelance reporter writing an article for the Hartford Courant (April 5); displayed new entomological literature at the Annual Dinner Meeting of the Connecticut Entomological Society in Jones Auditorium and was elected President of the Society for 2011-2012 (approx. 35 attendees) (April 15).

**DR. GALE E. RIDGE** was interviewed about comparing the Western conifer seed bug with the brown marmorated stink bug to help citizens identify the insects by the Hartford Courant (April 4); was interviewed about bed bugs and human behavior by the online newspaper The Patch (April 5); testified as an expert at a National Mattress Stewardship meeting in Hartford sponsored by the Product Stewardship Institute based in Boston, Massachusetts. The audience attended either in person or by webinar. The purpose of the meeting was to set priorities for mattress recycling and refurbishing in the United States. Some goals included model legislation, a pilot program in mattress recycling and refurbishing using the City of Bridgeport as a model, reuse as a waste management strategy, exploring social benefits through best use of materials, consumer education, and retail and manufacturer involvement (80 delegates) (April 11); talked about canine bed bug scent detection at WPLR in Orange on the Chaz and AJ morning show with Charles from Harlem River Hounds (April 12); with Mr. Mike Lipsett, presented a combined talk on bed bugs for a national webinar sponsored by Healthy Homes out of Yale University (April 19); spoke about bed bugs at Bed Bug Forum V sponsored by CCABB and the Norwalk Health Department in Stamford; the meeting was recorded by Community TV Channel 21 (30 attendees) (April 28); delivered a speech on bed bug biology and relevance to control methods at the National Pest Management Association, Northeastern conference, in Boston, MA (April 29). During April, Dr. Ridge published an informational flyer on the Integrated Pest Management approach for bed bugs titled "Got Bed Bugs?"

**DR. CLAIRE RUTLEDGE** spoke about Emerald ash borer with students visiting the Station from Greens Farms Academy (30 youths attended) (April 12); taught a review session for Arboriculture 101 in Jones Auditorium (40 attendees) (April 13); and participated in a "Joint Training and Skills Exchange" with the *Cerceris fumipennis* working group at Archbold Biological Sta-



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tion in Venus, FL. Participants from five states and Canada met to standardize techniques, learn new methodologies, and formulate research plans (11 attendees) (April 23-26).

**DR. VICTORIA L. SMITH** participated, along with **MS. TIA BLEVINS** and **MR. PETER TRENCHARD**, in Wilderness First Aid, a course sponsored by the US Forest Service, held at the Rachel Carson Office Building in Harrisburg, PA (16 participants) (April 1); presented a talk titled “How to Recognize Emerald Ash Borer and Asian Longhorned Beetle” at the Connecticut Urban Forest Council Municipal Tree Workshop held at the Beardsley Zoo in Bridgeport (approx. 50 participants) (April 5); presented a talk titled “How to Recognize Emerald Ash Borer and Asian Longhorned Beetle” at the Connecticut Light and Power and Lewis Tree Service annual Alliance Safety meeting held at CL&P in Torrington (approx. 50 participants) (April 6); participated in an Emerald Ash Borer Emergency Response meeting at the Valley Lab in Windsor (20 participants) (April 7); participated in the 86<sup>th</sup> annual meeting of the Eastern Plant Board, as the State Plant Regulatory Official of CT and as President of the Eastern Plant Board, held at the Hilton Garden Inn in Worcester, MA (approx. 75 participants) (April 11-14); participated in a meeting of the Yale Biosafety Committee in New Haven (15 participants) (April 21); and presented a talk titled “How to Recognize Emerald Ash Borer and Asian Longhorned Beetle” to Connecticut Light and Power and Lewis Tree Service at CL&P in Cheshire (approx. 40 participants) (April 27).

**DR. KIRBY C. STAFFORD III** participated in an Emerald ash borer preparedness meeting at the Valley Laboratory in Windsor (26 attendees) (April 7); attended the spring meeting of the Connecticut Beekeeping Association held in Jones Auditorium (April 9); presented a talk on ticks and tick management at a Lyme disease symposium in Westport organized by the Westport Weston Health Department (45 attendees) (April 14); participated in a meeting of the Connecticut Coalition Against Bed Bugs with Representative Andres Ayala in Hartford (9 attendees) (April 15); attended a meeting of the Connecticut Entomological Society in Jones Auditorium (April 15); with **DR. VICTORIA L. SMITH**, toured the Monsanto laboratories and greenhouses in Mystic (April 19); with **DR. ANUJA BHARADWAJ**, presented a display on ticks and Lyme disease for Biodiversity Day at the Yale Peabody Museum in New Haven (approx. 1,000 adults and youths attended) (April 21); presented a talk on ticks and tick-associated diseases at the Holcomb Farm in West Granby (15 attendees) (April 26); and presented a talk on ticks and Lyme disease at a meeting of the CT Hardy Plant Society in Wethersfield (28 attendees) (April 27).

**DR. KIMBERLY A. STONER** spoke about the use of insecticides highly toxic to bees in suburban landscapes and ways for beekeepers to protect their bees to the Back Yard Beekeepers Association in Weston (75 attendees) (April 26).



### FIGURE CAPTION:

Workshop participants monitor *Cerberis* wasps at J. N. “Ding” Darling National Wildlife Refuge in Sanibel, FL.

\* Dr. Claire Rutledge went on this trip, but she is not in this photograph.

## ENVIRONMENTAL SCIENCES

**DR. THEODORE ANDREADIS** met with State Auditors, Bill Zinn and Songlin Mo and gave an overview of the Station’s Center for Vector Biology & Zoonotic Diseases research and sur-



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veillance programs on mosquitoes and mosquito-borne diseases (April 15).

**MR. GREGORY BUGBEE** along with Jordan Gibbons, participated in the Connecticut Aquatic Nuisance Species Working Group Meeting at Avery Point in Groton (April 7); presented a talk entitled *Improving Soil in the Home Garden* to the Bethel Garden Club (April 8); was interviewed by Will Rowlands of Connecticut Gardener Magazine on using wood ash, coffee grounds etc. as a soil amendment (April 22); along with Jordan Gibbons, presented an invasive aquatic plant workshop to the Middlebury Land Trust (April 26); and along with Jordan Gibbons, gave an invasive aquatic plant workshop to high school students participating in Project CLEAR at Western Connecticut University (April 29).

## FORESTRY AND HORTICULTURE

**DR. JEFFREY WARD** spoke on tree care at a workshop for municipal tree workers of Bridgeport, Fairfield, and Norwalk (28 attendees) (April 5); presented invited lecture "Interaction of invasive plants and herbivory on tree seedlings and herbaceous plants" at the Northeast Natural History Conference 2011 in Albany, NY (43 attendees) (April 8); and spoke on departmental research to students of Green Farms Academy (April 12).

**DR. MARTIN GENT** presented a talk on "Life in the Greenhouse at the Connecticut Agricultural Experiment Station" to a seminar series on Careers in Biology at Mitchell College, New London (10 students) (March 24); and gave a talk on "Vegetable production in high tunnels, greenhouses, and in hydroponics" to the Fairfield County Farm Bureau in Bethel CT (50 attendees) (April 2).

**DR. ABIGAIL MAYNARD** spoke on composting and the utilization of compost to residents of the Manson Youth Institution in Cheshire (32 students, 3 adults) (April 6); advised Pre-kindergarten and Kindergarten teachers at Hamden Hall Country Day School about spring gardening for young children (April 21); and spoke about the New Crops Program to tour groups in the greenhouse from the Spring Open House (30 adults) (April 27).

**DR. WILLIAM NAIL** was interviewed by Annie deBoer and two other students from Wesleyan University at Lockwood Farm to discuss the state of the Connecticut winegrape industry for a classroom project (April 7); met with Steve and Ann Sawyer and their vineyard crew at Preston Ridge Vineyards in Preston to discuss pruning and training young vines and pest management strategies for the upcoming growing season (April 18); and participated in a conference call meeting of the National Grape Community of Practice (GCoP) hosted by Eric Stafne of Oklahoma State University (April 28).

**DR. SCOTT WILLIAMS** spoke to members of the Guilford High School's Environmental Club about invasive plant species and their control (15 students) (April 2); attended the 2011 Northeast Natural History Conference and participated in a round table discussion about white-tailed deer overabundance, Albany, NY (April 8); presented "Survival and Dispersal of Rehabilitated White-tailed Deer Fawns in Connecticut" at the 67th Annual Northeast Fish and Wildlife Conference, Manchester, NH (55 attendees) (April 17-19); was awarded a \$5,000 collaborative research grant from Shake Away, Inc. for their participation in an objective evaluation of commercially available and homemade deer repellents (April 25); gave invited lecture titled "Ecological Interconnectedness Between a Native Ectoparasite, an Alien Invasive Shrub, a Native Rodent, and a Native Invasive Mammal and Potential Impacts to Humans" at the Department of Biology Seminar Series at Western Connecticut State University (65 attendees) (April 27); and along with **DR. JEFFREY WARD**, **MR. JOSEPH P. BARSKY**, and **MR. MICHAEL R. SHORT** meet with David Gumbart (The Nature Conservancy), Steve Gregory (Lord Creek Farm), and Patrick Comins, Corrie Folsom-Okeefe, and Eric Davison (Audubon Connecticut) in Lyme to discuss impact of invasive species control on birds and native vegetation (April 29).

**MR. JOSEPH P. BARSKY** along with **DR. WALTER KROL**, presented a display on the Emerald Ash Beetle and the Food Emergency Response Network during an Earth Day event at Quinnipiac University (600 attendees) (April 14); and presented a display on Agriculture, Natural Re-



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sources, and Public Health during an Earth Day Event, held at the Hamden Middle School (3,000 attendees) (April 30).

## PLANT PATHOLOGY AND ECOLOGY

**DR. DONALD E. AYLOR** gave a lecture entitled "Modeling aerial dispersal of plant pathogens" via an Internet webcast to graduate students in the Department of Plant Pathology and in the Engineering Department at Virginia Tech University (10 adults attended) (April 14); and gave an invited lecture entitled "A biophysical framework for modeling aerial dispersal of plant pathogens" in the Department of Plant Pathology at the University of Nebraska in Lincoln, Nebraska (24 adults attended) (April 18).

**DR. SHARON M. DOUGLAS** gave a presentation titled "Eco-friendly management of diseases of perennials" at the Olde Ripton Garden Club in Shelton (56 adult attendees) (April 4); was interviewed about predicting flowering and pollen levels for this year by Amanda Kuda of the Connecticut Post (April 6); participated in the monthly meeting of the CTPA Board of Directors (April 12); organized and participated in a meeting of the Education Committee of the CTPA to discuss workshops for 2011-2012 (April 18); and was interviewed about winter injury on rhododendron and other plants this year by Nancy Schoeffler of the Hartford Courant (April 26).

**DR. WADE H. ELMER** was visited by Dr. Roman Zajac of the University of New Haven and gave a presentation on "Salt marsh change and biotic responses" (April 7); and attended the Connecticut Gladiolus Society meeting at the Valley Laboratory in Windsor (April 9).

**MS. MARY K. INMAN** gave a talk titled "General care and common problems of houseplants" to the Cheshire Garden Club at St. Peter's Episcopal Church in Cheshire (25 adults attended) (April 4).

**DR. YONGHAO LI** attended the Lab Accreditation Training for the National Plant Diagnostic Network STAR-D Project in Ames, IA (April 11-15).

**DR. ROBERT E. MARRA** spoke about plant pathology and the science behind plant disease diagnostics to two groups of students visiting the Station from Greens Farms Academy (25 students and 2 adults attended) (April 12); and discussed issues to consider in choosing street trees with the West Haven Tree Commission at West Haven City Hall (4 members of the Commission, 3 adults, and 1 UNH student attended) (April 19).

## VALLEY LABORATORY

**DR. CAROLE CHEAH** gave an update on the biological control programs for mile-a-minute invasive weed and hemlock woolly adelgid at the Horticultural Inspectors Meeting, Worcester (13 people) (April 13); and gave a presentation on biological control options for invasive species management (HWA and MAM) to high school students from the Housatonic Valley Regional High School, Falls Village at Science Day 2011 hosted by the Mad Gardeners (~ 100 attendees).

**DR. RICHARD COWLES** presented "Entomology" at a 3<sup>rd</sup> and 4<sup>th</sup> Grade career fair, Natchaug Elementary School, Willimantic (150 attendees) (April 8); presented "Managing insect pests with systemic insecticides" at the Interstate Landscape Management Conference in Linthicum, MD (180 participants) (April 18); and met with Darren Cugno, landscape manager at the Governor's Mansion, to discuss IPM for that property (April 29).

**DR. JAMES LAMONDIA** spoke about management of tobacco pathogens including poty viruses, target spot and progress of the breeding program for multiple pathogen resistance at the CPS tobacco growers meeting in East Windsor (115 persons) (April 4); visited with the Department of Entomology and Plant Pathology faculty, met with graduate students and presented an invited seminar on "the use of allelopathic rotation and cover crop plants for nematode manage-



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ment' at Auburn University in Alabama (45 people) (April 11 and 12); and was interviewed about Valley Laboratory services and research by Julian McKinley of Windsor Patch.com (April 15).

**DR. TODD L. MERVOSH** spoke about weed management for gladiolus and other flowers at a Conn. Gladiolus Society meeting at the Valley Laboratory in Windsor, CT (12 attendees) (April 9).

**DR. RICHARD COWLES** and **DR. JAMES LAMONDIA** submitted a patent application for Strawberry plant named 'Rubicon' with tolerance to black root rot and non-preference to feeding by black vine weevils; and **DR. JAMES LAMONDIA** developed a broadleaf cigar wrapper tobacco with genetic resistance to Fusarium wilt, Tobacco cyst nematodes, Tobacco mosaic virus and blue mold leaf spot currently being licensed by the CAES. These new plant cultivars maintain high yields and reduce grower costs while reducing the need for pesticide use, protecting human health and the environment.

## JOURNAL ARTICLES APPROVED APRIL 2011

- Brazeo, N. J., **Robert E. Marra**, and R. L. Wick. Genotypic Diversity of *Armillaria gallica* From Mixed Oak Forests Using AFLPs. *Mycologia*
- Cohen, A. C., **Carole A. Cheah**, C. Kidd, and T. Hodgson. Defining PC/QC Standards for Mass Rearing HWA Predators. Chapter in: Implementation and Status of Biological Control of the Hemlock Woolly Adelgid. USDA Forest Service Publication
- Cohen, A. C. and **Carole A. Cheah**. Development of Artificial Diets for Hemlock Woolly Adelgid Predators. Chapter in: Implementation and Status of Biological Control of the Hemlock Woolly Adelgid. USDA Forest Service Publication
- Douglas, Sharon M.** Disease Diagnosis and Eco-friendly Management. *Tree Care Industry Magazine*
- Douglas, Sharon M.** Drought, Its After-effects, and Management Strategies for Woody Ornamentals (rev. 4/11). CAES Fact Sheet
- LaMondia, James A.** Registration of B2 Connecticut Broadleaf Cigar Wrapper Tobacco with Resistance to *Fusarium* Wilt, Tobacco Mosaic Virus, Tobacco Cyst Nematode and Blue Mold. *Journal of Plant Registrations*
- LaMondia, James A.** B2, A New Broadleaf Cigar Wrapper Tobacco Cultivar with Resistance to Multiple Pathogens
- LaMondia, James A.** Management of Foliar Nematodes in Ornamentals. *The Journal of Nematology* (Abstract)
- Li, De-Wei**, B. Kendrick, and J. Chen. Hyphomycetes Including *Dictyochoetopsis sinensis* sp. nov., *Parapleurotheciopsis quercicola* sp. nov. and *Pyricularia wudangensis* sp. nov. from *Quercus phillyraeoides* Leaf Litter. *Mycotaxon*
- Mosa, Kumar, Chikara, McDermott, Lui, **Craig Musante**, **Jason White**, Dhankher. Members of rice plasma membrane intrinsic proteins (PIP subfamily) are involved in arsenite transport. *New Phytologist*
- Nofchissey, R. A., E. R. Deardorff, **Tia M. Blevins**, M. Anishchenko, A. C. Brault, G. D. Ebel, and **Louis A. Magnarelli**. Seroprevalence of Powassan Virus in Connecticut Deer. *Emerging Infectious Diseases*
- Rathier, Thomas**. Cultural and Pest Management Update. *The Real Tree Line, Newsletter CCTGA*, Vol. 51, May 2011

## THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION

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*Putting Science to work  
for Society.*



Entrance to The Connecticut Agricultural Experiment Station in New Haven on Huntington Street



Main Laboratories, New Haven



Lockwood Farm, Hamden



Griswold Research Center, Griswold



Valley Laboratory, Windsor

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P.O. Box 1106, New Haven, CT 06504, or call (203) 974-8440. CAES is an affirmative action/equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services at (203) 974-8442 (voice); (203) 974-8502 (FAX); or [Michael.Last@ct.gov](mailto:Michael.Last@ct.gov) (E-mail).

*Did you know that the first genetically crossed sweet corn was introduced by Station scientists in 1926?*