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## THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION

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

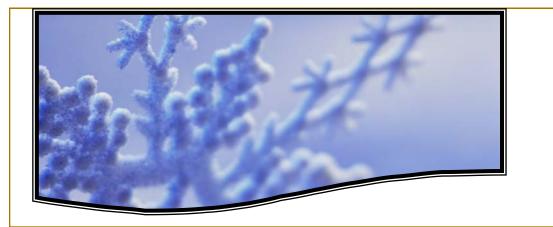
The mission of The Connecticut Agricultural Experiment Station is to develop, advance, and disseminate scientific knowledge, improve agricultural productivity and environmental quality, protect plants, and enhance human health and well-being through research for the benefit of Connecticut residents and 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** Participated in an Invasive Plants Council Meeting in Hartford (November 13).

#### ANALYTICAL CHEMISTRY

DR. JASON C. WHITE was invited to join the Scientific Advisory Board of Environmental Science and Technology (November 1); participated with DR. CHRISTINA ROBB and MR. CRAIG MUSANTE in an FDA FERN phone call to plan future activities on the Agilent 7700x ICP-MS (November 2); attended the first annual meeting of the Sustainable Nanotechnology Organization (SNO) in Arlington, VA and gave a lecture entitled "Nanomaterial interactions with agricultural crops" (40 attendees) (November 4-6); participated with DR. BRIAN EITZER, DR. WALTER KROL, MS. KITTIPATH PRAPAYOTIN-RIVEROS, DR. CHRISTINA ROBB, MS. TERRI ARSENAULT, MR. CRAIG MUSANTE, MR. WILLIAM BERGER in an FDA FERN Chemistry Cooperative Agreement conference call (November 8); welcomed Dr. Helmi Hamdi of the Water Research and Technology Center in Tunisia to the Department as part of a five-month Fulbright Scholarship focused on nanomaterial toxicity to plants (November 13); participated with DR. BRIAN EITZER, DR. WALTER KROL, MS. KITTIPATH PRAPAYO-TIN-RIVEROS, DR. CHRISTINA ROBB, MS. TERRI ARSENAULT, MR. JOHN RANCI-ATO, MR. WILLIAM BERGER, MR. CRAIG MUSANTE, AND MR. JOSEPH HAW-THORNE in a monthly FDA ISO Accreditation Cooperative Agreement Program (CAP) conference call (November 15); gave an invited lecture at the Stockbridge School of Agriculture within the University of Massachusetts entitled "Nanomaterial interactions with agricultural crops" (30 attendees) (November 19); along with DR. BRIAN EITZER, DR. WALTER KROL, MS. KIT-TIPATH PRAPAYOTIN-RIVEROS, DR. CHRISTINA ROBB, MS. TERRI ARSENAULT, MR. JOHN RANCIATO, MR. WILLIAM BERGER, MR. CRAIG MUSANTE, AND MR. JOSEPH HAWTHORNE hosted Special Agent Daniel K. Coleman, the new FBI Weapons of Mass Destruction Coordinator in New Haven, for a tour of the laboratories and Department programs related to chemical terrorism and adulteration of food (November 28); gave an invited lecture at the University of Texas-El Paso Department of Chemistry entitled "Nanomaterial interactions with agricultural crops" (50 attendees) (November 30); was interviewed for the radio program "Science Studio" by Dr. Keith Pannell and Dr. Russ Chianelli of the University of Texas-El Paso (November 30); and served as a Dissertation Committee member on the Ph.D. proposal defense of Ms. Sanghamitra Majumdar of the University of Texas-El Paso Department of Chemistry (November 30).

**DR. BRIAN EITZER** participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Rocky Hill (November 5) and participated in a North American Pesticide Residue Workshop organizing committee phone call (November 8).

**DR.** CHRISTINA ROBB attended MassHunter training for the new Agilent 7700x ICP-MS (November 1); received eLEXNET Data Submission training (November 5th); and attended the 2012Eastern Analytical Symposium and annual board meeting in Somerset NJ (November 11th to 14th ).



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### **BIOCHEMISTRY AND GENETICS**

**DR. DOUGLAS W. DINGMAN** participated in the annual Southern New England Beekeepers Assembly (SNEBA) (East Lyme, CT) (November 10).

**DR. RICHARD B. PETERSON** attended the Nordic Photosynthesis Conference in Turku, Finland (September 11-14); presented a poster entitled "LHCB7 shifts the regulated response of photosystem II to excess excitation"; and conducted research on chlorophyll fluorescence characteristics in leaves of C3 and C4 species in the laboratory of Dr. Agu Laisk of the Institute of Cell and Molecular Biology at Tartu University in Tartu, Estonia (September 15-October 27).

**DR. NEIL P. SCHULTES** and **DR. RICHARD PETERSON** performed and discussed photosynthesis experiments; **DR. NEIL MCHALE** discussed his research into leaf development (November 13, 15); **DR. NEIL SCHULTES** discussed the use of modern genetic techniques in studies of plant metabolism and **MS. MARY INMAN** gave an overview of the Plant Disease Office to twenty biology students from Southern Connecticut State University Plant Physiology class run by Dr. Rebecca Silady (November 13 & 15).

#### ENTOMOLOGY

**MS. KATHERINE DUGAS** attended an appreciation day for Forest Pest Volunteers at the Valley Laboraotry in Windsor (November 8) and staffed an information booth about emerald ash borer and Asian longhorned beetle at the annual CT Association of Conservation and Inland Wetland Commissions winter meeting held in Meriden (November 17).

**MS. ROSE T. HISKES,** with **MS. KATHERINE DUGAS,** hosted a Forest Pest Volunteer Appreciation Night at the Valley Laboratory in Windsor (November 8).

**DR. CHRIS T. MAIER** presented a poster titled "Apparent Asynchronous Emergences of Brood II of Periodical Cicadas, *Magicicada* spp. (Hemiptera: Cicadidae), in Connecticut and Eastern New York," while attending the Annual Meeting of the Entomological Society of America in Knoxville, TN (November 13); displayed Connecticut specimens of the brown marmorated and other stink bugs, extension material on how to separate the brown marmorated stink bug from other brown stink bugs, and a graph of the annual number of reports of the brown marmorated stink bug since its discovery in Connecticut in 2008 at a meeting of the Connecticut Entomological Society at Yale University (25 attendees) (November 16).

**DR. GALE E. RIDGE** spoke to Yale New Haven Hospital home caregivers for new mothers about self-protection and mother and baby protection in low income housing against bed bugs (25 attendees) (November 8); spoke about bed bugs to the staff of HART United in North Haven, a non-profit organization that serves citizens with developmental disabilities in group homes throughout Connecticut (20 attendees) (November 15); gave a talk on bed bugs to the Northwest Mental Health Network staff in Torrington (35 attendees) (November 15); as part of the Connecticut State Library response to the discovery of bed bugs in Connecticut, libraries invited her to speak about the biology, history, and management of the insect in the library system. She spoke in the main hall of the Connecticut State Library in Hartford, a beautiful space with the portraits of the governors of Connecticut hanging on the walls (70 attendees) (November 19). She has been retained as an advisor to the state library system as they develop protocols for managing bed bugs in inter-library loan transportation and library buildings. Dr. Ridge spoke about bed bug biology, their behavior and how as residents they should communicate and cooperate in the management of the insect to the senior citizen residents of Woodview in East Haven (135 attendees) (November 21).



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Dr. Gale Ridge speaking at the Connecticut State Library, Hartford, CT

**DR. CLAIRE E. RUTLEDGE** gave a talk titled "Emerald ash borer and *Cerceris fumipennis:* Why wasps are our friends" to the Federated Garden Clubs of America Ecology Course at Kellogg Environmental Center in Derby (20 adult attendees) (November 8); gave a talk titled "Emerald ash borer in Connecticut" to the Pomperaug Valley Garden Club in Woodbury (30 adult attendees) (November 13); gave a talk titled "Emerald ash borer in Connecticut" to the Naugatuck Audubon Society at Kellogg Environmental Center in Derby (18 adult attendees) (November 13); and taught the "Tree Conditions Laboratory" class for the Connecticut Tree Protective Association in North Haven (45 adult attendees) (November 28).

**DR. VICTORIA L. SMITH** participated in a meeting of the National Plant Board Board of Directors and the USDA-APHIS Plant Protection and Quarantine Leadership Team, held at the Center for Plant Health Science and Technology Headquarters in Raleigh, NC, with discussion on *Phytophthora ramorum*, chrysanthemum white rust, quarantine and budget issues, and plant health policy (20 participants) (November 5-8).

DR. KIRBY C. STAFFORD III presided over a public hearing on proposed firewood regulations in Hartford (9 attendees) (November 2); represented the Experiment Station at the annual meeting luncheon of the Working Lands Alliance in Hartford (November 14); represented the Experiment Station at the Rule of Law Conference in Hartford (November 16); represented the Experiment Station at the annual meeting luncheon of the Connecticut Farm Bureau in Waterbury (November 16); attended a meeting of the Connecticut Entomological Society in New Haven (November 16); with **MR. GREGORY BUGBEE** and Dr. John Silander, University of Connecticut, provided a workshop on "Invasive Species, Climate Change and Other Factors" at the annual meeting of the Connecticut Association of Conservation and Inland Wetlands Commissions in Meriden, speaking specifically on insect pests, particularly the emerald ash borer and Asian longhorned beetle, and climate change impacts on the hemlock woolly adelgid and ticks (35 attendees) (November 17); was interviewed about beekeeping by Lisa Lenkiewicz of the West Hartford Patch (November 19); hosted by the Redding Department of Health, DRS. KIRBY C. STAF-FORD III and DR. SCOTT C. WILLIAMS presented the CDC tick management project to residents of select neighborhoods in Redding at the Redding Community Center (35 attendees) (November 28); and spoke on the emerald ash borer (EAB) and related regulations at the Department of Energy and Environmental Protection (DEEP) as part of EAB training for DEEP personnel (25 attendees) (November 30).

**DR. KIMBERLY A. STONER** visited the new farm of Kam Lasater in Hamden and gave him advice, referrals, and a list of resources (November 9); spoke on pollination and bees at the Flanders Nature Center in Woodbury (12 attendees) (November 13); participated in the Urban Agriculture and Economic Development Working Group of the New Haven Food Policy Council (35 people participated in this working group, making plans to increase the availability of healthy



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### **ENVIRONMENTAL SCIENCES**

**DR. THEODORE ANDREADIS** attended the 61<sup>st</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene held in Atlanta, GA and presented a poster display entitled, *Laboratory Transmission and Characterization of a Novel Microsporidian Parasite from the Invasive Rock Pool Mosquito, Ochlerotatus japonicus* (November 11-15).

**MR. GREGORY BUGBEE** was interviewed by Will Roland of the Connecticut Gardener Magazine on about salt damage to plants after hurricane Sandy (November 5); presented a seminar entitled *Connecticut's Invasive Aquatic Plants: Searching for Solutions* at Western Connecticut State University in Danbury (approximately 40 attendees) (November 8); and spoke on *Connecticut's Invasive Aquatic Plants and Climate Change* at the annual meeting of The Connecticut Association of Conservation and Inland Wetland Commissions, held Middletown (approximately 40 attendees) (November 17).

**MR. JOHN SHEPARD** attended an Executive Board Meeting of the Northeastern Mosquito Control Association in Mystic, CT (12 attendees) (November 9) and presented the invited talk, *West Nile Virus and Eastern Equine Encephalitis in Connecticut, 2012* at the Annual Meeting of the Connecticut Environmental Council in Southington, CT (approx. 150 attendees) (November 20).

#### FORESTRY AND HORTICULTURE

**DR. JEFFREY WARD** participated in a meeting of the Audubon Connecticut Science Committee in Southbury (November 1); met with Kim Dietrich, Dietrich Gardens-Woodbury, to discuss bamboo control, Woodbury (November 9); met with Gerald Stomski, First Selectman - Town of Woodbury, to discuss invasive control and roadside tree care (November 9); met with Terry Jones, Jones Family Farm, to discuss right-of-way management (November 9); met with Doug Pfenniger, Winchester Land Trust, to discuss forest management (November 19); met with Chris Herold, The Tree Company, to advise on care of the state champion pepperridge in Madison (November 19); lectured on "A short history of the Connecticut forest" for the Dept. of Biology 2012-13 seminar series at Western Connecticut State University, Danbury (65 attendees) (November 28); interviewed by Bob Miller of the Danbury News Times about changes in forest composition (November 28); and interviewed by John Burgeson of the Connecticut Post about running bamboo growth and control (November 29).

**MS. JOAN BRAVO** attended and assisted with administrative duties at the annual meeting of NE-1020: Multi-State Evaluation of Winegrape Cultivars and Clones in Mystic (November 14-15).

**DR. ABIGAIL MAYNARD** assisted in planning a Lower School garden for Hamden Hall Country Day School (4 teachers) (November 15).

**DR. WILLIAM NAIL** hosted the Eastern Viticulture Workshop in Mystic (59 attendees) (November 13); hosted the annual meeting of NE-1020: Multi-State Evaluation of Winegrape Cultivars and Clones in Mystic (November 14-15); hosted a tour of NE-1020 participants to Sharpe Hill Vineyards in Pomfret, Priam Vineyards in Colchester, and Stonington Vineyards in Stonington (November 15); participated in a meeting of PIs and stakeholders for the USDA/NIFA SCRI project: Improved Grape and Wine Quality in a Challenging Environment: An Eastern US Model for Sustainability and Economic Vitality in Mystic (November 16); and was profiled in the November issue of Northern Grape News (November 30).

**DR. SCOTT WILLIAMS** gave invited lecture about deer capture techniques to students in the Introduction to Wildlife Management class in the Department of Natural Resources and the Environment at the University of Connecticut, Storrs (18 undergraduates) (November 1); participated in an executive board meeting of the Connecticut Urban Forest Council, Southbury (November 9); and participated in an executive board meeting of the Connecticut Urban Forest Council, Middlefield (November 27).



## PLANT PATHOLOGY AND ECOLOGY

**DR. SANDRA L. ANAGNOSTAKIS** and Ms. Cornelia Pinchot met with a group of land owners in Washington, CT, who are interested in participating in test plantings of advanced breeding material of timber chestnut trees (8 attendees) (November 20).

**DR. SHARON M. DOUGLAS** organized and facilitated a CTPA Workshop titled "The Soil Food Web—Healthy Soils for Healthy Trees," featuring Dr. Elaine Ingham of the Rodale Institute, at the Farmington Club (54 attendees) (November 6).

**DR. WADE H. ELMER** gave an oral presentation titled "The incidence of *Fusarium palustre*, a new endophyte/pathogen of *Spartina alterniflora*, in Chinese salt marshes" (70 attendees) and a poster presentation titled "Comparison of abiotic and biotic stressors on herbivory of *Spartina* spp. by marsh crabs in North and South American salt marshes" at the Coastal Estuarine Research Foundation meeting in Mar del Plata, Argentina (November 9-15).

**MS. MARY K. INMAN** gave the talk "Maintaining healthy perennials" to the Long Hill Garden Club at the Trumbull Public Library (56 adult attendees) (November 26).

**DR. YONGHAO LI** gave a talk titled "Plant disease diagnostics" for students, faculty, and staff at Northeast Agricultural University in Harbin, China (60 attendees) (November 12); gave a talk titled "Anthracnose of *Miscanthus sinensis* caused by *Colletotrichum graminicola*" for students and faculty at Northeast Forest University in Harbin, China (18 attendees) (November 14); gave a talk titled "Plant disease diagnostics and pathogen detection" for researchers at Heilongjiang Academy of Agricultural Science in Harbin, China (25 attendees) (November 15); staffed the hands-on table for tree diseases for Arboriculture 101 in North Haven (30 attendees) (November 28).



**DR. ROBERT E. MARRA** attended the CTPA Workshop titled "The Soil Food Web—Healthy Soils for Healthy Trees," presented by Dr. Elaine Ingham, at the Farmington Club (November 6).

#### VALLEY LABORATORY

**DR. RICHARD COWLES** spoke on ""CT report on spotted wing drosophila," and "Research Update," SWD meeting for extension, research, and grower representatives, Geneva, NY, (November 1); "Spotted wing drosophila," University of RI Cooperative Extension grower's meeting (30 attendees) (November 16); and "Facts and Fallacies of Organics," CT Environment Council, (150 attendees) (November 20).

**DR. JAMES A. LAMONDIA** was interviewed about the history and culture of shade and broadleaf tobacco and the Station's role in the history of tobacco in Connecticut by author Mark Sullivan (November 9).

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#### **GRANT AWARDS DECEMBER 2012**

**DR. JAMES A. LAMONDIA** was notified that his grant proposal for management of boxwood blight in Connecticut was selected for funding by the Horticultural Research Institute for \$15,000.

**DR. RICHARD COWLES** received a \$13,000 grant from the North American Maple Syrup Producers Foundation, with Dr. Anthony Lagalante (Villanova University) and Kyle Lombard, NH Dept. of Forestry and Natural Resources, to address concerns of imidacloprid residues in trees treated for Asian longhorned beetle quarantine programs.

#### JOURNAL ARTICLES APPROVED DECEMBER 2012

Andreadis, Theodore G. and Philip M. Armstrong. 2012: A record year for West Nile virus in Connecticut. Connecticut Weekly Agricultural Report

Armstrong, Philip M. and Theodore G. Andreadis. Eastern equine encephalitis: an old enemy but new threat. New England Journal of Medicine

Douglas, Sharon M. Common Diseases of Crabapple. CAES Fact Sheet (November 2012-rev.)

**Douglas, Sharon M.** and **Mary K. Inman**. Seed Germination and Purity Analysis 2012. CAES Technical Bulletin

Li, Yonghao. Powdery Mildew of Curcurbits. CAES Fact Sheet

Li, Yonghao. Powdery Mildew of Dogwood. CAES Fact Sheet

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#### The Connecticut Agricultural Experiment Station, Station News, Volume 2 Issue 12, December 2012

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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

#### THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION

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