

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 participated in an Invasive Plants Council meeting in Hartford February 14; was interviewed by Phyllis Swebilius of the New Haven Register about bamboo February 15; and was interviewed by Vinti Singh of the Connecticut Post about the new strawberry cultivar and honey bees.

ANALYTICAL CHEMISTRY

DR. JASON C. WHITE attended the USDA NIFA Nanotechnology Grantees Annual Conference in Orlando Florida and gave a presentation entitled "Nanomaterial contamination of agricultural crops" (February 1-4)(25 attendees); participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Hartford (February 6); participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (February 9); participated in a FDA FERN Northeast Regional conference call (February 14); hosted Professor Jaco Vangronsveld, Dr. Nele Weyens, Wouter Sillen, and Nele Eevers from Hasselt University (Belgium) to plan and conduct collaborative experiments on nanotoxicology (February 16-17); hosted a principal investigator conference call for a USDA NIFA nanotechnology grant (February 28); and participated in an FDA FERN conference call on an ongoing surveillance exercise for arsenic in fruit juices (February 29).

DR. BRIAN EITZER attended the American Bee Research Conference; while at this meeting he also attended the annual PI meeting for The Coordinated Agricultural Program on Sustainable Solutions to the Problems of Managed Bees, and the PI meeting for NC1173 multi-state Hatch grant on Sustainable Solutions to Problems Affecting Bee Health" in Greenbelt Maryland (February 6 – 9); participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (February 9); participated in a FDA FERN Northeast Regional conference call (February 14); and participated in a FERN cCAP conference call on the use of the Ex-active LC/MS system for the monitoring of pesticides in produce (February 22).

DR. WALTER KROL participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (February 9); participated in a FDA FERN Northeast Regional conference call (February 14); and presided as Secretary at the New Haven Section American Chemical Society Executive Board Meeting (February 23).

DR. CHRISTINA ROBB participated in a FDA FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call (February 9); participated in a FDA FERN Northeast Regional conference call (February 14); and participated in an FDA FERN conference call on an ongoing surveillance exercise for arsenic in fruit juices (February 29).



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BIOCHEMISTRY AND GENETICS

DR. NEIL A. MCHALE presented a seminar to the Biology Department at Smith College, Northampton, MA titled "The Genetics and Evolution of the Leaf Blade; a Living Solar Panel" (February 27).

DR. NEIL P. SCHULTES and **DR. DOUGLAS DINGMAN** presented a lecture for Station staff on "Genomics for CAES" in Jones Auditorium (February 7) and along with **DR. DONALD AYLOR** met with Dr. Dan Putnam from the Department of Plant Sciences at the University of California, Davis. Dr. Davis is an agronomist with extensive experience in the adoption of transgenic alfalfa (February 17).

DR. DOUGLAS DINGMAN attended New England Grows Conference (Boston, MA) (February 2-3); participated in Connecticut Beekeepers Association Bee School (New Haven, CT) (February 11); program spokesman for Sigma Xi annual seminar series (Hamden, CT) (February 23); and presented seminar (Honey Bee basics) at CT Flower and Garden show (Hartford, CT) (February 24).

ENTOMOLOGY

MS. KATHERINE DUGAS gave a talk on insects to first- and third-grade students at the St. Thomas' Day School in New Haven (38 students) (February 10); gave a talk on insects at the Westbrook Library for the Potapaug Audubon (30 attendees) (February 18); and staffed the CAES table at the CT Flower and Garden Show in Hartford (February 24-25).

MS. ROSE HISKES participated in a Connecticut Invasive Plant Working Group symposium planning committee meeting in Windsor (February 1); gave a talk on "Butterfly Gardening and Exotic Forest Pests" to the Franklin Garden Club in Franklin (10 attendees) (February 15); participated in a CAPS State Survey Coordinator Conference call (February 16); taught Insect Pest Management in Ornamentals and Turf for the Connecticut NOFA Organic Landcare Course in New Haven (40 attendees) (February 17); participated in a Forest Pest Project conference call (February 22); collaborated with Ken Mosher, state computer consultant, on the Pesticide Guide Toward Integrated Pest Management for Arborists and Nursery Growers in East Hartford (February 23); and with **MS. DIANE RIDDLE, MS. KATHERINE DUGAS, MR. PETER TRENCHARD, and MR. STEPHEN SANDREY**, staffed a Forest Pest table at the Flower Show at the Connecticut Convention Center in Hartford (February 23-26).

DR. CHRIS MAIER displayed the kudzu bug (Plataspidae), an eastern Asian bug that represents a new insect family for North America and that recently was discovered in the southeastern United States, at a meeting of the Connecticut Entomological Society at the University of Connecticut in Storrs (February 17).

DR. GALE E. RIDGE spoke to a meeting of Connecticut Legal Services about landlord/tenant law and bed bugs in Meriden (30 attendees) (February 2); the Connecticut Pest Control Association held a bed bug training program and Dr. Ridge introduced Chimney Swift Bugs (discovered in a Greenwich school) to the group as another species to be considered for identification in Connecticut (60 attendees) (February 10); was a guest on a live National Public Radio show, the Colin McEnroe show. She was part of a broad discussion about dust including dust mites (February 13); was interviewed about a career in Entomology by the Lancaster Farming magazine (February 14); was interviewed about insect activity during winter by The Day (February 15); ran a training session for the Norwalk Health Department staff on bed bug identification (February 17); was interviewed about her identification of Chimney Swift Bugs found at North Mianus School in Greenwich and the importance of expert identification by the Greenwich Times (February 21); and assisted Sue Dubb of the Chatham Health District with bed bugs and how to avoid accidental introduction by EMS technicians (February 29).



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DR. CLAIRE E. RUTLEDGE taught a class on Insects Attacking Trees and Shrubs for Arboriculture 101 held in Jones Auditorium (50 attendees) (February 15); and taught a class on Insects Attacking Trees and Shrubs at Bartlett Arboretum in Stamford (20 adult attendees) (February 16).

DR. VICTORIA L. SMITH participated in a meeting of the Yale Biosafety Committee in New Haven (16 participants) (February 16).

DR. KIRBY C. STAFFORD III participated in a NIFA webinar on the new USDA REEport project reporting system (February 9); was interviewed about the CDC grant proposal on tick management by Sue Walsh of the Redding Pilot (February 14); spoke on invasive insects and forest pests at the Regional Agricultural Science and Technology Center at the Middletown High School (16 attendees) (February 16); spoke on tick and Lyme disease management at the NOFA Organic Land Care Course in Jones Auditorium (46 attendees) (February 21); participated on a Forest Pest Outreach and Survey project conference call (February 22); was interviewed about the winter impact on ticks by Fred Bruer of Northeast Public Radio (February 22); participated in a Farm Bill conference call for plant regulatory officials (February 23); and participated in the first of introductory webinars for state plant regulatory officials on the new USDA plant pest reporting system, IPHIS (February 29).

DR. KIMBERLY A. STONER taught the section on "Principles and Procedures" in the Organic Land Care Course sponsored by CT NOFA in Jones Auditorium (45 participants) (February 15); spoke on "Pollination Security, Honey Bees, and Wild Bees" at the monthly meeting of the Connecticut Entomological Society at the University of Connecticut in Storrs (25 participants) (February 17); and taught the section "Pest Management Overview" in the Organic Land Care Course sponsored by CT NOFA in Jones Auditorium (45 participants) (February 21).

ENVIRONMENTAL SCIENCES

DR. PHILIP ARMSTRONG presented an invited seminar entitled, *West Nile Virus: Ecology and Evolution of an Invasive Pathogen in Northeastern U.S.* to the Sigma Xi Chapter at Quinnipiac University (February 23).

MR. GREGORY BUGBEE with **MS. JORDAN GIBBONS** presented an Invasive Aquatic Plant Identification Seminar at Connecticut IB Academy in East Hartford (approximately 40 attendees) (February 2); presented a seminar on *Soil Science for Arborists* at the Bartlett Arboretum in Stamford (approximately 30 attendees) (February 9); with **MS. JORDAN GIBBONS** and **DR. MARK JUNES-WELLS** presented an *Invasive Aquatic Plant Identification* seminar at the Connecticut Envirothon at Sacred Heart University in Fairfield (approximately 70 attendees) (February 18); and met with members of the Fence Rock Lake Association in Guilford to discuss the Station's discovery of *Egeria densa* in Fence Rock Lake and arrange control strategies (7 attendees) (February 29).

DR. JOSEPH PIGNATELLO presented poster and short presentation entitled, *Nanoscale Interactions between Engineered Nanomaterials and Black Carbon (Biochar) in Soil* at the USDA NIFA-AFRI 2012 Nanotechnology Grantee Meeting, Orlando, FL (February 1-3).



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FORESTRY AND HORTICULTURE

DR. JEFFREY WARD spoke on "Trees and changes" at Lincoln Middle School in Meriden, CT (80 children, 5 teachers) (February 1); meet with John Goodfellow, BioCompliance Consulting, Inc. to discuss storm damage to urban trees (February 6); along with J.P. BARSKY, met with MDC foresters Carol Youell, Scott Rodgers, and Andrew Hubbard to discuss strategies to regenerate forests in areas of high deer density in West Hartford (February 16); was interviewed about the relationship between blacklegged ticks and Japanese barberry by Greg Hladky of the Advocate newspapers (February 17); spoke on Japanese barberry growth and control to reduce the risk of Lyme disease exposure to the Norfolk Land Trust (45 attendees) (February 18); spoke on "Impacts of Invasive Species on our Forests – and How to Control Them" to the Naugatuck Valley Audubon in Derby (23 attendees) (February 21); spoke on forest management and proposed research to the Guilford Conservation Commission (7 attendees) (February 22); along with **MR. JOSEPH P. BARSKY**, visited Ehrich Woods to advise Winchester Land Trust on forest management (4 attendees) (February 22); and hosted a meeting to discussing small trees appropriate for planting near utility line with Darryl Newman (Planter's Choice Nursery), David Tadei (Mountainview Landscaping), Ed Gregan (Carlton Plants), and Chris Donnelly (CT-DEEP) at Lockwood Farm (February 29).

DR. MARTIN GENT gave a seminar to a class at Mitchell College, New London, on 'Life in the greenhouse at the Connecticut Agricultural Experiment Station' (12 students). (February 2); advised Olivia Kelly, a student at Sacred Heart Academy, with a science fair project on 'A study of ebb and flow aquaponics as the most effective growing system for romaine lettuce as compared to hydroponic and an organic soil-based growing system' (February 13).

DR. WILLIAM NAIL consulted with Cristy Hopkins of Coventry on site and cultivar selection for a prospective commercial vineyard (February 2); met with Charlotte Geer and Peter Wikul at Geer Tree Farm in Griswold do discuss a possible vineyard and winery on the property (February 9); inspected the replanted portion of the vineyard at Charmard Vineyards in Clinton (February 9); and met with Jerry Savino of Savino Vineyards in Woodbridge to discuss pest and crop management strategies for the upcoming growing season (February 23).

DR. SCOTT WILLIAMS spoke on "Wildlife Laws and Deer Damage Avoidance" at the Northeast Organic Farming Association's Organic Land Care Accreditation Course, New Haven (48 attendees) (February 21); received a small business grant of \$15,000 from Bobbex, Inc. (Monroe, CT) to test the efficacy of different formulations of rabbit repellents (February 29).

GRISWOLD RESEARCH CENTER

MR. ROBERT DURGY taught a University of Connecticut Master Gardener Program class on vegetables in North Haven (47 attended) (February 9), in Norwich (41 attended) (February 14), in Stamford (36 attended) (February 20), and in Torrington (38 attended) (February 22); taught Math Calculations and Calibration for Pesticide Applicator's Training in East Haven (46 attended) (February 16) and in West Hartford (19 attended) (February 28); presented two workshops at the CT-NOFA End of Winter Conference entitled Top Ten Vegetable Insect Pests (33 attended); and Deer Fencing for Large and Small Farms (23 attended) (March 3).



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PLANT PATHOLOGY AND ECOLOGY

DR. SANDRA L. ANAGNOSTAKIS gave a presentation on “Planting hybrid chestnut trees” to the Fairfield Conservation Commission in Fairfield (35 adult attendees) (February 18).

DR. SHARON M. DOUGLAS gave an invited presentation titled “Boxwood blight—A new threat to boxwood in the U.S.” at New England Grows 2012 held at the Boston Convention Center (625 adult attendees) (February 3); was interviewed about boxwood blight by Kelli Rodda, Editor of Nursery Management magazine, at New England Grows 2012 (February 3); participated in the Board of Directors meeting of the CTPA in the CAES Board Room (February 14); gave a presentation titled “Understanding plant diseases” as part of the CT NOFA Organic Land Care Workshop held in Jones Auditorium (45 adult attendees) (February 21); participated in a multi-state boxwood blight conference call (February 24); and was interviewed about the unseasonably warm winter temperatures and early flowering by Kendra Bobowick of The Newtown Bee (February 29).

DR. WADE H. ELMER co-organized the Bedding Plant Meeting, with Ms. Leanne Pundt (UConn) and Dr. Rich McAvoy (UConn), and gave the talk “Update on emerging diseases, and new fungicides” in Vernon (55 adult attendees) (February 7); spoke about “Earthworms and soil health” to an Adult Continuing Education class at Middletown High School in Middletown (16 adult attendees) (February 7); and co-organized the Bedding Plant Meeting, with Ms. Leanne Pundt (UConn) and Dr. Rich McAvoy (UConn), and gave the talk “Update on emerging diseases, and new fungicides” at the UConn branch campus in Torrington (39 adult attendees) (February 14).

DR. ROBERT E. MARRA met with State Park Ranger Joseph Maler at West Rock Ridge State Park to discuss the Mycological Society of America (MSA) foray, scheduled for July 2012 as part of the MSA meeting in New Haven (February 1); was sworn in as a Commissioner on the West Haven Tree Commission (February 21); and presented a 2-hour talk titled “Eight Important Plant Diseases of Eastern North America” to nursery professionals at the New York Botanical Gardens in Bronx, NY (75 adult attendees) (February 22).

VALLEY LABORATORY

DR. CAROLE CHEAH gave a presentation on progress in development of an artificial diet for the mile-a-minute biocontrol weevil at the 2012 MAM Biological Control Cooperators Meeting at Trenton, NJ (80 attendees) (February 16) and visited and discussed mile-a-minute and hemlock woolly adelgid biocontrol projects with cooperators from the Phillip Alampii Beneficial Laboratory, NJDA (February 17).

DR. RICHARD COWLES presented the talk "Spotted wing drosophila: Current and potential management methods" at the Massachusetts Farm Winery Association meeting, Sturbridge, MA, (50 attendees) (February 7), and a similar talk, "SWD IPM ASAP" at the Connecticut Farm Fresh Meeting, Glastonbury, (7 attendees) (February 25); and spoke on "Insects and mites of Rhododendrons," to the CT Rhododendron Society, Windsor, (45 attendees) (February 7); and was interviewed about the new insect and disease tolerant strawberry cultivar ‘Rubicon’ by Vinti Singh.

DR. JAMES A. LAMONDIA spoke about research on management of tobacco pathogens including poty viruses, target spot and blue mold fungicide resistance and presented information about the CORESTA pesticide residue program and strategies to reduce pesticide residues in cigar wrapper leaves at the CAES Tobacco research meeting held in Suffield (February 21) (125 people); participated in a meeting of the Connecticut Agricultural Information Council (February 22); and participated in a USDA ARS Research National Program Panel Review for Nematology (February 23).



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DR. TODD L. MERVOSH participated in a symposium planning meeting for the Conn. Invasive Plant Working Group (CIPWG) at the Valley Laboratory (15 attendees) (February 1); spoke about services provided by CAES to the "Green Knees Gardeners" club in Suffield (13 attendees) (February 9); taught a program (sponsored by UNH Cooperative Extension) on weeds and weed management in rights-of-way [32 attendees] in Manchester, NH (February 16); and answered questions about invasive plants at the CIPWG exhibit at the Connecticut Flower and Garden Show in Hartford (approximately 50 visitors) (February 26).

Tobacco Research Meeting Held at the Suffield Vo-Ag Center

One hundred and twenty five people attended the Connecticut Agricultural Experiment Station's annual Tobacco Research Meeting held at the Suffield High School auditorium on February 21, 2012. **Dr. Jim LaMondia** welcomed growers, showed the CAES public service announcement and spoke about research topics and recent developments at the Station. The meeting addressed a wide variety of issues of concern to growers. **James LaMondia** spoke about research on management of tobacco pathogens including poty viruses, target spot and blue mold fungicide resistance. **Thomas Rathier** spoke about the responsible agronomic practices in tobacco and Christina Berger spoke about important changes in regulations affecting soil fumigation. **Jim LaMondia** spoke about the CORESTA pesticide residue program and strategies to reduce pesticide residues in wrapper leaves. Mr. Clif Parker spoke about updates and changes in the Risk Management program and insurance programs and Rebecca Dubbs of the New England Agricultural Statistics Service provided updates on the CT Valley tobacco crop statistics. Ross Eddy of the Farm Services Administration provided updates on FSA services to growers. **Jane Canepa-Morrison, Michelle Salvas, and Jim Preste** assisted with much of the behind the scenes work for the meeting. The meeting qualified for pesticide applicator re-certification credit in both Connecticut and Massachusetts and 70 persons received credit.



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JOURNAL ARTICLES APPROVED FEBRUARY 2012

- Anderson, John F., and Richard S. Cowles.** Susceptibility of bed bugs, *Cimex lectularis* L. (Hemiptera: cimicidae) to pyrethroid insecticides and to insecticidal dusts with or without pyrethroid insecticides. *Journal of Economic Entomology*
- Armstrong, Philip M., N. Prince, and Theodore G. Andreadis.** Development of multi-target taqman assay to detect Eastern Equine Encephalitis virus variants in mosquitoes. *Vector-Borne and Zoonotic Diseases*
- Bugbee, Gregory J.** Invasive Aquatic Plants. Lakes Candlewood, Lillinonah, Zoar Monitoring Report 2010. *Station Bulletin*
- Harper, Richard W. and **Richard S. Cowles.** Susceptibility of Chinese Hemlock (*Tsuga chinensis*) to Injury from Horticultural Oil Applications. *Arboriculture and Urban Forestry*
- Isleyan, Mehmet, P. Sevin, **Jason C. White.** "Accumulation of weathered p,p'-DDTs in hybridized *Cucurbita pepo* cultivars". *Environmental Toxicology and Chemistry*
- Koppenhofer, Albrecht M., S. R. Alm, **Richard S. Cowles**, B. A. McGraw, S. Swier, and P. J. Vitum. Insecticides for annual bluegrass weevil control: optimal timing and rates of available products. *Golf Course Management*
- Maier, Chris T.** Japanese Cedar Longhorned Beetle, *Callidiellum rufipenne* (Motshulsky) (Coleoptera: Cerambycidae), in Delaware and Pennsylvania. *Proceedings of the Entomological Society of Washington*
- Maier, Chris T.** First detection and widespread distribution of the Spotted wing drosophila, *Drosophila suzukii* (Matsumura) (Diptera: Drosophilidae) in Connecticut in 2011. *Proceedings of the Entomological Society of Washington*
- Mao, Jingdong, X. Kong, K. Schmidt-Rohr, **Joseph J. Pignatello**, and E. M. Perdue. Advanced Solid-state NMR Characterization of Marine Dissolved Organic Matter Isolated Using the Coupled Reverse Osmosis/Electrodialysis Method. *Environmental Science and Technology*
- Mervosh, Todd L.** Common Weeds in Connecticut Christmas Tree Fields. *The Real Tree Line, Newsletter CCTGA, 2012*
- LaMondia, James A.** Reduced Sensitivity of *Peronospora tabacina* to dimethomorph in Connecticut. *Plant Disease*

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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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