

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 Station research and outreach activities by Jan Spiegel of the CT Mirror (June 5); was interviewed about possible layoffs and Station research programs by Judy Benson of the New London Day (June 12); was interviewed about mosquitoes by Mark Simms of the CT Radio Network (June 13); was interviewed about layoffs at the Experiment Station by Melissa Bailey of the New Haven Independent (June 15); participated in a press conference on Lyme disease with US Senator Richard Blumenthal at the Station (June 18); was interviewed about Lyme disease by WVFUV Radio in New York City (June 18); was interviewed about program cuts in the Station's research by Robert Cyr of the Record Journal (July 25); and was interviewed about Plant Science Day by Ray Andrewsen of WQUN radio in Hamden (July 27).

ANALYTICAL CHEMISTRY

DR. JASON C. WHITE conducted a phone interview with a graduate student from French Atomic Energy Commission (CEA) regarding her application to a post-doctoral position in the Department (July 1); participated in a conference call with Tim Spillane and Frank Green of the Connecticut Department of Consumer Protection regarding findings of pesticide violations in imported herb samples (July 1); gave a tour of the Department laboratory and programs to a reporter from the Connecticut Mirror (July 5); participated in a FDA FERN-wide hotwash call on recently completed mycotoxin proficiency test (July 6); conducted a phone interview with a graduate student from the University of Texas-El Paso regarding his application to a post-doctoral position in the Department (July 6); participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (July 7); gave a tour of Department laboratories and programs to Will Rowland (July 8); participated with the FBI Weapons of Mass Destruction (WMD) Coordinator and the Connecticut Department of Public Health Bioterrorism (BT) Coordinator in a summer camp for 7-12th grade students at St. Vincent's College on Disaster and Terrorism Response and presented a lecture entitled "The Connecticut Agricultural Experiment Station Department of Analytical Chemistry- Food Safety and Emergency Response" (55 attendees) (July 12) and (50 attendees) (July 19); received a Group Recognition Award from Margaret Hamburg, Commissioner of the US FDA "For exceptional contribution and outstanding dedication to the agency's response effort to the Deepwater Horizon Oil Spill Disaster" (July 13); participated with Department staff in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (July 14); participated in a US FDA food safety contract conference focused on funding state laboratory accreditation (July 14); hosted Professor Elisha Tel-Or of the Hebrew University of Jerusalem (Rehovot) and discussed future collaborative research (July 15); hosted potential post-doctoral candidate Dr. Tatsiana Ratnikova of Clemson University (July 22); participated in a FDA/USDA FSIS Tabletop Exercise in Manchester New Hampshire (12 attendees) (July 27); and presented a poster entitled "Nanomaterial contamination of agricultural crops" at the USDA NIFA Food Safety Project Directors Meeting in Milwaukee Wisconsin (50 attendees) (July 30).

DR. BRIAN EITZER along with DR. KIMBERLY STONER, hosted Dr. Thomas Steeger and Dr. Thomas Moriarty of the US EPA Environmental Fate and Effects Division to discuss research findings on pesticides and honey bees (July 6-7); participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (July 7); participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (July 14); and participated in a US FDA food safety contract conference focused on funding state laboratory accreditation (July 14).

DR. WALTER KROL participated in a conference call participated with Tim Spillane and Frank Green of the Connecticut Department of Consumer Protection regarding findings of pesticide violations in imported herb samples (July 1); participated in a FDA FERN-wide hotwash call on recently completed mycotoxin proficiency test (July 6); received a Group Recognition Award from Margaret Hamburg, Commissioner of the US FDA "For exceptional contribution



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and outstanding dedication to the agency's response effort to the Deepwater Horizon Oil Spill Disaster" (July 13); and participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (July 14).

MS. TERRI ARSENAULT received a Group Recognition Award from Margaret Hamburg, Commissioner of the US FDA "For exceptional contribution and outstanding dedication to the agency's response effort to the Deepwater Horizon Oil Spill Disaster" (July 13).

ENTOMOLOGY

MS. KATHERINE DUGAS attended a CTPA-sponsored field trip to see the ongoing control, survey, and replanting efforts for the Asian longhorned beetle infestation in Worcester, MA (July 12); with **MS. ROSE HISKES**, staffed a table about the CAPS program at the CNLA Summer Field Day at Veterans Park in Watertown (July 13); with **MS. ROSE HISKES** and **DR. CLAIRE E. RUTLEDGE**, staffed an insect identification table at the CTPA Summer Meeting held at the Farmington Club in Farmington (561 adults and 36 youths attended) (July 21); and gave a talk about common garden insects and toured the QVWA's butterfly garden at the Quinnipiac Valley Watershed Association's Midsummer Celebration in Meriden (July 24).

MS. ROSE HISKES gave a talk titled "Forest Pest Update and the CAPS program" to Master Gardeners at the University of Connecticut Research Farm in Storrs (25 attendees) (July 7); with **MS. KATHERINE DUGAS**, staffed a CAPS and Forest Pest table at the summer meeting of the Connecticut Nursery and Landscape Association in Newtown (400 attendees) (July 13); and with **MS. KATHERINE DUGAS** and **DR. CLAIRE E. RUTLEDGE**, staffed a CAPS and Forest Pest table at the summer meeting of the Connecticut Tree Protective Association held at the Farmington Club in Farmington (561 adults and 36 youths attended) (July 21).

DR. GALE E. RIDGE spoke about insects and the science of entomology to visiting students from the Urban Initiative Program (15 attendees) (July 7); published the Connecticut Health Department Bed Bug Identification Guide, which was distributed through the Connecticut State Health Department to the 78 local health departments in the state of Connecticut along with vials of alcohol-preserved specimens of the Common Bed Bug, *Cimex lectularius*, with all life stages. This reference material was to help local health department staff to better identify the Common Bed Bug when samples were submitted by citizens (July 8); participated in a bed bug online "chat" moderated by Matthew Sturdevant of the Hartford Courant with a simulcast through the Tribune properties, which included websites of the Los Angeles Times, Chicago Tribune, Baltimore Sun, Orlando Sentinel, Fort Lauderdale Sun Sentinel, The Morning Call of Allentown, PA, and the Daily Press of Newport News, VA (July 20); and presented two talks about bed bugs and self-protection to the Home Instead Senior Care In-Service in Shelton (80 attendees) (July 27).

DR. CLAIRE E. RUTLEDGE, with **MS. ROSE HISKES** and **KATHERINE DUGAS**, staffed an insect identification table at the CTPA Summer Meeting held at the Farmington Club in Farmington (561 adults and 36 youths attended) (July 21).

DR. VICTORIA L. SMITH participated in the Connecticut Nursery and Landscape Association Summer Meeting, held at Veterans Park in Watertown (~ 200 participants) (July 13); and participated in the Connecticut Pomological Society Meeting, held at Dzen Brothers Farm in South Windsor, with information on peach disease surveys (~ 60 participants) (July 14).

DR. KIRBY C. STAFFORD III participated in the joint meeting of the Northeastern Regional Association of Experiment Station Directors (NERA) and Extension Directors (NEED) and a meeting of the Multi-States Activity Committee in Baltimore, MD (July 10-12); was interviewed by William Weir of the Hartford Courant and participated on their webchat on insect and tick repellents (July 14); with **DR. SHARON M. DOUGLAS**, **DR. THEODORE G. ANDREADIS**, and **MR. MICHAEL P. LAST**, met with architects from FLAD on planning for the Jenkins-Waggoner Laboratory renovations (July 20); and with **DR. SHARON M. DOUGLAS**, met with architects from FLAD on planning for the Jenkins-Waggoner Laboratory renovations (July 27).



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DR. KIMBERLY A. STONER, with **DR. BRIAN D. EITZER**, hosted Dr. Thomas Steeger of the Environmental Fate and Effects Division of the Environmental Protection Agency and Thomas Moriarty, risk manager in the Office of Pesticide Programs at EPA and chair of EPA's Pollinator Protection Team. The visitors from EPA came to discuss current and planned research on pesticides and pollinators and how the EPA can use Experiment Station research in making decisions about pesticide use and labeling (July 6-7); led a workshop in the field and a discussion of Insects on the Farm at Boulder Knoll, including presenting data on the 50 species of bees caught in bee traps at Boulder Knoll Farm in 2009 (12 attendees) (July 16); hosted Roberta Glatz, a visiting researcher on squash bees, and visited Fort Hill Farm in New Milford and Riverbank Farm in Roxbury looking for squash bee nesting sites (July 25); and made a presentation on "Bees and pollination" and led a workshop collecting bees on the wildflower plantings at the Audubon Center in Greenwich (36 adult and 6 youth attendees) (July 30).

ENVIRONMENTAL SCIENCE

DR. THEODORE ANDREADIS was interviewed about the first isolation of West Nile virus this summer from mosquitoes collected in Bridgeport by Jeevan Vittal, Fox 61 News and Matthew Kozar New 12 Norwalk (July 1); was interviewed about mosquitoes and West Nile virus by Deborah Boxtie, NBC 30; was interviewed about the isolation of Jamestown Canyon virus and West Nile virus from mosquitoes this year by Nancy Burton, The Patch (July 18); was interviewed about the isolation of West Nile virus from mosquitoes collected in Greenwich and Stamford by Marc Sims, Connecticut Public Radio, (July 27); was interviewed about the mosquito and arbovirus surveillance program for the 2011 season, and the abundance of early spring mosquitoes on West Nile virus by Brigitte Ruthman Waterbury Republican American (July 27); was interviewed about the build-up of West Nile virus in the state by Dan Kane WFSB TV3 (July 28); and was interviewed about West Nile virus activity in Stamford by Anthony Buzzeo, The Stamford Daily (July 28).

MR. GREGORY BUGBEE spoke at the annual meeting of the Coventry Lake Association on the results of the CAES IAPP survey of Coventry Lake (50 attendees) (July 14).

DR. GOUDARZ MOLAEI hosted Jenna Hernandez a student from Sacred Heart Academy who completed her summer internship in his laboratory.

MR. JOHN SHEPARD was interviewed about Jamestown Canyon virus isolated from mosquitoes in North Haven by Ben Lasman from North Haven Patch (July 14).

MR. MICHAEL THOMAS participated in a botanical survey of Bell Cedar Swamp in North Stonington and, along with **DR. GOUDARZ MOLAEI** discussed ongoing research on the ecology and epidemiology of Eastern Equine Encephalitis virus with members of the Connecticut Botanical Society, Avalonia Land Conservancy, and Stonington Land Trust (13 attendees) (July 9); and co-lead the Farmington Valley butterfly count sponsored by the North American Butterfly Association (10 attendees) (July 23).

DR. CHARLES VOSSBRINCK met with Jon Panciera the QA Manager of Sligan Plastics Corporation, Deep River, Connecticut which makes bottles for use in the medical industry for compounds such as polyethylene glycol. A shipment was rejected when a single tenebrionid beetle, *Alobates pennsylvanica*. Possible means of monitoring insects at the plant and preventing this contamination were discussed on (July 26).

FORESTRY AND HORTICULTURE

DR. JEFFREY WARD visited Pasquariello property in Rivertown for potential as a preserve for Audubon Connecticut (12 attendees) (July 9); along with **DR. SCOTT C. WILLIAMS**, hosted a meeting of the Connecticut Urban Forest Council at the station (July 14); visited sites in



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Woodbury infested with *Phyllostachys aurea* with Karyl Rickel (July 15); interviewed about sycamores by John Burgeson of the Connecticut Post (July 15); visited Veteran's Park in Bridgeport to advise Steve Hladun and others about invasive control on a new Frisbee golf course (3 attendees) (July 20); invited guest on WTIC AM-1080 radio talk show "Garden talk" to offer advice on tree care (30,000 listeners) (July 23); along with **DR. SCOTT C. WILLIAMS**, discussed invasive control with James Wolf at in property in Coventry (July 27); was interviewed about growing subtropical plants by Carrie MacMillan of the Waterbury Republican American (July 29); spoke on invasive plant control for Vermont NOFA in Brattleboro, VT (7 attendees) (July 30); and advised Green River Association on invasive control in Guilford, VT (2 attendees) (July 31).

DR. ABIGAIL MAYNARD hosted a delegation of government officials from China at Lockwood Farm (19 adults) (July 8); reported on Station activities at a quarterly meeting of the Council on Soil and Water Conservation (15 adults) (July 21); and spoke about the New Crops Program on the radio show Garden Talk on 1080 AM (July 23).

DR. WILLIAM NAIL presented a poster "Rootstock Influence on Vine Performance and Fruit Quality of Red Bordeaux Cultivars in Connecticut" at the American Society of Enology and Viticulture- Eastern Section meeting in Baltimore, MD (July 11-14); was re-elected Secretary of the American Society of Enology and Viticulture - Eastern Section (2011-2013) (July 13); participated in three Board of Directors meetings (July 10-14); and participated in a meeting of PIs for the SCRI project "Improved grape and wine quality in a challenging environment: An eastern US model for sustainability and economic vitality" (July 14).

JOSEPH P. BARSKY met with Dr. Alex Felson and staff (Yale University) to provide plant identification expertise for the PlaNYC Reforestation Initiative at Kissena Park, Flushing, NY (3 attendees) (July 26).

PLANT PATHOLOGY AND ECOLOGY

DR. SANDRA L. ANAGNOSTAKIS gave an invited talk titled "Diseases of butternuts" at the Schatz Tree Genetics Colloquium in Mont Alto, PA (80 adult attendees) (July 10-13); gave two talks titled "History of chestnut breeding in the U.S." and "Diseases of butternuts" at the Northern Nut Growers Association Annual Meeting held in Logan, Utah (100 adult attendees) (July 16-20); and talked about her chestnut research on Len & Lisa's "Garden Talk Show" on WTIC (July 23).

DR. SHARON M. DOUGLAS gave a presentation titled "Current diseases of Christmas trees" at the twilight meeting of the Connecticut Christmas Tree Growers Association at the Valley Lab in Windsor (50 adult attendees) (July 19); participated in, answered questions about tree diseases, and organized the summer meeting of the Connecticut Tree Protective Association held at the Farmington Club in Farmington (561 adults and 36 youths attended) (July 21); was interviewed about the impact of high temperatures and drought on plants and plant diseases by Bill Weir of the Hartford Courant (July 22); and represented the Station and answered questions about Plant Science Day and plant diseases on Len & Lisa's "Garden Talk Show" on WTIC (July 23).

DR. WADE H. ELMER was visited by Dr. Yixuan Zhang from China who is a visiting scientist at Yale (July 6); an article by **DR. WADE ELMER** and **DR. JOSEPH J. PIGNATELLO** titled "Effect of Biochar Amendments on Mycorrhizal Associations and Fusarium Crown and Root Rot of Asparagus in Replant Soils" was awarded the *Plant Disease* Journal Editor's Pick for the month of July (July 29).

DR. FRANCIS J. FERRANDINO gave a talk describing the Southern New England powdery mildew modeling project at a twilight meeting of the Massachusetts Farm and Winery Growers Association (MFWGA) held at Coastal Vineyards in South Dartmouth, MA (18 adult attendees) (July 14).

DR. YONGHAO LI assisted with the CAES booth and answered questions about tree diseases at the CTPA summer meeting held at the Farmington Club in Farmington (561 adults and 36



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youths attended) (July 21).

DR. ROBERT E. MARRA submitted a \$579,566 National Science Foundation grant proposal as the lead PI for a project titled "Collaborative Research: Internal decay and carbon loss in living trees of northern hardwood forests." The co-PI is Dr. Jingfeng Xiao of the Complex Systems Research Center at the University of New Hampshire (July 8); and assisted with the CAES booth and answered questions about tree diseases at the CTPA summer meeting held at the Farmington Club in Farmington (561 adults and 36 youths attended) (July 21).

VALLEY LABORATORY

DR. JOHN AHRENS spoke on The Tree Improvement Project at the Conn. Christmas Tree Growers Assoc. twilight meeting at the Valley Lab in Windsor (50 attendees) (July 19).

DR. RICHARD COWLES presented "Managing armored scales in Christmas trees" and helped with the insect and mite portion of a walking tour for the "Conifer Pests ID & Control Workshop" hosted by The Hudson Valley Commercial Horticulture Education Program of Cornell Cooperative Extension, Milton, NY (32 attendees) (July 12); discussed "Root feeders in strawberries and strawberry sap beetles" to a UConn twilight growers' IPM meeting, South Windsor, (50 attendees) (July 14); talked about "Insect management on Christmas trees" at the CT Christmas Tree Growers' Association meeting at the Valley Lab (40 attendees) (July 19); gave two presentations: "Systemic insecticides for trees and shrubs" and "Insecticide mode of action, resistance management, and IPM" to the MA Association of Lawn Care Professionals, Boyleston, MA (45 attendees) (July 28); and provided an overview of progress on the Fir Genetic Improvement project, Valley Lab (5 attendees) (July 29).

DR. JAMES A. LAMONDIA toured research plots at the Valley Lab with Greg Hannig of Dupont (July 18); was interviewed about the effect of the high heat conditions on the tobacco crop by Aaron Kupec of WTIC News (July 22); was interviewed about blue mold and the progress of the tobacco crop by Dana Whalen of WTIC News (July 22); was interviewed by Professor Adam Sweeting of Boston University about the cultural implications of climate change in New England, in regard to the cultural history of tobacco production (July 28); and was interviewed by Julie Simmons Harrison of WFSB's Better CT about the native plant, educational, and Connecticut introductions gardens at the Valley Laboratory (July 28).

DR. TODD L. MERVOSH organized the meeting and spoke about "Herbicide experiment: mesotrione" at the Conn. Christmas Tree Growers Assoc. twilight meeting at the Valley Lab in Windsor (50 attendees) (July 19); and hosted the Directors of the Suffield Land Conservancy for a farm tour and board meeting at the Valley Lab (7 attendees) (July 28).



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JOURNAL ARTICLES APPROVED JULY 2011

Anderson, John F., Andrew J. Main, G. Cheng, **Francis S. Ferrandino**, and E. Fikrig. Horizontal and Vertical Transmission of West Nile Virus Genotype NY99 by *Culex salinarius* and Genotypes NY99 and WN02 by *Culex tarsalis*. American Journal of Tropical Medicine & Hygiene

Andreadis, Theodore, A. V. Simakova, **Charles R. Vossbrinck**, John J. Shepard, and Y. A. Urchenko. Ultrastructural characterization and comparative phylogenetic analysis of new Microsporida from Siberian mosquitoes: Evidence for coevolution and host switching. Journal of Invertebrate Pathology

Grebel, J. E., **Joseph J. Pignatello**, W. A. Mitch. Sorbic acid as a quantitative probe for the formation, scavenging and steady-state concentrations of the triplet-excited state of organic compounds. Water Research

Grebel, J. E., **Joseph J. Pignatello**, and W. A. Mitch. Impact of halide ions on natural organic matter-sensitized photolysis of 17 β -Estradiol and on singlet oxygen concentration in saline waters. Environmental Science and Technology

Krupke, Hunt, **Brian D. Eitzer**, Andino, Given. Honey bees living near cornfields are exposed to pesticides. Science

Li, De-Wei. Microscopic Methods for Analytical Studies of Fungi. Laboratory Protocols in Fungal Biology

Schneckenburger, Tatjana, Charisma Lattao, **Joseph J. Pignatello**, G. E. Schaumann, S. Thiele-Bruhn, X. Cao, and J. Mao. Preparation and Characterization of Humic Acid Cross-linked with Organic Bridging Groups. Organic Geochemistry

Teixido, M., **Joseph J. Pignatello**, J. L. Beltran, M. Granados, and J. Peccia. Environmental Science and Technology

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*Putting Science to work
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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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