

STATION NEWS

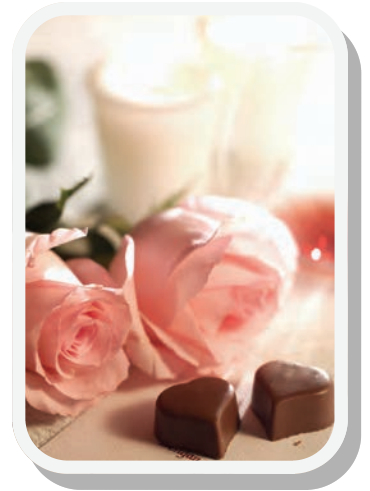
THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION



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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 gave an update report on research and outreach activities at the Connecticut Tree Protective Association meeting in Southington January 19, 2012

ANALYTICAL CHEMISTRY

DR. JASON C. WHITE participated in an FDA FERN conference call on an ongoing surveillance exercise for arsenic in fruit juices (January 4), participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Hartford (January 9), participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (January 12) and participated in a conference call on ISO/IEC 17025:2005 accreditation with Hitelia Castellanos of the US FDA (January 30).

DR. BRIAN EITZER participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (January 12) and participated in a conference call on ISO/IEC 17025:2005 accreditation with Hitelia Castellanos of the US FDA (January 30).

DR. WALTER KROL participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (January 12) and participated in a conference call on ISO/IEC 17025:2005 accreditation with Hitelia Castellanos of the US FDA (January 30).

DR. CHRISTINA ROBB participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (January 12) and participated in a conference call on ISO/IEC 17025:2005 accreditation with Hitelia Castellanos of the US FDA (January 30).

THE ANALYTICAL CHEMISTRY DEPARTMENT participated in a two-day on-site ISO/IEC 17025:2005 Accreditation training course which was given by the American Association for Laboratory Accreditation (A2LA). The US Food and Drug Administration (FDA) is providing the Department with funding to achieve ISO accreditation for our pesticide residues in food program.

BIOCHEMISTRY AND GENETICS

DR. NEIL P. SCHULTES and **DR. DOUGLAS DINGMAN** presented a lecture for Station staff on Introduction to Genomics in Jones Auditorium (January 23) and presented a lecture along with **DR. DOUGLAS DINGMAN** for Station staff on Next Generation DNA Sequencing Technologies in Jones Auditorium (January 30).

We have learned of the recent death of David A. Walker, F.R.S., 83, one of the world's most distinguished scientists in the field of photosynthesis research who had close professional and personal ties to the Experiment Station. On retirement, he was Director of the Robert Hill Institute for Photosynthesis Research, University of Sheffield, England. In 1962 he worked with Israel Zelitch in the Department of Biochemistry for 6 months on the control of the opening and closing of leaf stomata, and in 1989 he was a guest speaker as part of the Centennial Symposium celebration held for the Department. In 1987 Dr. Richard Peterson spent a sabbatical leave in Walker's group in Sheffield doing research on leaf fluorescence associated with photosynthesis. Walker was a prolific writer and lecturer and co-author of a highly respected book "C3,C4: mechanisms,



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and cellular and environmental regulation, of photosynthesis” (1983). He received many honors including election as a Corresponding Member of the American Society of Plant Biologists. We have lost a great scientist and a close friend.

ENTOMOLOGY

MS. KATHERINE DUGAS staffed an information table about forest pests at the CNLA Winter Symposium in Manchester (January 4 and 5); staffed a CAES information table about forest pests at the CTPA Annual Meeting held at Aqua Turf in Plantsville (840 attendees) (January 19); staffed an information table about forest pests at the Northeast RV and Camping Show in Hartford (January 20); staffed an information table about forest pests and boxwood blight at the CGKA Winter Meeting in Cromwell (January 24).

MS. ROSE HISKES staffed a Forest Pest table at the Connecticut Nursery and Landscape Association winter meeting in Manchester (January 4-5); participated in a Connecticut Invasive Plant Working Group symposium planning committee meeting in Windsor (January 10); taught Ornamental and Turf Insect Pest Management to the Massachusetts Organic Landcare Course in Worcester, MA (40 students) (January 11); participated in a Citizen Volunteer Survey Project Webinar (January 18); staffed a Forest Pest and Question-and-Answer table at the Annual Meeting of the Connecticut Tree Protective Association held at Aqua Turf in Plantsville (840 attendees) (January 19); collaborated with Ken Mosher, state computer consultant, on the Pesticide Guide Toward Integrated Pest Management for Arborists and Nursery Growers in East Hartford (January 20); staffed a Forest Pest table at the Connecticut RV and Camping Show at the Connecticut Convention Center in Hartford (January 22); gave a talk on “Butterfly Gardening” to the East Hartford Garden Club in East Hartford (18 attendees) (January 23); staffed a Forest Pest table at the CGKA Winter Meeting in Cromwell (January 24); and participated in a Forest Pest Project conference call (January 25).

DR. CHRIS MAIER was interviewed by Robert Pollack for a brief article on the brown marmorated stink bug to appear in the Bulletin of the Experiment Station Associates (January 6); attended the 23rd USDA Interagency Research Forum on Invasive Species in Annapolis, MD (January 10-13); attended the Annual Meeting of the Connecticut Tree Protective Association in Southington (January 19); displayed new entomological literature on moths, butterflies, and their conservation at a meeting of the Connecticut Entomological Society in Jones Auditorium (January 20).

DR. GALE E. RIDGE presented two talks on bed bug behavior and community management at Luther Ridge in Middletown (200 attendees) (December 16); met with Danbury city officials and western Connecticut directors of health regarding managing bed bugs in schools and the public response (15 attendees) (January 4); presented a talk at a public outreach program at Danbury High School (75 attendees) (January 4); spoke at Greenwich High School about bed bugs in schools (30 attendees) and was part of a panel of officials answering questions. During this forum, she was interviewed by Channel 12 (January 25); ran a training program for the Hartford Board of Education on non-chemical treatments for bed bugs in schools (January 27); with members of the CCABB board, met with Representative Andres Ayala in Hartford concerning the Landlord/Tenant Bed Bug Bill (7 attendees) (January 30).

DR. CLAIRE E. RUTLEDGE staffed a CAES information table and answered questions on Emerald ash borer and *Cerceris fumipennis* at the CTPA Annual Meeting held at Aqua Turf in Plantsville (840 attendees) (January 19).

DR. VICTORIA L. SMITH participated in the CT Tree Protective Association winter meeting, with a table on boxwood blight (840 participants) (January 19); participated in a workshop titled “Chrysanthemum White Rust: Exploring the Issues,” held at the USDA Center at Riverside in Riverdale, MD (approx. 60 participants) (January 31-February 2).

DR. KIRBY C. STAFFORD III participated as Administrative Advisor at a meeting of the multi-state collaborative potato breeding project in Orlando, FL (NE-1031) (16 attendees)



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(January 6-7); with **DR. SHARON M. DOUGLAS**, participated in a meeting with architects from FLAD on the plans for the Jenkins-Waggoner Laboratory (January 11); participated in a legislative meeting of CT agricultural organizations at the CT Farm Bureau in Windsor (January 19); with **DR. LOUIS MAGNARELLI, MR. MICHAEL LAST, and DR. SHARON DOUGLAS**, participated in a meeting with the architect and interior designer from FLAD on the plans for the Jenkins-Waggoner Laboratory (January 27); with **DR. LOUIS MAGNARELLI, DR. VICTORIA SMITH, MR. PETER TRENCHARD, MR. STEPHEN SANDREY, and DR. SHARON DOUGLAS**, participated in a meeting with nursery industry representatives about boxwood blight (January 30); and was interviewed about ticks and Lyme disease by Abram Katz (January 30).

DR. KIMBERLY A. STONER participated in the annual meeting of the Connecticut Vegetable and Small Fruit Growers at the Tolland Extension Center and made an announcement about the research project on pollination of squash and pumpkins and talked with growers about participating in the project (January 19).

MS. TRACY ZARRILLO was credited as editor for the Discover Life Bee Genera Guide, http://www.discoverlife.org/mp/20q?guide=Bee_genera. She continues to volunteer her services to further efforts to make bee taxonomy more accessible to researchers. She is currently working on this editing project, as well as doing photo coordination for the various species guides.

ENVIRONMENTAL SCIENCES

MR. GREGORY BUGBEE and MS. JORDAN GIBBONS presented the results of the 2011 aquatic plant survey of Lake Quassapaug and spoke on weed management options at a town meeting held at the Middlebury Public Library (approximately 60 people attended) (January 31).

MR. JOHN SHEPARD participated a Board of Directors meeting of the Northeastern Mosquito Control Association in Northboro, MA (12 attendees) (January 29).

FORESTRY AND HORTICULTURE

DR. JEFFREY WARD visited Chris Sagnella to assist with tree identification for his classes at Alice Peck School in Hamden (January 4); interviewed replacement choices for storm damaged trees by Debbie Roberts of the Connecticut Gardener (January 12); participated in the 90th Annual Meeting of the Connecticut Tree Protective Association in Plainville (January 19); interviewed about controlling invasive species by Sheila Foran of UConn Today (January 20); spoke on "Storms, trees and you" to the Fairfield Forestry Committee in Fairfield (26 attendees) (January 23); spoke on "Homeowner tree care" at the Middletown Regional Agricultural Science and Technology Center continuing education program (18 attendees) (January 24); visited Mike Johnson at Summer Hill Nursery in Madison to discuss growing bamboo (January 30); interviewed about effect of warm winter on trees by John Burgeson of the Connecticut Post (January 31).

DR. ABIGAIL MAYNARD spoke on Composting and Utilization of Compost to the Milford Garden Club (38 adults) (January 10); spoke on The Connecticut Agricultural Experiment Station's New Crops Program to the Connecticut Vegetable and Small Fruit Growers' Conference in Vernon (175 adults) (January 19).

DR. WILLIAM NAIL participated in a webinar for the SCRI Northern Grapes Project (220 attendees) (January 5); save a pruning demonstration and general viticulture workshop at Silverman's Farm in Easton (5 attendees) (January 11); participated in a national conference call meeting of the eXtension Viticulture Extension Educators Community of Practice (January 25).



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DR. SCOTT WILLIAMS gave invited lecture titled “The Ecological Perfect Storm: Deer Ticks in Japanese Barberry” hosted by The Menunkatuck Chapter of Audubon Connecticut at Blackstone Memorial Library, Branford, CT (57 attendees) (January 11); was interviewed by Sheila Foran of the UConn Daily Campus about the relationship between increased abundances of blacklegged ticks in Japanese barberry infestations (January 20); participated in an Executive Committee of the Connecticut Urban Forest Council conference call (January 24); gave invited comments on the East River Preserve management plan at the Town of Guilford Special Selectmen’s Meeting (100 attendees) (January 25).

J.P. BARSKY attended the Connecticut Tree Protective Association Annual Winter Meeting in Southington. (January 19); participated in the Agricultural Compliance Review for Lyman Hall High School, Wallingford (January 24).

PLANT PATHOLOGY AND ECOLOGY

DR. SANDRA L. ANAGNOSTAKIS judged the nut exhibit at the Pennsylvania Farm Show and was interviewed by local access TV about the process of evaluating nut samples (January 6); sampled American chestnut trees at Smith Middle School in Glastonbury while being filmed for a documentary on chestnut problems and solutions (January 19).

DR. SHARON M. DOUGLAS gave a presentation titled “Boxwood blight—A new threat to boxwood in the U.S.” at the CNLA/CGGA Winter Symposium held at Manchester Community College (140 attendees) (January 5); was interviewed about boxwood blight in Connecticut by Kathryn Boughton of the Litchfield County Times (January 10); was interviewed along with DR. ROBERT E. MARRA about boxwood blight and other exotic, introduced fungal pathogens by Susan Milius of Science News (January 17); participated in the Annual Meeting of the CTPA as a member of the CTPA Board of Directors and reported about the CTPA Education Committee’s activities at Aqua Turf in Plantsville. Attendance at this meeting exceeded previous records at 840 (January 19); gave a presentation on “Eco-friendly management of plant diseases” for the Danbury Garden Club (45 attendees) (January 20).

DR. WADE H. ELMER visited Greenwich High School and participated in Zheni Gusho’s class project on the effect of biochar on Verticillium wilt of eggplant under the guidance of Mr. Andrew Bramante (January 27).

DR. YONGHAO LI staffed the CAES Plant Pathology booth and answered questions about tree diseases at the Annual Meeting of the CTPA held at Aqua Turf in Plantsville (840 attendees) (January 19).

DR. ROBERT E. MARRA participated telephonically in a committee meeting in preparation for the annual meeting of the Mycological Society of America in New Haven in July (January 10); joined **DR. SHARON M. DOUGLAS** in a phone interview with Susan Milius, a writer from Science News, to discuss boxwood blight (January 17); attended the monthly meeting of the West Haven Tree Commission and discussed street tree selection criteria and continued issues with storm-damaged trees (January 17); staffed the CAES Plant Pathology booth and answered questions about tree diseases at the Annual Meeting of the CTPA held at Aqua Turf in Plantsville (840 attendees) (January 19).



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Station Staff celebrate the Chinese New Year.

VALLEY LABORATORY

DR. JOHN AHRENS presented a paper at the 66th Annual Meeting of the Northeastern Weed Science Society in Philadelphia, PA entitled "Tolerance of Conifers to Mesotrione Alone or Combined with Other Herbicides" by J. F. Ahrens and T. L. Mervosh and coauthored another paper with Dr. Mervosh entitled "Tolerances of Container-grown Ornamentals to Mesotrione, Dimethenamid-P and Pendimethalin plus Dimethenamid-P Applications (January 3-6).

DR. RICHARD COWLES discussed "Bed bug biology and management" to Connecticut Community Care, Inc., an organization with the mission to assist people to live at home Bristol, CT (40 attendees) (January 5); presented the talk "Spotted wing drosophila: Current and potential management methods" at the Massachusetts Vegetable and Small Fruit growers' meeting, Northampton, MA (100 attendees) (January 6); and a similar talk, "SWD IPM ASAP" at the Connecticut Vegetable and Small Fruit growers' conference, Vernon (150 attendees) (January 19); and visited with Greg Loeb in Ithaca, NY, to discuss spotted wing drosophila (January 20); and spoke on "Turf insect management, opportunities for managers," to the Connecticut Grounds Keepers' Association, Berlin, CT (300 attendees) (January 24).

DR. JAMES A. LAMONDIA was interviewed about shade and broadleaf tobacco culture and pesticide use by Steve Woodruff of the NRCS in Greensboro, NC (January 4); participated in a planning meeting of the Connecticut Agricultural Information Council (January 9); attended the 45th Tobacco Worker's Conference in Williamsburg VA (January 16 to 20) to present "Is *Peronospora tabacina* becoming less sensitive to dimethomorph fungicide?" and participate in a Tobacco Disease Council discussion of nematode diseases of tobacco; was interviewed about wrapper tobacco types grown in Connecticut, shade tobacco culture and diseases, and broadleaf tobacco culture and diseases for three segments of 'On the Farm' a radio program produced by Eddie Beasley of the University of Georgia Cooperative Extension System (January 18); and participated in a meeting between Station researchers and regulatory personnel and Connecticut nurserymen concerning boxwood blight (January 30).

DR. TODD L. MERVOSH was interviewed about potential invasiveness of bamboo species by Phyllis Swebilus of *New Haven Register* (December 19 and 22); presented research on "Tolerances of container-grown ornamentals to mesotrione, dimethenamid-P, and pendimethalin



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plus dimethenamid-P applications” (co-author: DR. JOHN F. AHRENS) (35 attendees) co-presented a talk “Approaches for swallow-wort control – deciding how to begin” with Nancy P. Cain (Cain Vegetation Management, Ontario, Canada) (45 attendees), and served as a judge of the student research poster contest at the annual meeting of the Northeastern Weed Science Society in Philadelphia, PA (January 4 - 6); participated in a symposium planning meeting for the Connecticut Invasive Plant Working Group at the Valley Laboratory (15 attendees) (January 10); taught a half-day training program (sponsored by DEEP) on vegetation management for people with right-of-way applicator licenses (45 attendees) in North Haven (January 12); and taught a program (sponsored by UNH Cooperative Extension) on weeds and weed management in rights-of-way (40 attendees) in Goffstown, NH (January 26).

JOURNAL ARTICLES APPROVED JANUARY 2012

Ahrens, John. Growing and Marketing Christmas Trees in Austria. The Real Tree Line, Newsletter CCTGA, 2012

Andreadis, Theodore G. The contribution of *Culex pipiens* complex mosquitoes to transmission and persistence of West Nile virus in North America. Journal of the American Mosquito Control Association

Cao, Xiaoyan, J. E. Birdwell, M. Chappell, Y. Li, **Joseph J. Pignatello**, and J. Mao. Characterization of oil shale, isolated kerogen, and post-pyrolysis residues using advanced ¹³C solid state nuclear magnetic resonance spectroscopy. American Association of Geologists Bulletin

Cao, Xiaoyan, **Joseph J. Pignatello**, Y. Li, **Charisma Lattao**, M. A. Chappell, N. Chen, L. F. Miller, and J. Mao. Characterization of wood chars produced at different temperatures using advanced ¹³C Solid-state NMR spectroscopic techniques. Environmental Science and Technology

Davis, R. E., Y. Zhao, E. L. Dally, I.-M. Lee, R. Jomantiene, and **Sharon M. Douglas.** ‘*Candidatus Phytoplasma pruni*’, a novel taxon associated with X-disease of stone fruits, *Prunus* spp.: multilocus characterization based on 16S rRNA, secY, and ribosomal protein genes. International Journal of Systematic and Evolutionary Microbiology

Elmer, Wade H. Using earthworms to improve soil health and suppress diseases. CAES Fact Sheet

Gegonis, M. A., **Scott C. Williams**, H. J. Kilpatrick, and A. M. LaBonte. Survival and dispersal of rehabilitated white-tailed deer fawns in Connecticut – Year 2 – ABSTRACT. 68th Annual Northeast Fish and Wildlife Conference

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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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