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.
DEPARTMENTAL NEWS

ADMINISTRATION

DR. LOUIS A. MAGNARELL was interviewed by Nancy Cohen of NPR about the possible elimination of the Experiment Station (May 11); was interviewed by Ann DeMatteo of the New Haven Register about the possible elimination of the Experiment Station (May 11); was interviewed by Melinda Tuhus of WQUN Radio about the possible elimination of the Experiment Station (May 12); was interviewed by Will Rowlands of the CT Gardener about the possible elimination of the Experiment Station (May 13); and was interviewed by Fran Schneido of WCBS Radio about the Emerald ash borer.

ANALYTICAL CHEMISTRY

DR. JASON C. WHITE participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Hartford (May 2); presented a lecture entitled “Role of the Connecticut Agricultural Experiment Station Department of Analytical Chemistry in the Deepwater Horizon Oil Spill Response” at the annual meeting of the Experiment Station Associates (~ 12 attendees) (May 5); participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (May 5 and 25); participated with Department staff in a FDA FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (May 12); participated with Department staff in the hot-wash call for the FDA Incident Response Drill that we participated in the previous month (May 13); participated in a conference call with the FDA FERN National Program office and other CAP Laboratory Directors on modifying grant reporting requirements (May 26); presented a poster entitled “Nanomaterial contamination of agricultural crops” at a Gordon Conference in Waterville Valley New Hampshire focusing on Environmental Nanotechnology (~ 150 attendees) (May 29-31); and held a Project Directors meeting for a USDA grant on Nanoparticle uptake and toxicity in agricultural plants (May 31).

DR. BRIAN EITZER presented a lecture entitled “The Role of Pesticides in Honey Bee Decline” at the annual meeting of the Experiment Station Associates (May 5); participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (May 5 and 25); participated in a FDA FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (May 12); and participated in the hot-wash call for the FDA Incident Response Drill that we participated in the previous month (May 13).

DR. WALTER KROL participated in FDA FERN CAP Chemistry conference call for LC-MS Exactive users (May 5 and 25); served as a judge for the ACS Award for Excellence in Chemistry at the New Haven Science Fair held on the campus of Yale University (May 10); presided as Secretary at the New Haven Section American Chemical Society Executive Board Meeting (May 11); participated in a FDA FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (May 12); presented a talk to about 40 members of the White Conservation Center and local communities entitled “‘Catching’ Pesticide Residues in the Food We Eat” at the White Memorial Conservation Center in Litchfield (May 18); and organized an award banquet in the Jones Auditorium as part of the New Haven Section American Chemical Society National Chemistry week. Awards were presented for the 2010-2011 Poster Contest, as well as for the Chemistry Olympiad, which was held in March in the Yale University Chemistry Laboratory (~ 100 students, teachers and parents).

BIOCHEMISTRY AND GENETICS

DR. NEIL MCHALE attended a project directors meeting at NIFA headquarters Washington D.C. to present an accomplishment report on NIFA grant #252 “LAM1 regulation of blade
formation in Nicotiana leaves” (May 24 and 25).

**ENTOMOLOGY**

**MS. KATHERINE DUGAS** staffed the ALB/EAB booth at the Norwalk/Wilton Tree Festival held at Cranbury Park in Norwalk (500 adult and 800 youth attendees) (May 21).

**MS. ROSE HISKES** met with Don Bellingham, Director of Vernon Greenways Volunteers, to plan the Citizen Volunteer Survey Project outing for May (May 11); participated in the Forest Pest Outreach and Survey Program conference call (May 19); and led a volunteer survey for Asian longhorned beetle and Emerald ash borer with the Vernon Greenways Volunteers. Data was entered into the Beetle Detectives website (12 attendees) (May 21).

**MR. IRA KETTLE** presented live honey bees and had a display of honey, varroa mites in alcohol, and preserved bees in alcohol with deformed wing virus. There was also a cup of propolis and 100% beeswax samples, and the children got to see a bee suit and a smoker at the Norwalk/Wilton Tree Festival at Cranbury Park in Norwalk (500 adult and 800 youth attendees) (May 21).

**DR. CHRIS MAIER** spoke at a planning meeting of the officers of the Connecticut Entomological Society at the University of Connecticut in Storrs (May 20); and spoke about the biology and control of the brown marmorated stink bug at a twilight meeting of the Connecticut Entomological Society held at March Farms in Bethlehem (May 31).

**DR. CLAIRE RUTLEDGE** judged for the New Haven Public Schools Science Fair in New Haven (May 10 and 11); and participated in the Norwalk/Wilton Tree Festival with a booth “The Asian Longhorned Beetle and the Emerald Ash Borer” at Cranbury Park in Norwalk (May 21).

**DR. VICTORIA L. SMITH** participated in an Emerald ash borer response team meeting, held at USDA-APHIS-PPQ offices in Wallingford (6 participants) (May 6); participated in the CT Cooperative Agricultural Pest Survey meeting, held at the Valley Lab in Windsor (20 participants) (May 18); and participated in an Emerald ash borer publicity event, held at DEP Headquarters in Hartford (20 participants) (May 19).

**DR. KIRBY C. STAFFORD III** spoke about ticks and tick research to members of the North Branford Land Trust in North Branford (36 attendees) (May 4); was interviewed about ticks, tick activity, and Lyme disease by Sam Gingerella of WTIC-Radio (May 5); was interviewed about how to “tick-proof” for the summer by Claire Constant for Men’s Health Magazine (May 10); with **DR. ANUJA BHARADWAJ** and **MS. HEIDI STUBER**, met with Redding Health Officer Douglas Hartline in Redding to review potential tick study sites (May 16); participated in a meeting of the state CAPS committee at the Valley Laboratory in Windsor (18 attendees) (May 18); spoke about the Emerald ash borer at a press conference held at the DEP headquarters in Hartford, attended by several press organizations (May 19); assisted photographer Jon Rosen, Broadcast Med, Inc., in filming video footage of living *Ixodes scapularis* nymphs and adults (May 19); was interviewed about ticks and Lyme disease by Marla Matthews of NBC-CT News (May 24); was interviewed about tick control and the prevention of Lyme disease by Lisa Carberg of NBC-CT (May 26); attended a reception for the opening of the Yale Peabody Museum of Natural History’s new exhibit “Invasion of the Bloodsuckers: Bed Bugs and Beyond” (May 26); was interviewed about the influence of weather on tick activity by Karena Garrity of Patch.com (May 27); was interviewed about the current tick activity by Jason Bagley of Patch.com (May 27); and was interviewed about his upcoming talk on tick management in Weston on 7 June 2011 by Patty Gay of The Weston Forum (May 31).

**EXPERIMENT STATION HELPS WITH INVASION OF THE BLOODSUCKERS EXHIBIT AT THE YALE PEABODY MUSEUM**

**DR. GALE E. RIDGE** made major contributions to the new exhibit “Invasion of the Bloodsuckers: Bed Bugs and Beyond” at the Yale Peabody Museum of Natural History. Accompanied by **DR. KIRBY STAFFORD, DR. ANUJA BHARADWAJ** and **MS. KATHERINE DUGAS**,...
DR. GALE RIDGE attended an opening reception for the exhibit Thursday evening, May 26, at the Peabody. Detailed models of a bed bug, flea, mosquito, tick, head louse, and crab louse created by the Peabody’s resident artist Michael Anderson are part of the display. Working closely with Dr. Leonard E. Munstermann at Yale University, who acknowledged the valuable contributions that the Experiment Station has made for this and other exhibits, DR. GALE RIDGE is featured in the introductory video to the exhibit and provided the live bed bugs that are also on display. There also is a special information board with literature from the Connecticut Coalition Against Bed Bugs that was provided by DR. GALE RIDGE. DR. RICHARD COWLES and his wife were also in attendance at the reception. The exhibit opened to the public on Saturday, May 28, 2011.

The model of the bed bug (left) and Dr. Gale E. Ridge (right) talking about the live bed bug display.

DR. THEODORE ANDREADIS was interviewed about the mosquito and arbovirus surveillance program for the 2011 season and the impact of budget cuts on the program by Sam Gingerella, WTIC Radio (May 5); was interviewed about the impact of budget cuts on the State mosquito and arbovirus surveillance program for the 2011 season by the Associated Press in Hartford (May 6); was interviewed about the mosquito and arbovirus surveillance program for the 2011 season and the impact of budget cuts on the program by Fran Schneidau WCBS Radio, New York (May 10); was interviewed about eastern equine encephalitis virus in New England by Onion Park, Standard Times, New Bedford (May 10); attended a Northeastern Eastern Equine Encephalitis Conference sponsored by the Centers for Disease Control and Prevention and presented an invited talk entitled Epidemiology of eastern equine encephalitis virus in Connecticut with insights on virus overwintering and the role of Culiseta melanura and other mosquito vectors, held at the New Hampshire Public Health Laboratories, Concord, NH, (May 13); was interviewed about mosquito and arbovirus surveillance program for the 2011 season by Jenifer Bernstein Fox 61 News (May 16); was interviewed about the mosquito and arbovirus surveillance program for the 2011 season and the impact of budget cuts on the program by William Weir, Hartford Courant (May 19); was interviewed about the mosquito and arbovirus surveillance program for the 2011 season and the impact of budget cuts on the program by Marc Sims, Connecticut Radio Network and WTIC radio (May 20); was interviewed about the mosquito and arbovirus surveillance program for the 2011 season and the impact of budget cuts on the program by Cablevision 12 Norwalk (May 23); was interviewed about the mosquito and arbovirus surveillance program for the 2011 season and the impact of budget cuts on the program by NBC 30 (May 24); was interviewed about the impact of winter snowfall and spring flooding on mosquitoes, West Nile virus and eastern equine encephalitis virus in the northeastern US by ABC Evening News with Dianne Sawyer (May 31); and was interviewed about the impact of winter snowfall and spring flooding on mosquitoes, West Nile virus and eastern equine encephalitis virus in the Connecticut and the impact of budget cuts on the surveillance program by Karena Garrity, Patch.com (May 31).

DR. PHILIP ARMSTRONG served as a judge for the New Haven Public Schools Science Fair (May 10-11); and presented an invited lecture entitled, New era, but old problem: Insight into the
MR. GREGORY BUGBEE updated the Bashan Lake Association on the status of *Cabomba caroliniana* in Bashan Lake (May 7); presented a talk on *Container gardening indoors and out* to the Orange Women’s Garden Club held at the Case Memorial Library in Orange (May 10); presented a talk on *Composting as part of a garden program* sponsored by the Cragin Memorial Library in Colchester (May 11); spoke on *Using GIS to monitor and manage invasive aquatic plants* at the NEARC conference in North Hampton, MA (May 17); and along with Michael Cavolini, instructed a high school class at the New Horizons School, in New Haven, on how to obtain and test soil samples (May 25).

DR. GOUDARZ MOLAEI presented an invited lecture entitled, *Mosquitoes and transmission of viruses in the metropolitan area of New York City* at the Office of Vector Surveillance and Control, NYC Dept. of Health and Mental Hygiene, New York (May 19).

DR. JOSEPH PIGNATELLO presented and invited seminar entitled, *Structure-activity relationships and speciation in the adsorption of organic compounds and ions to environmental black carbon* to the Department of Analytical Chemistry, University of Barcelona, Barcelona Spain (May 16); and presented a talk entitled *Sorption of phenolic acid anions by black carbon is accompanied by release of hydroxide into Solution* at the SETAC Europe Annual Meeting; Milan, Italy (May 15-18).

**FORESTRY AND HORTICULTURE**

DR. JEFFREY WARD spoke on controlling invasive shrubs to the North Branford Land Conservation Trust (40 attendees) (May 4); spoke on "Homeowner tree care" for the Women's Club of Madison (27 attendees) (May 10); participated in a Connecticut Urban Forest Council in Southbury (May 19); met with Jeffrey Taylor (Vegetation Control Service) in Mansfield to discuss invasive shrub control (May 23); and met with David Roach (All Habitat Services) to discuss invasive control techniques (May 26).

DR. ABIGAIL MAYNARD assisted ninth graders with their Honors Biology projects at Hamden Hall Country Day School (29 students, 1 teacher) (May 19); discussed the New Crops Program with Adrian and Mary Offinger at their farm in Wilton (May 20); and participated in meeting of the State Technical Committee in Tolland (May 24).

DR. WILLIAM NAIL interviewed by Jordan Ross of Practical Winery and Vineyard magazine (May 12); and consulted with Dr. Christian Heidkamp to evaluate site and cultivar selection for a proposed vineyard at Southern Connecticut State University as part of their Plant it Forward Initiative (May 27).

DR. SCOTT WILLIAMS spoke on impacts of deer and invasive plant removal on blacklegged tick populations to members of the North Branford Land Conservation Trust (40 attendees) (May 4); hosted a Connecticut Urban Forest Council conference planning meeting (May 9); visited with the Town of Orange tree warden Ed Vaughn to discuss deer browsing (May 10); and met with Ron Boyce and Bob Reynolds of Shake Away, Inc. to discuss deer repellents (May 19).

MR. JOSEPH P. BARSKY, along with MR. MICHAEL R. SHORT, was interviewed about invasive control techniques by James Fisher of The White Memorial Foundation for their newsletter (May 11).

MR. MICHAEL R. SHORT, along with MR. JOSEPH P. BARSKY, presented a CAES Research Display on “Agriculture, Natural Resources, and Public Health” at the Audubon Bent of the River Festival in Southbury (325 attendees) (May 21).
THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION

STATION NEWS

GRANT AWARDS JUNE 2011

DR. KIMBERLY STONER of the Entomology Department and DR. BRIAN EITZER of the Analytical Chemistry Department are participants in a grant from the Specialty Crops Research Initiative of the U.S. Department of Agriculture. The title of the grant is “Pollination security for fruit and vegetables in the Northeast,” and Anne Averill of the University of Massachusetts is the Project Director. The project starts on January 1, 2012 and runs for five years. The Connecticut Agricultural Experiment Station will receive over $500,000 in funding from this grant.

PLANT PATHOLOGY AND ECOLOGY

DR. SANDRA L. ANAGNOSTAKIS visited Callaway Gardens in Pine Mountain, GA, and examined a few of the 4,172 chestnut trees sent there by the USDA and planted in the 1930’s (May 20); and gave a talk titled “Solving the problems of timber and orchard chestnut trees” to a chestnut group in Albany, GA, and examined chestnut trees sent to the area by the USDA in the 1940’s and 1950’s (May 21).

DR. SHARON M. DOUGLAS participated in conference calls for the Northeast Plant Diagnostic Network to discuss funding and budget issues (May 2 and 26); met with Dr. Jeanne Romero-Severson, Lockwood Lecturer, to discuss the research and service programs of the Department of Plant Pathology and Ecology (May 6); participated in a conference call for the Board of Directors of the APS Foundation (May 9); participated in the monthly meeting of the Board of Directors of the CTPA in New Haven (May 17); and participated in the Cooperative Agricultural Pest Survey (CAPS) meeting to discuss pests of concern for Connecticut for 2012 in Windsor (May 18).

DR. WADE H. ELMER visited Dr. Frank Caruso of the Cranberry Research Center in East Wareham, MA, to discuss sudden vegetation dieback and biological control (May 18); presented a seminar titled “Role of plant pathogens in sudden vegetation dieback” at MIT in Cambridge, MA (7 adult attendees) (May 19); participated in the State Advisory Council for Agricultural Science and Technology at Housatonic Valley Regional High School in Falls Village (12 adult attendees) (May 24); and was interviewed about the effects of the wet weather on vegetable crops this year by Matt Dwyer of WTIC (May 27).

MS. MARY K. INMAN gave a talk titled “Pruning woody ornamentals” to the Wallingford Garden Club in Wallingford (40 adult attendees) (May 10).

DR. ROBERT E. MARRA served as a special awards judge at the New Haven Public Schools Science Fair in New Haven (May 10-12); attended the West Haven Tree Commission’s leadership training program in preparation for the city’s street tree inventory (May 14); attended the CT Cooperative Agricultural Pest Survey (CAPS) meeting held at the Valley Lab in Windsor (May 18); helped staff the Experiment Station’s booth at the Norwalk-Wilton Tree Festival at Cranbury Park in Norwalk (May 21); and attended the Plant Science Day Organizing Committee meeting (May 23).

THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION AWARD AT 2011 NEW HAVEN PUBLIC SCHOOLS SCIENCE FAIR

From May 10-12, at the Yale University Commons, DR. CLAIRE RUTLEDGE, DR. RICHARD PETERSON and DR. ROBERT MARRA served as special awards judges for the New Haven Public Schools Science Fair, choosing on behalf of CAES the “Best Project related to food, plants, insects, or the environment.” They unanimously chose Ms. Waltrina Kirkland-Mullins’ 3rd grade class from the Davis Street Arts and Academics Magnet School for their project titled “Which Way Is Up? - A Fascinating Look at Corn Plants.” DR. ROBERT MARRA presented the award and a $100 check to three students (picture follows) representing their class at the Awards Ceremony on the evening of May 12, which was held at Sheffield-Sterling-Strathcona Hall on the Yale Campus.
The Experiment Station participated in the *Fifth Annual Norwalk-Wilton Tree Festival* at Cranbury Park in Norwalk on Saturday, May 21, 2011. CAES 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—one for bees and trees (diseases) and one for two exotic invasive insects at our state borders, Asian Longhorned Beetle and Emerald Ash Borer. This is the fourth 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. ROBERT MARRA** and **DR. CLAIRE RUTLEDGE**, along with **MS. KATHERINE DUGAS**, **MR. IRA KETTLE** and **MS. DIANE RIDDLE** answered questions, distributed Station fact sheets, 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. Among the many visitors to the bee booth was Nancy Faesy, a valued supporter of the Station, shown with Apiary Inspector **MR. IRA KETTLE**. Attendance has been steadily increasing and this year, about 1,300 people, including 800 youths, participated in the event.
DR. RICHARD COWLES conducted a walking field tour of Christmas tree pests for the RI Christmas Tree Growers' Association, Cranston, RI (30 attendees) (May 14); presented "Facts and fallacies of organics" for the East Windsor Garden Club (25 attendees) (May 17); and was the keynote speaker and discussed "Evolution up close and personal: return of the bed bugs" for the New England Biology Association of Teachers at Two Year Colleges in Manchester, CT (40 attendees) (May 24).

DR. JAMES LAMONDIA hosted Bolton High School student, Sarah Cowles, for a job shadowing program at the Valley Laboratory. Sarah also got a chance to visit with DR. RICHARD COWLES, MS. DIANE RIDDLE, MS. ROSE HISKES and MS. MICHELLE SALVAS (May 4).
Journal Articles Approved May 2011


Cowles, Richard S. Managing annual bluegrass weevil resistant to pyrethroids. New Jersey Turf Expo Proceedings

Douglas, Sharon M. De-icing salts: damage to woody ornamentals. CAES Fact Sheet

Douglas, Sharon M. Winter injury on woody ornamentals. CAES Fact Sheet


Elmer, W. H., Martin P. N. Gent, and R. McAvoy. Influence of partial saturation in ebb and flow irrigation on flooded floors to suppress Pythium root rot of ornamentals. Journal of Crop Protection

Gent, Martin P. N. Composition of Salad greens: A comparison of locally-grown and supermarket produce. CAES Bulletin


Maynard, Abigail A. and David E. Hill. How to Grow Vegetable Amaranth in Connecticut. Station Fact Sheet


Did you know that a honey bee can visit flowers a mile or two away from the main hive?