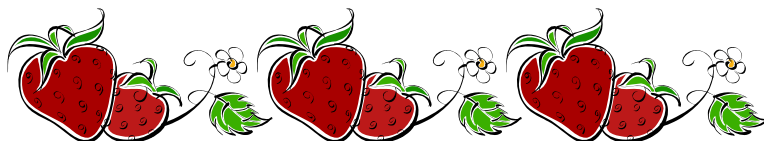


Station News

A PROGRESS REPORT for staff
and Friends of America's first Agricultural Experiment Station



Departmental News

EXPERIMENT STATION PARTICIPATES IN THE NEW HAVEN PUBLIC SCHOOL SCIENCE FAIR 2010

The Experiment Station participated in this year's *New Haven Public School Science Fair* in several ways in 2010. **Dr. PHILIP ARMSTRONG** and **Dr. JOSEPH PIGNATELLO** served as science fair judges for the event held in The Commons of Yale University (11-13 May 2010). **Dr. DOUGLAS DINGMAN** and **Dr. SHARON DOUGLAS** were invited to attend the Awards Ceremony held in Sheffield-Sterling-Strathcona Hall at Yale (13 May). **Dr. DOUGLAS** presented "The Connecticut Agricultural Experiment Station Award" to Rhianna Bennett, Grade 6, of Davis Street School, for her science project, *War of the Fertilizer*. This award (\$100) is given to the best project related to Food, Plants, Insects, or the Environment.



STATION PARTICIPATES IN THE FOURTH ANNUAL NORWALK-WILTON TREE FESTIVAL

The Experiment Station participated in the *Fourth Annual Norwalk-Wilton Tree Festival* under beautiful skies on Saturday, 22 May 2010. The festival was held at Cranbury Park in Norwalk and staff members were there to teach children and their parents about trees, tree diseases, exotic insects, and bees. **Dr. SHARON M. DOUGLAS** organized and coordinated The Station's participation, which

included two booths. This is the third year that the Station has participated in this “by-invitation-only” event, a reflection of the organizers’ recognition of the importance of the Station’s contributions to the health of urban trees in Connecticut. **DR. DOUGLAS DINGMAN, DR. SHARON DOUGLAS, DR. CLAIRE RUTLEDGE,** along with **MS. KATHERINE DUGAS, MS. ROSE HISKES, MS. MARY INMAN, and MR. IRA KETTLE,** answered questions, distributed Station publications, coloring books, and other literature to attendees. Young and old examined specimens of the Asian Longhorned Beetle and the Emerald Ash Borer, were attracted to the honey bees, and asked questions about tree diseases. Over 1275 adults, including 900 youths, participated in the event.





Administration

DR. LOUIS A. MAGNARELLI welcomed members of the Federated Garden Clubs of CT and gave a report on Station research, Jones Auditorium (May 3); and attended a forum on agriculture and reviewed Experiment Station research and outreach programs, Shelton, CT (May 7).

Analytical Chemistry

DR. JASON WHITE participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Hartford and presented a talk entitled “The Connecticut Agricultural Experiment Station Department of Analytical Chemistry: 115 Years of Food Safety Research.” (May 3); along with **DR. JOSEPH PIGNATELLO** (Environmental Sciences) and **DR. WADE ELMER** (Plant Pathology and Ecology), met with Michael Sesko, Justin Frieberg and several other graduate students from the Yale School of Forestry and Environmental Studies on potential collaborative projects involving biochar (May 5); joined with staff to participate in a FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (May 13); met with Professor Saion K. Sinha of the University of New Haven regarding joint coordination of the Summer Undergraduate Research Fellowship of Durational Research Associate Joseph Hawthorne (May 20); accompanied by staff, participated in a FERN Chemistry Cooperative Agreement (cCAP) Laboratory conference call focusing on the role of FERN cCAP in the testing of seafood for the Gulf Oil Spill (May 21); and joined with staff in a FERN-wide conference call focusing on the role of all FERN laboratories in the testing of seafood for the Gulf Oil Spill (May 27).

DR. WALTER KROL served as a judge on behalf of the New Haven Section of the American Chemical Society at the New Haven Public Schools Science Fair 2010. Two winning displays entitled ‘Orange Power to the Rescue’ (Mauro-Sheridan School) [Pictured below Top-Left] and ‘Synthesis of Microporous carbon cryogel through experimental template methodology’ (Wilber Cross School) were selected to each receive a \$100 monetary award on behalf of the society (May 12); and organized an award banquet in the Jones Auditorium as part of the New Haven Section American Chemical Society National Chemistry week. During the banquet, awards were presented for both the 2008 Poster Contest (Pictured below Top-Right) and the Chemistry Olympiad which was held in March at the Yale University Chemistry Laboratory. (Approximately 100 students, teachers and parents attended).

Additional photos of this event may be viewed at:

<http://picasaweb.google.com/NewHavenACS01/AwardsCeremonyMay252010ConnecticutAgCenter?feat=email#>





Entomology

MR. IRA KETTLE gave a presentation on live bees to the K-1 classes at Highland Elementary in Wallingford (98 children and 5 adult attendees) (May 11); honey bees were presented at the Norwalk-Wilton Tree Festival held at Cranbury Park in Norwalk (1,275 attendees) (May 22).

DR. CHRIS T. MAIER spoke about a survey for the European wood-wasp at a meeting of the Cooperative Agricultural Pest Survey Advisory Committee at the Valley Laboratory in Windsor (May 19); spoke about "State-listed Flies (Diptera) of Connecticut" at a meeting of the Connecticut Entomological Society in Jones Auditorium (May 21); circulated fact sheets on the brown marmorated stink bug at a twilight meeting of the Connecticut Pomological Society at Belltown Hill Orchard in Glastonbury (May 25).

DR. GALE. E. RIDGE talked to students from the Sound School about the activities of the insect inquiry office (May 10); advised Kathy Alexander from the DEP on heat techniques for bed bug management, which will be incorporated into the language of a new permit for mattress processing in the State of Connecticut (May 18); and visited a home in Avon, Connecticut regarding an intractable bed bug infestation. Dr. Ridge had first identified the human bed bug *Cimex lectularius* at the Avon residence two years previously, as a result of introduction by a suitcase. In the May visit, Dr. Ridge collected debris that yielded bat fecal pellets, carpet beetle larvae and all stages of the bat bug, *Cimex adjunctus*. When a pest control operator had treated for the human bed bugs, the residual crack and crevice pesticides had killed wandering bat bugs in the vicinity of these cracks and they had subsequently fallen into a bathroom. Further inspection revealed a small, established bat colony in the dormer window roof above the bathroom, which the owner never knew she had (May 30).

DR. CLAIRE RUTLEDGE attended the winter meeting of Conn. Tree Protective Association at the Aquaturf Club in Farmington (January 21); taught the class "Insects that feed on trees" at the Arboriculture class at the Bartlett Arboretum in Stamford (14 attendees) (February 11); taught the class "Insects that feed on trees" for the CTPA Arboriculture 101 course held in Jones Auditorium (40 attendees) (February 17); presented a talk titled "Shiny beetles and the wasps who love them" at the Forest Health Workshop in Jones Auditorium (40 attendees) (February 18); presented a poster titled "Multiple mating and fecundity in the Emerald ash borer" at the Eastern Branch Meeting of the Entomological Society of America in Annapolis, MD (March 7 and 8); taught the "hands-on" night for the CTPA Arboriculture 101 course in Jones Auditorium (40 attendees) (March 10); attended the Forest Health Cooperators meeting in Concord, NH (April 1); presented a talk on the Emerald ash borer to Federated Garden Club workshop in Jones Auditorium (25 attendees) (April 7); presented a talk titled "Cerambycidae and Buprestidae: Not so boring after all" to advanced master gardeners in Bethel (30 attendees) (April 20); presented a talk titled "Insects that feed on trees" to Master Gardeners at the Bartlett Arboretum in Stamford (45 attendees) (April 21); presented a talk titled "The beetle hunting wasp" to the Experiment Station Associates at the Discovery Center in Hartford (40 attendees) (May 13); gave a presentation titled "What is an insect?" to children at Cuddletime Daycare Center in Hamden (20 children attended) (May 21); and helped man the CAES booth on Asian longhorned beetle and Emerald ash borer at the Norwalk-Wilton Tree Festival held at Cranbury Park in Norwalk (1,275 people) (May 22).

DR. VICTORIA L. SMITH testified as a Friend of the Court witness in a legal case involving a Federally-regulated pest, at the State of CT Civil Court in Stamford (May 4); participated in the Spring Meeting of the CT Cooperative Agricultural Pest Survey committee, with a discussion on *P. ramorum* survey activity, insect trapping, and outreach efforts (20 participants) (May 19); and the Survey and Inspection Team participated in a Snail Blitz, coordinated by the Wallingford office of USDA-APHIS-PPQ. Trained detector dogs and their handlers, from the Detector Dog Training Center in Newnan, GA, searched for invasive snails and slugs in areas surrounding ports and rail freight yards. Snails and slugs were found and collected, and retained for later identification (May 27).



Detector dogs and their handlers ready to search for snails.



Tia Blevins, Jeff Fengler, and Steve Sandrey set up a sample site for snails.



The Catch of the day! Snails collected during the Snail Blitz.

DR. KIRBY C. STAFFORD III was interviewed about honey bees and colony collapse disorder by Rick Harrison of the Republican American (May 6); participated in a conference call of the U.S. Environmental Protection Agency's Lyme disease network (May 6); was interviewed about honey bees, bee health, and colony collapse disorder by John Krebs from WTTX-Fox 61 (May 7); participated in the meeting of the Cooperative Agricultural Pest Survey at the Valley Laboratory in Windsor (May 19); and participated on a Forest Pest Outreach and Survey project conference call (May 27).

DR. KIMBERLY A. STONER made a presentation "Why pollinator decline is important" to the Wild Ones (a native plant group) at Connecticut College in New London (25 attendees) (May 1); spoke about her research on bees to a visiting group of students from the Sound School (May 10); participated in a meeting of the NOFA Organic Land Care Committee at the Valley Laboratory in Windsor (12 attendees) (May 11); participated in a meeting of the CT NOFA Board of Directors at the NOFA office in Oxford (12 people) (May 16); spoke on "Threats to the health of wild bees and honey bees" to the Naugatuck Audubon Society at the Kellogg Environmental Center in Derby (40 attendees) (May 18).

Environmental Sciences

DR. THEODORE ANDREADIS lectured on mosquitoes and West Nile virus to a group of visiting students from the Sound School in New Haven (May 10); and participated in the final dissertation defense of Charles McGee, a PhD candidate at the University of Texas School of Biomedical Sciences at Galveston, TX. Dr. Andreadis served as a formal member of the Supervisory Committee. The title of the dissertation was: *Evaluation of arthropod-borne virus recombination potential and phenotype: in vitro and in vivo analysis of flavivirus and alphavirus model systems* (May 24).

DR. PHILIP ARMSTRONG served as a judge at the New Haven Science Fair held at Yale University (May 11-12).

MR. GREGORY BUGBEE spoke on *Connecticut's Invasive Aquatic Plant Problem* and gave an *Invasive Aquatic Plant Identification Workshop* to the Federated Garden Club in the Jones Auditorium (approx. 50 attendees) (May 4); spoke on *Container Gardening: Indoors and Out* to a class at Albertus Magnus College (approx. 12 attendees) (May 5); spoke on *Controlling Nuisance Aquatic Vegetation* to the Fence Rock Lake Association in Guilford (approx. 20 attendees) (May 10); spoke on *Composting* as part of the Warren Public Library Gardening Series (approx. 20 attendees) (May 15); attended the Amity High School *Science Night* and received a mentorship award for assisting a student with a science project (May 21); and spoke on *Candlewood Lakes Invasive Aquatic Plant Problem* in the New Fairfield public access TV (Channel 17) studio as part of documentary on watershed protection (May 25).

DR. JOSEPH PIGNATELLO served as a judge at the New Haven Science Fair held at Yale University (May 12); and presented a talk entitled: *Sorption of the Swine Antibiotic Sulfamethazine to Biochars*, at the SETAC Europe 20th Annual Meeting held in Seville, Spain (May 23-27).

MR. MICHAEL THOMAS gave a presentation on the status of State-listed Odonata at a meeting of the Connecticut Entomological Society held at the CAES in New Haven (May 1).

Forestry and Horticulture

DR. JEFFREY WARD spoke on "Tree and shrub care for the homeowner" at Bartlett Arboretum in Stamford, CT (8 attendees) (May 1); spoke on "Strategies for reducing deer browse damage" for the Branford Evening Garden Gate Club (15 attendees) (May 10); interviewed about tree pollen production by Dana Waylon of WTIC-1080 radio (May 13); visited Bridgeport to advise Steve Hladun, Special Projects Coordinator - City of Bridgeport, on tree care and invasive shrub control (May 13); spoke on Japanese barberry control and forest management at the Scituate Reservoir watershed public field tour in Foster, RI (65 attendees) (May 15); along with **DR. SCOTT WILLIAMS**, gave a walking tour of Lockwood Farms to the Executive Committee of the Connecticut Urban Forest Council (10 attendees); (May 19); and spoke on "Alternative methods of controlling invasive shrubs" at a Flame Weeding Workshop at the Griswold Research Farm (43 attendees) (May 26).

DR. ABIGAIL MAYNARD talked to students from the Sound School about the New Crops Program (15 students, 2 teachers) (May 10); discussed specialty and ethnic vegetables with John Holbrook at Holbrook Farm in Bethel (May 12); spoke about the New Crops Program to the Connecticut Urban Forest Council at Lockwood Farm (10 attendees) (May 19); interviewed about ethnic vegetables and the New Crops Program by Steven Singer from the Associated Press (May 25); and reported on Station activities at a Quarterly meeting of the Council on Soil and Water Conservation (10 adults) (May 26).

DR. WILLIAM NAIL met with Jamie Jones and Larry McCulloch at the Jones Family Farms in Shelton to discuss disease management and general viticulture for the growing season (May 27); and met with Gary Crump at Priam Vineyards in Colchester to discuss management strategies for the 2010 growing season (May 28).

DR. SCOTT WILLIAMS spoke on "The link between Japanese barberry and Lyme disease" at a Flame Weeding Workshop at the Griswold Research Farm (43 attendees) (May 26).

MR. JOSEPH P. BARSKY spoke on “Overview of Forestry and Wildlife Research” to visiting students from the New Haven Sound School (May 10); gave a presentation “Safe usage of flame weeding equipment” at a Flame Weeding Workshop at the Griswold Research Farm (43 attendees) (May 26).

Plant Pathology and Ecology

DR. SANDRA L. ANAGNOSTAKIS was interviewed about her research on butternuts by a Vermont National Public Radio reporter in the New Haven NPR studio (May 4); consulted with the Greentree Foundation Managers about the establishment of a chestnut arboretum and park area in Long Island (May 5); gave a lecture on “Restoration of timber chestnut trees” (45 adult attendees) and facilitated planting some of her hybrid chestnut trees on the Princeton Battleground in Princeton, NJ (May 6); gave a talk on “Elms for the Elm City” to the New Haven Garden Club in Jones Auditorium (60 adult attendees) (May 10); and gave a talk titled “Restoration of timber chestnut trees” in Petersham, MA (80 adults and 1 youth attended--and she asked a question!) (May 27).

DR. SHARON M. DOUGLAS gave a presentation titled “Eco-friendly approaches to managing plant diseases” at the Federated Garden Club’s Environment Study School in Jones Auditorium (25 adult attendees) (May 4); participated in the Board of Directors meeting of the CTPA to report on the upcoming workshop and lecture by Dr. Kevin T. Smith (May 4); was interviewed about dogwood anthracnose and other diseases by John Burgeson of the Connecticut Post (May 6); spoke about the importance of correctly diagnosing plant diseases and the Station’s Plant Disease Information Office and organized a tour of CAES for Sound School biology students and their teachers Charles Baldwin and Michelle Fucci (13 students and 2 adults attended) (May 10); was interviewed about the recent frost and potential for damage on trees and small fruit throughout the state by Emily Gross of the Norwich Bulletin (May 13); organized and moderated a CTPA Workshop titled “Tree decay—Concepts in Compartmentalization and Detection” held at Sessions Woods Wildlife Management Center in Burlington (65 attendees) (May 20); co-sponsored, with **DR. ROBERT E. MARRA**, a Lockwood Lecture by Dr. Kevin T. Smith (USFS, Durham, NH) titled “Tree Survival and Response to Injury, Infection, and Environmental Change” in Jones Auditorium (61 attendees) (May 21); and met with Dr. Smith to discuss new and reemerging tree diseases of importance during his visit (May 19-21).

DR. WADE H. ELMER, along with **DR. JASON WHITE** and **DR. JOSEPH J. PIGNATELLO**, discussed the use of biochar in agricultural systems with Michael Sesko from the Yale School of Management and Bidisha Banerjee and Justin Freiberg from the Yale School of Forestry and Environmental Studies, in Johnson-Horsfall (May 5); was interviewed about growing asparagus in Connecticut by Jan Ellen Spiegel of the Hartford Courant (May 7); and gave a talk titled “Plant parts and their diseases” to five first-grade classes at Doolittle School in Cheshire (95 youths and 11 adults attended) (May 12).

Valley Laboratory

DR. CAROLE CHEAH gave a presentation on invasive species and Connecticut’s biological control program for mile-a-minute invasive weed and hemlock woolly adelgid for the Power of Agriculture lecture series at the Harris Agriscience Center, Bloomfield (25 attendants) (April 9); gave a presentation on biological control of hemlock woolly adelgid and mile-a-minute weed at the Spring 2010 Open House at CAES, New Haven (102 attendants) (April 22); and gave a presentation on biological control of mile-a-minute weed at the Town of Newtown Invasive Plants Seminar (15 attendants) (May 15).

DR. RICHARD COWLES presented "Managing armored scales in Christmas trees" to the Rhode Island Christmas Tree Growers' Association, Tiverton, RI (40 attendees) (May 1) and met with Cornell Cooperative Extension personnel at Lasdon Park, Westchester County, NY, to discuss hemlock woolly adelgid and armored scales (5 attendees) (May 24).

DR. JAMES LAMONDIA assisted University of Connecticut Diagnostician Joan Allen with information about nematode extraction and identification (May 6).

Journal Articles Approved May 2010

Ahrens, John F. 50 Years of Weed Control in Christmas Tree Plantations. The Real Tree Line (CT Christmas Tree Growers Association Newsletter)

Anderson, John F. The History of Public Health Entomology at The Connecticut Agricultural Experiment Station, 1904-2009. Station Bulletin 1030.

Douglas, Sharon M. Fifty Years of Connecticut Christmas Trees: A Plant Pathologist's Perspective. The Real Tree Line (CT Christmas Tree Growers Association Newsletter)

Maynard, Abigail A. Backyard Composting. Station Fact Sheet

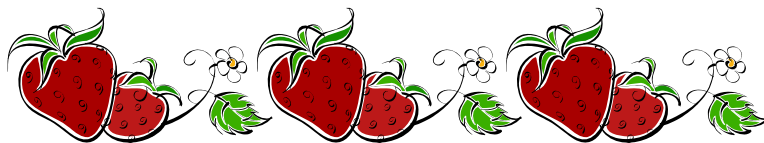
Musante, Craig, and Jason C. White. Phytotoxicity of Ag and Cu Nanoparticles to Plants. Environmental Pollution

Ward, Jeffrey S. and Scott C. Williams. Controlling an Invasive Shrub, Japanese Barberry, Using Directed Heating With Propane Torches. Natural Areas Journal

T. E. Worthley, **Jeffrey S. Ward, Scott C. Williams.** Comparing Cover Reduction and Cost of Japanese Barberry Treatments in Southern New England. Forest Ecology and Management

Pritchina, **Jason White, Smets.** Plant Host, Age, and Soil Coal Tar Contamination Impact the Rhizosphere Microbial Community Structure of Wheat and Zucchini. Science of the Total Environment

Williams, Scott C. and Jeffrey S. Ward. Effects of Japanese Barberry Removal and Resulting Microclimatic Changes on Blacklegged Tick (*Ixodes scapularis*) Populations in Connecticut, USA. Environmental Entomology



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