

STATION NEWS

THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION



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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 about Plant Science Day and Station research by the New Haven Register (August 1); was interviewed about emerald ash borer by Jan Spiegel (August 2); was interviewed about the emerald ash borer quarantine by Mark Simms of CT Public Radio (August 6); was interviewed about the emerald ash borer quarantine by Fox-TV (August 6); was interviewed about the emerald ash borer quarantine by Ann DeMatteo of the New Haven Register (August 6); was interviewed about the emerald ash borer quarantine by Bill Leukhardt of The Hartford Courant (August 8); was interviewed about the emerald ash borer quarantine by Quannah Leonard of the Republican American (August 8); was interviewed about the emerald ash borer quarantine by WFSB-TV (August 9); was interviewed about the emerald ash borer quarantine by WTNH-TV (August 9); gave a report on Station research, the emerald ash borer quarantine, and progress being made on building projects to the Experiment Station Associates (August 28); was interviewed about a new FDA grant for the Station by Amanda Cuda of the CT Post (August 29).

ANALYTICAL CHEMISTRY

DR. JASON C. WHITE presented a lecture entitled "Role of the CT Agricultural Experiment Station Department of Analytical Chemistry and the FDA Food Emergency Response Network (FERN) in the Deepwater Horizon Oil Spill Response" at the National Conference for Project Food, Land and People in Madison CT (August 2)(25 attendees), participated in Skype Conference calls with the US EPA and Hasselt University (Belgium) researchers on the upcoming 9th International Phytotechnologies Conference to be held next month in Belgium (August 7, 27), served as a subject matter expert and one of three examiners during the interview process for the City of New Haven Health Department Laboratory Manager position (August 8), met with Professor Saion Sinha of the University of New Haven regarding a jointly mentored graduate student who will be conducting research within the Analytical Chemistry Department on nanotoxicology (August 9), participated with Department staff in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (August 9), attended the 244th Annual Meeting of the American Chemical Society in Philadelphia PA and presented an invited plenary lecture entitled "Nanomaterial contamination of agricultural crops" in the "Nanomaterials in medicine, food, and the environment" session (August 19-23)(35 attendees), was interviewed by Janet Raloff of *Science News* regarding a recent publication in the *Proceedings of the National Academy of Sciences* (PNAS) from a group showing that nanoparticles significantly inhibit nitrogen fixation (August 20), received notification of funding from the US FDA for a competitive proposal entitled "Achieving a nationally integrated food safety system: ISO/IEC 17025 accreditation" which runs for 5-years and totals \$1.5 million (August 27), spoke by phone with Allison Dodge of Congresswoman Rosa DeLauro's office regarding a press release focused on a new FDA food safety grant (August 28), was interviewed by Amanda Cudo of the *CT Post* regarding our new FDA food safety grant (August 29), was interviewed by WQUN radio in Hamden regarding our new FDA food safety grant (August 29), and was interviewed by Anthony King of *Chemical and Industry Magazine* regarding a recent publication in the *Proceedings of the National Academy of Sciences* (PNAS) from a group showing that nanoparticles significantly inhibit nitrogen fixation (August 30).

BIOCHEMISTRY AND GENETICS

DR. DOUGLAS DINGMAN attended the American Phytopathological Society annual meeting in Providence, RI (August 4-7).



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ENTOMOLOGY

MS. ROSE T. HISKES gave a talk on forest pests at the Buck Nature Center in Wethersfield (July 5); led a group of Vernon Greenways Volunteers to survey trees along the Rails to Trails in Vernon for Asian longhorned beetle and emerald ash borer (July 7); participated in a Forest Pest Conference call (July 11); staffed a forest pest and CAPS table at the Connecticut Nursery and Landscape summer meeting held at Lockwood Farm (July 11); was interviewed about forest pests by Nancy Barnes of Patch.com (July 16); volunteered as a Wasp Watcher at Lake Street School in Vernon (July 21 and 22); was interviewed about forest pests by Bill Doak of the East Hartford Gazette (July 24); gave talks on insects and forest pests to 6 groups of Girls Scouts at the International Jamboree at Camp Laurel in Lebanon (August 9); gave a lecture on Forest Pests to the Natural Resource Conservation Service training day at the Tolland Agricultural Center in Vernon (44 attendees) (August 28).



Rose Hiskes led a group of Vernon Greenways Volunteers to survey trees along the Rails to Trails in Vernon for ALB and EAB.

DR. CHRIS T. MAIER was interviewed about invasive insects by John Burgeson of the Connecticut Post (August 1).

DR. GALE E. RIDGE traveled to London, England, and Prague, Czech Republic, to work with experts in bed bug taxonomy. She confirmed a 5th form of *Cimex lectularius* L. which has unusually long legs. Populations of these insects can be found in Eastern Europe (August 4-17). Dr. Ridge spoke about bed bugs to the Connecticut Community Providers Association (CCPA) in Rocky Hill (60 attendees) (August 28); was filmed for a Connecticut nature program by Scott Tucker and talked about the European paper wasp *Polistes dominulus*, carpenter bees, and other Hymenoptera (August 29).



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DR. CLAIRE E. RUTLEDGE presented a table display “Wasp Watchers: Citizen Scientists at Work” (August 1); met with US Representative Rosa DeLauro at CAES to discuss emerald ash borer (August 6); was interviewed for the article “Citizen scientist used wasp to locate ash borer” by Laraine Weschler of the Waterbury Republican-American (August 6).

DR. VICTORIA L. SMITH participated in a meeting of the Yale Biosafety Committee in New Haven (18 participants) (August 16); participated in a meeting of the emerald Ash Borer Compliance Agreement Working Group at USDA-APHIS-PPQ Headquarters in Wallingford (6 participants) (August 20); participated in a meeting of the emerald Ash Borer Incident Management Team held at USDA-APHIS-PPQ Headquarters in Wallingford (10 participants) (August 21).

DR. KIRBY C. STAFFORD III spoke on ticks and Lyme disease at the Eleanor Buck Wolf Nature Center in Wethersfield (8 attendees) (August 2); was interviewed about honey bees in a New Haven firehouse by Denise Bufa of the Hartford Courant (August 2); participated in a conference call on the emerald ash borer with USDA-APHIS-PPQ, Department of Energy and Environmental Protection, and the U.S. Forest Service (August 3); with **DRS. LOUIS A. MAGNARELLI** and **CLAIRE E. RUTLEDGE**, participated in a tour for Representative Rosa DeLauro and the press on the emerald ash borer (EAB) (August 6); was interviewed about the emerald ash borer by the New Haven Register and Channel 3 Fox News (August 6); participated in the hearing on the emerald ash borer quarantine in Prospect (170 attendees) (August 8); was interviewed about the emerald ash borer quarantine by Lucy Nalpathchil of WNPR (August 9); was interviewed about the emerald ash borer by Denise Coffey of Reminder News (August 10); participated in a conference call of the National Research Support Projects Review Committee (August 13); was interviewed about the new tick and Lyme disease grant from the Centers for Disease Control and Prevention by Susan Wolf of the Redding Pilot (August 20); with **DR. VICTORIA L. SMITH**, participated in a meeting with the USDA-APHIS-PPQ staff on the regulatory aspects of the emerald ash borer infestation (4 attendees) (August 20); was interviewed about the emerald ash borer by Bill Leukhardt of the Hartford Courant (August 21); participated in a meeting between the Experiment Station, Department of Energy and Environmental Protection, the U.S. Forest Service, and APHIS-PPQ to plan and structure the delimiting survey for the emerald ash borer (8 attendees) (August 21); was interviewed for additional information on the emerald ash borer by Bill Leukhardt of the Hartford Courant (August 23); conducted diversity training for new employees in Jones Auditorium (19 attendees) (August 27); was interviewed about the emerald ash borer, its impact, and control by Mike Puffer of the Republican American (August 29); testified on a panel at a Senate Hearing in Stamford, sponsored by Senator Richard Blumenthal, on Lyme disease and the federal response to Lyme disease (360 attendees) (August 30); was interviewed about deer and tick management by Kaomi Goetz of WSHU Public Radio (August 30); was interviewed about ticks by Beau Berman of Fox CT News (August 30); participated in a Department of Energy and Environmental Protection Forestry emerald ash borer and firewood update conference call (August 31).



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ENVIRONMENTAL SCIENCES

DR. THEODORE ANDREADIS was interviewed by Bill Weir Hartford Courant for a feature story on the Station's Mosquito and Arbovirus Surveillance and Research Programs (August 8); was interviewed about the first human case of West Nile virus in Connecticut for the 2012 season by Bill Weir Hartford Courant; Marc Sims, Connecticut Public Radio; Mary O'Leary-New Haven Register; and WTIC Radio (August 16); was interviewed about mosquitoes, West Nile virus and the Station's Mosquito and Arbovirus Surveillance and Research Programs by Mark Sullivan WHOM Radio 94.9 (August 20); participated in WNPR Connecticut Public Radio *Where we live, morning edition* show on *Mosquitoes* hosted by John Dankosky (August 22); was interviewed about the 2012 West Nile virus season in Connecticut and the US and the potential impact of global climate change on future West Nile virus outbreaks by Grace Merritt, the Connecticut Mirror (August 23); was interviewed about the recent human cases of West Nile virus in Bridgeport and Stamford by Steve Kotchko-Connecticut Public Radio and Jim Konrad, Norwich Bulletin (August 24); was interviewed about West Nile virus activity in the state and human cases in Fairfield County by the Citizens News New Fairfield (August 27); Was interviewed about the human cases of West Nile virus in residents of Greenwich and Stamford by the Greenwich Times and Marc Sims, Connecticut Public Radio (August 28).

MR. GREG BUGBEE participated in a meeting called by the First Selectman of New Fairfield, at the New Fairfield Town Hall, on controlling Eurasian milfoil in Candlewood Lake with herbicides (8 attendees)(August 1).

DR. GOUDARZ MOLAEI presented and invited talk entitled, *Vector-Host Interactions of Culex pipiens Complex Mosquitoes in the United States* to the Department of Evolution, Ecology and Organismal Biology, The Ohio State University (August 30).

DR. CHARLES VOSSBRINCK visited Bill's Fig Farm in Flemington NJ and obtained 6 varieties of 2 year old fig trees which are now located at the Lockwood farm (August 23).

FORESTRY AND HORTICULTURE

DR. JEFFREY WARD interviewed by John Burgeson of the Connecticut Post about running bamboo growth and control (August 1); participated in the CT Statewide Vegetation Management Task Force in Middlefield (August 2, 14, 28); spoke on invasive identification and control to the Student Conservation Association in Bridgeport (8 students, 4 staff) (August 9); inspected running bamboo along Merritt Parkway in Trumbull with Bruce Villwock, CT DOT Transportation Landscape Designer, to discuss on control strategies (August 17); spoke on invasive identification and control to the Norfolk Land Trust (7 attendees) (August 18); meet with White Memorial Foundation staff to discuss effectiveness of Japanese barberry control and roadside forest management (3 attendees) (August 30); interviewed by Bob Miller of the Danbury News Times about acorn production (August 30).

DR. MARTIN GENT a Cheshire High School student visited to discuss hydroponics experiments for a Science Fair project (August 23).

DR. ABIGAIL MAYNARD interviewed by Steve Grant of the Hartford Courant about vegetable farming in Connecticut (August 20).

DR. WILLIAM NAIL inspected the vineyards at Stonington Vineyards and Saltwater Farms Vineyards in Stonington (August 21); participated in a meeting of the Connecticut Farm Wine Development Council at the Department of Agriculture in Hartford (August 28).

DR. SCOTT WILLIAMS met with Drs. Ortega and Rittenhouse at the Department of Natural Resources and the Environment at the University of Connecticut about possible collaborative research projects (August 29); participated in an Executive Committee, Northeast Section of The Wildlife Society conference call (August 31).



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MR. MICHAEL R. SHORT attended the public hearing concerning emerald Ash Borer infestation in Prospect (August 8).

PLANT PATHOLOGY AND ECOLOGY

DR. SANDRA L. ANAGNOSTAKIS gave two talks titled “Disease problems for nut trees” and “Nut trees for animal forage” to the New York Nut Growers Association in Hudson, NY (56 adult attendees) (August 11); reported on the progress with CAES breeding of chestnut trees for resistance to Asian chestnut gall wasp at the Chestnut Growers of America meeting in Jackson, MI (83 adult attendees) (August 30 – September 2).

DR. DONALD E. AYLOR gave an invited talk titled “Emission Rates of Bioaerosols” at the Workshop on Bioaerosol Effects on Clouds held in Steamboat Springs, Colorado (45 adults attended) (August 5-6).

DR. SHARON M. DOUGLAS was interviewed about “Boxwood Blight—What do we know and where are we going?” by Jan Ellen Spiegel of the Connecticut Mirror (August 3); participated in the Diagnostics Committee Meeting and attended the Annual Meeting of the American Phytopathological Society in Providence, RI (August 4-7); participated in the monthly meeting of the CTPA Board of Directors (August 14); was interviewed about Boxwood Blight in the U.S. by Adrian Higgins of The Washington Post (August 23).

DR. WADE H. ELMER attended the Annual Meeting of the American Phytopathological Society in Providence, RI, and presented a paper titled “Influence of *Fusarium palustre*, drought, and DMSO on herbivory of *Spartina alterniflora* by marsh crabs.” He also attended the Senior Editors committee meeting for *Phytopathology*, the Divisional Forum meeting, and the Committee on Widely Prevalent Fungi meeting. In addition, he attended the APS Northeastern Division (NED) meeting and presented the Divisional Forum Representative (DFR) report. Dr. Elmer was awarded a certificate of appreciation from the Divisional Forum for his service and a plaque from the Northeastern Division for his service to the division as the DFR (August 4-8).

DR. FRANCIS J. FERRANDINO presented a paper titled “Latent period and infectious period: Useful concepts or vague notions” at the Annual Meeting of the American Phytopathological Society in Providence, RI (August 5-7).

DR. YONGHAO LI attended the Annual Meeting of the American Phytopathological Society in Providence, RI (August 5-8) and presented a poster titled “Effects of light density on resistance of bigleaf hydrangea to *Cercospora* leaf spot” (August 7).

DR. ROBERT E. MARRA attended the Annual Meeting of the American Phytopathological Society and coauthored on oral presentation titled “Real-time PCR detection of the boxwood blight pathogen *Calonectria pseudonaviculata*” in Providence, RI (August 5-7).



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VALLEY LABORATORY

DR. JOHN AHRENS attended a twilight meeting of the Connecticut Christmas Tree Growers Association held at the Winterberry Farm in Killingworth, CT and spoke on controlling weeds in the plantation (30 attendees) (August 2).

DR. CAROLE CHEAH attended and presented a poster on "Other hemlock species for Connecticut" at the CNLA Summer Field Day at Lockwood Farm, Hamden (July 11); gave a short talk on biological control of mile-a-minute weed" at Plant Science Day 2012 at Lockwood Farm (153 attendees) (August 1); was interviewed by John Burgeson of the Connecticut Post at Plant Science Day (August 1); was interviewed and filmed by John Charlton of Fox News CT on mile-a-minute weed threats to power lines at the Valley Laboratory, Windsor (August 2); together with **DR. TODD MERVOSH** and Donna Ellis of the University of Connecticut; was interviewed on weevil releases and mile-a-minute weed by Robert Miller of the Danbury New Times and Kendra Bobowick of the Newtown Bee at a Newtown weevil release site during field monitoring (August 21); was interviewed by Frank MacEachern, Gimbel Audubon Sanctuary, Greenwich for the Greenwich Time, the Stamford Post, and the Connecticut Post (August 21 and 28); was filmed by Cablevision Channel 12, Rockrimmon Country Club, Stamford, during field monitoring at weevil release sites (August 22).

DR. RICHARD COWLES presented "Spotted Wing Drosophila" for the walking tour for pesticide credits at Plant Science Day, Hamden (25 participants) (August 1); presented "Bed Bugs" as a poster exhibit with **DR. GAIL RIDGE** at Plant Science Day, Hamden (August 1); and discussed insects and diseases of Christmas trees at the CT Christmas Tree Growers' twilight meeting, Killingworth (40 attendees) (August 4).

DR. JAMES LAMONDI spoke about research on management of boxwood blight with fungicides on the Pesticide Re-Certification Credit Tour on Plant Science day (55 attendees) (August 1); served as President of the Society of Nematologists at the annual meeting in Savannah GA, led the Executive Board meeting (August 12); participated in the Board meeting of the N.A. Cobb Foundation (August 13); led a Colloquium on 'Nematodes and the Gardens of Savannah', participated in the Journal of Nematology Editorial Board meeting, the Finance Advisory Committee, and presented a poster titled 'Biochar inhibits host recognition by *Globodera tabacum*' (August 14); coauthored a symposium paper with John Halbrendt of PSU entitled 'Dagger nematodes and perennial fruit crops', led the annual Society Business Meeting (August 15); and participated as Past-President in the second Executive Board Meeting (August 16).

DR. TODD L. MERVOSH spoke about weed management at a meeting of the Conn. Christmas Tree Growers Association, Killingworth (30 attendees) (August 2); hosted a board meeting of the Suffield Land Conservancy, Valley Laboratory, Windsor (7 attendees) (August 16); participated in a symposium planning meeting for the Connecticut Invasive Plant Working Group at the Valley Laboratory (11 attendees) (August 20); and was interviewed about biological control of mile-a-minute weed by Frank MacEachern of The Greenwich Time (August 20 and 28), by Kendra Bobowick of The Newtown Bee (August 21), and by a reporter from News 12 Connecticut of Norwalk (August 22).



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ARTICLES OF INTEREST

EXPERIMENT STATION STAFF DETECTS THE EMERALD ASH BORER IN CONNECTICUT

On Monday, July 16, 2012, the first emerald ash borer (EAB) was detected in Connecticut in the town of Prospect. The initial detection was by Mioara Scott working for Dr. Claire Rutledge in her *Cerceris* wasp biosurveillance program supported, in part, by the U.S. Forest Service. *Cerceris fumipennis* is a solitary, sand-nesting wasp (it doesn't sting people) that stocks her burrows with metallic, wood-boring beetles (Family Buprestidae) for her young. This includes EAB if it is present. Mioara intercepted a female wasp that was carrying an EAB. This is the first detection of a new EAB infestation in a state using the wasp as a surveillance method. Numerous other EAB were recovered from the wasps at this site as well as at Fusco Field in Prospect and at a ball field in Beacon Falls. The EAB has now been detected in four towns in New Haven County: Prospect, Naugatuck, Bethany, and Beacon Falls. Some of these beetles were also captured by purple prism traps maintained by The University of Connecticut Cooperative Extension Forestry with support from the USDA-APHIS-PPQ. Surveillance for EAB in Connecticut is a statewide, multi-agency effort involving *Cerceris* wasps (with a network of many volunteer "wasp-watchers"), the purple traps, trap ash trees (trees girdled that are highly attractive to the beetles), inspection of trees, and public outreach and reporting of suspect EAB. – Dr. Kirby C. Stafford III



Dorsal view of the first EAB detected in Connecticut at Canfield Park in the Town of Prospect .



Mioara Scott and Stone Ng collect beetles from female *Cerceris* wasps returning to their burrows at Canfield Park.



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EXPERIMENT STATION HOSTS NATIONAL PLANT BOARD

The Connecticut Agricultural Experiment Station hosted the 86th annual meeting of the National Plant Board at the Hilton in Mystic, CT, July 21 through July 26. Over 135 people, from 36 states, Canada and Mexico, and representing state Departments of Agriculture, USDA, US Forest Service, US Customs and Border Protection, industry, and USDA executives, participated in meetings, discussions, and presentations. A tour of the Monsanto Plant Transformation Research Facility in Mystic and Fort Trumbull State Park in New London were included. Station Director Lou Mag-narelli gave the Connecticut welcome, and Sharon Douglas presented a talk on Boxwood blight. Vicki Smith was the Local Arrangements Chair, and Tia Blevins, Sandy Carney, Mark Creighton, Jeff Fengler, Lisa Kaczynski, Steve Sandrey, and Peter Trenchard helped with registration and arrangements. Vickie Marie Bomba-Lewandoski helped with database management and printing.

SENATOR BLUMENTHAL CHAIRS SENATE HEARING

Senator Blumenthal Chairs Senate Hearing In State On Lyme Disease Prevention, Will Hear From Senate Colleague, Patients And Experts. <http://www.blumenthal.senate.gov/lymedisease>

RETURN OF THE AMERICAN CHESTNUT, CONNECTICUT GARDENER

<http://www.conngardener.com/chestnut.html>

JOURNAL ARTICLES APPROVED AUGUST 2012

Anagnostakis, Sandra L., S. L. Brosi, J. Romero-Severson, S. E. Schlarbaum, and **Francis J. Fer-randino**. Field inoculations of *Juglans ailantifolia* and *Juglans cinerea* with *Ophiogno-monia clavignenti-juglandacearum*. Canadian Journal of Plant Pathology

Anagnostakis, Sandra L., T. J. Hall, and T. M. Frontz. A laboratory assay to determine resistance in butternut to butternut canker disease. Northern Journal of Applied Forestry

Cowles, Richard S. Guidelines for Preserving Trees in the Presence of the emerald Ash Borer. CAES Fact Sheet

Douglas, Sharon M. Plaga (Tizon) del arbusto de Boj – Una nueva enfermedad para Connecticut y EE.UU. CAES Fact Sheet

Douglas, Sharon M. Tizon del arbusto de boj (genero buxos) confirmado en *Pachysandra ina* de un jardin ornamental de Connecticut. CAES Fact Sheet

Douglas, Sharon M. Powdery mildew (revised July 2012). CAES Fact Sheet

Douglas, Sharon M. “Tizon del arbusto de Boj” – Una Nueva plaga para Connecticut y los EE.UU. CAES Fact Sheet – Disease Alert

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Griswold, CT 06351-3627
Phone: 860-376-0365

*Putting Science to work
for Society.*



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



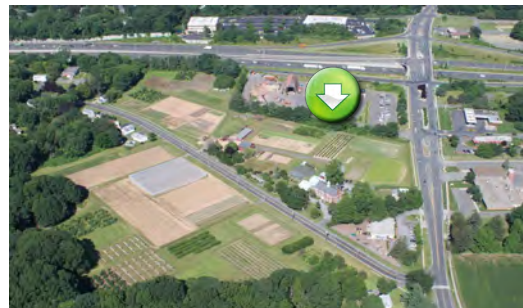
Main Laboratories, New Haven



Lockwood Farm, Hamden



Griswold Research Center, Griswold



Valley Laboratory, Windsor

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