# Station News A progress Report for staff

and Friends of America's first Agricultural Experiment Station

# **Departmental News**

BIOLOGICAL CONTROL PROJECT FOR MILE-A-MINUTE VINE IN CONNECTICUT



Mile-a-minute biological control team in Greenwich on July 30 (L to R): Carole Cheah (CAES), Donna Ellis (UConn), Todd Mervosh (CAES), Logan Senack (DEP/UConn). Mile-aminute vines climbing trees in background.



Todd Mervosh releasing 500 weevils (*Rhinoncomimus latipes*) in a patch of mile-aminute vine in Newtown on July 30.



Carole Cheah and Todd Mervosh at mile-aminute biological control research site in Quinnipiac River State Park in North Haven on July 2.



Donna Ellis and Carole Cheah releasing *Rhinoncomimus latipes* onto mile-a-minute vines at Quinnipiac River State Park, North Haven on July 2, 2009. Photo by Todd Mervosh.



Release of 500 *R. latipes* weevils in a patch of mile-a-minute vine in Quinnipiac River State Park in North Haven on July 2.

## Administration

**DR. LOUIS A. MAGNARELLI** was interviewed by Sarah Politz of the New Haven Magazine about ticks (July 8); attended an Experiment Station Associates meeting in New Haven and gave a report on Station research (July 13); attended the Governor's Sub-committee meeting in Windsor on the effects of climate on agriculture (July 14); was interviewed by Emily Froehlich of the Danbury News Times about mosquitoes (July 24); was interviewed by WTIC Radio about mosquitoes (July 24); was interviewed by Brad Davis of WDRC-AM Radio about mosquitoes (July 27); and was interviewed by Ray Andrewsen of WQUN Radio about Station research and outreach programs (July 29).

## **Biochemistry and Genetics**

**DR. DOUGLAS DINGMAN** presented a talk on honey bees and American foulbrood, in addition to conducting a laboratory tour, to teachers participating in advanced learning classes at Southern Connecticut State University (June 30); participated in Sigma Xi (Quinnipiac chapter) board meeting for planning a student research symposium (Hamden, CT) (July 10); and Jennifer Nyquist (Chemistry Teacher, Masuk High School) performed a summer internship in the laboratory. (July 13–24).

**DR. RICHARD PETERSON** met with other members of the executive committee of the Quinnipiac Chapter of Sigma Xi and voted to host the annual Northeast Regional Student Research Conference at the Experiment Station on April 17, 2010; vice president of the Chapter (July 10); met with Dr. Sandy Allan of the USDA ARS, Gainesville, FL and **DR. JOHN ANDERSON** to discuss experimental issues regarding insect attractants and application of this assessment technology to bedbugs (July 13).

#### Entomology



**Mr. Ira Kettle** poses with students and a librarian at the Stetson Library Branch in New Haven following his presentation on honey bees.

MR. IRA KETTLE delivered honey bee presentations for the New Haven Free Public Library at the Wilson Branch (32 children, 5 adults) (July 14); at the Fair Haven Branch (13 children, 4 adults) (July 15); and at the Stetson Branch (25 children, 4 teens, and 4 adults) (July 16); delivered a honey bee presentation at the Ives Library in New Haven; It was considered a great program according to John Jesse, Librarian (11 adults and 52 children) (July 22); gave an outreach presentation on the Asian Longhorned Beetle and the Emerald Ash Borer at a 4-H Fair held at the North Stonington Fair Grounds in North Stonington (July 26); gave a presentation on the Asian Longhorned Beetle and Emerald Ash Borer to a group from the Sound School Agricultural Science Program (15 teenagers, 1 adult attended) and to a group of younger children from the Farm Camp (Brookvale Park, Hamden) at Lockwood Farm (11 children, 4 adults) (July 29). Fact sheets, A.L.B., and E.A.B. cards and tattoo transfers were handed out. All the young people had a good time and the younger set certainly enjoyed the tattoos. The group was also impressed with the pinned beetle specimens, especially those of the A.L.B. After this presentation was completed, he gave a honey bee presentation with the live bees and a bunch of handouts. As usual, everyone enjoyed this, as the bees are quite a draw (July 29); gave a honey bee presentation at the Mitchell Library in New Haven. Handouts were distributed and all the kids had a good time, as did many of the parents; also did a presentation on the Asian Longhorned Beetle and the Emerald Ash Borer. The kids were very interested and, again, the tattoos were a big hit! (30 children, 9 adults) (July 30).

**DR. VICTORIA SMITH** participated in a program evaluation tour of fruit, cut flower, and ornamental plant shipping facilities in Sacramento and Watsonville, California, sponsored by the National Plant Board, to evaluate effectiveness of pest mitigation efforts for *P. ramorum* and Light Brown Apple Moth, by plant and plant product exporters (30 participants) (July 12-17) and participated in the summer meeting of the Northeast Sustainable Agriculture Research and Education Administrative Council (NE-SARE), held at the Highlander Inn in Manchester, NH, as the State Departments of Agriculture representative to the AC (60 participants) (July 21-24).

**DR. KIRBY C. STAFFORD III** participated in the joint meeting of the Northeastern Regional Association of Experiment Station Directors (NERA) and Extension Directors (NEED) in Portland, ME (July 12-14); spoke on ticks and Lyme disease at the Yale Peabody Museum as part of their 2009 Peabody Fellows Institute for teachers (13 adult attendees) (July 16); and participated in a regional conference call of the NE Exotic Forest Pest Outreach and Survey Project (July 23).

**DR. KIMBERLY A. STONER** participated in a meeting on methods of measuring the effects of pesticides on honey bees. The meeting was sponsored by the U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS) and the U.S. Department of Environmental Protection and was held in Alexandria, VA (July 8-9); participated in an on-farm workshop sponsored by CT NOFA and the Connecticut Greenhouse Growers Association held at Gilbertie's Herb Farm in Easton (July 21); and

was visited by Bill Duesing, Executive Director of CT NOFA, to discuss plans for the Community Farming Conference in October (July 27).

#### Forestry and Horticulture

**DR. JEFFREY WARD** along with **Dr. SCOTT WILLIAMS**, met with Christopher Riely and Robert MacMillan of Providence Water to discuss barberry control options, Providence, RI (July 1); hosted a display on controlling Japanese barberry at the Jones Tree Farm Red, White, and Blue Festival in Shelton (20 children, 10 adults) (July 3); lead a field walk on invasive and forest management for the Talcott Farm Homeowners Association in Old Lyme (10 attendees) (July 14).

**DR. MARTIN GENT** attended a meeting at Geremia Greenhouse with Reps Mary Fritz and Rosa DeLauro to discuss the benefits of a commercial demonstration greenhouse facility, and the possibility of funding (July 1); presented posters on "Recycling Nutrient Solution for Greenhouse Tomato Grown in Rockwool" and "Rapid Watering to Achieve Partial Saturation of Root Medium on Flooded Floors" at the American Society for Horticultural Science annual meeting in St. Louis, MO (800 attendees) (July 24-28); moderated a workshop on Whole Plant Physiology in High Tunnels and under Protected Cultivation at the American Society for Horticultural Science annual meeting in St. Louis, MO.(50 attendees) (July 25).

**DR. ABIGAIL MAYNARD** spoke about New Crops to Dr. Frumento's class from Southern Connecticut State University at Lockwood Farm (15 adults) (July 7); interviewed by Richie Radsack of the Journal Courier about the cool wet weather conditions and crop growth (July 21).

**DR. WILLIAM NAIL** participated in a meeting of the Connecticut Vineyard and Winery Association and gave a presentation on midsummer vineyard management at the Connecticut Food Association in Farmington (16 attendees) (July 13); presented a talk on vine balance and general viticulture at Vineyard Day at Miranda Vineyards in Goshen (23 attendees); (July 18); presented a poster presentation, "Effects of Horticultural Oil on Incidence and Severity of Harvest Rots on Winegrapes" at the American Society of Enology and Viticulture- Eastern Section in Painesville, OH (July 21); participated in three Board of Director's meetings at the American Society of Enology and Viticulture- Eastern Section in Painesville, OH (July 19-21); served on the judging panel for the Viticulture and Enology Student Presentation competitions at the American Society of Enology and Viticulture- Eastern Section in Painesville, OH (July 21); participated in a planning meeting for a potential CAP project for eastern viticulture and enology in Painesville, OH (July 23).

**DR. SCOTT WILLIAMS** gave a talk on the effectiveness of various deer repellents on preventing browse damage at the Christmas Tree Growers Twilight Meeting at the Valley Lab (60 attendees) (July 9); met with staff from UConn Extension, DEP Wildlife Division, and DEP Forestry planning the Coverts Project to enhance forestry and wildlife conservation practices at Goodwin State Forest Headquarters (July 24); along with Dr. JEFF WARD, led a Japanese barberry control demonstration for staff of the Norcross Wildlife Sanctuary staff (4 attendees) (July 30).

**MR. MICHAEL SHORT** discussed hydroponic greenhouse production and Ebb & Flood watering of greenhouse crops with members of the "Institute for Science Instruction and Study" of Southern Connecticut State University (12 students) (July 7).

## Plant Pathology and Ecology

**DR. SANDRA L. ANAGNOSTAKIS** spoke to a class of teachers and showed them chestnut trees and blight and biocontrol at Lockwood Farm (20 adult attendees) (July 7) and attended the Board meeting (as treasurer) and reported on finances; gave a paper entitled "Where are the Ozark chinquapins" and another entitled "Planting chestnut trees in the forest"; discussed canker diseases of butternuts and their hybrids at a tour of the Ostry plantings at the Annual Meeting of the Northern Nut Growers Association in West Lafayette, Indiana (140 adult attendees) (July 18-22).

**DR. BOTOND BALOGH** attended the CTPA Summer Meeting in Farmington (July 16); gave a talk on "Diseases of vegetables" at the Stonington Grange in North Stonington (15 adults, one youth) (July 17) and visited the University of Massachusetts Fruit Research Center in Belchertown, MA, and met with Lorraine Los, Fruit Crops Integrated Pest Management (IPM) Coordinator from the University of Connecticut; Jon Clements, Extension Educator from the University of Massachusetts; and Dr. Daniel Cooley, Associate Professor from the Department of Microbiology, University of Massachusetts, to survey stone fruit orchards and discuss stone fruit disease and pest management strategies (July 23).

**DR. SHARON M. DOUGLAS** was interviewed about how weather is affecting plant growth and crops in Connecticut and about late blight of tomato by Bob Miller of the Danbury News-Times (July 1); was interviewed about late blight of tomato and potato by Nancy Cowen of WNPR and about how late blight is affecting tomatoes in Connecticut by Diana Perez of Channel 30 TV (July 8); gave a talk about current diseases of Christmas trees at the Twilight Meeting of the Connecticut Christmas Tree Growers at the Valley Lab in Windsor (50 adult attendees) (July 9); was interviewed about late blight in 2009 by Shana Wickett of the New Haven Register (July 10); participated in the CTPA Summer Meeting, organized the CAES booth, and answered questions about tree diseases at the Farmington Club (545 adults and 17 children) (July 16); was interviewed about late blight by Fox 61 News (July 24); and was interviewed about late blight and its impact on tomato prices and availability in Connecticut by Emily Groves of the Norwich Bulletin (July 28).

**DR. WADE H. ELMER** was interviewed about salt marsh dieback by Margaret Van Patten, Communications Director for Connecticut Sea Grant, University of Connecticut (July 28).

## Soil and Water

DR. THEODORE ANDREADIS was interviewed about the impact of the June rains on mosquito populations around the state and projected arbovirus activity this summer by Amy Wrubel NBC 30 (July 1); was interviewed about the impact of the June rains on mosquito populations around the state and projected arbovirus activity this summer by WFSB TV3 (July 2); was interviewed about the impact of the June rains on mosquito populations around the state and projected arbovirus activity this summer by Jodi Latino, WTNH TV8; Marc Sims, Connecticut Public Radio; and Edward Stannard, -New Haven Register (July 7); was interviewed about the impact of the June rains on mosquito populations around the state and projected arbovirus activity this summer by WICC Radio-Talk of the Town Program with Paul Pucelli (July 8); was interviewed about the impact of the June and July rains on mosquito populations around the state and projected arbovirus activity this summer by Carrie MacMillan, Waterbury Republican (July 13); was interviewed about the impact of the June and July rains on mosquito populations around the state and projected arbovirus activity this summer by Doug Green, NBC 30TV (July 14); presented a lecture entitled "West Nile virus: a ten-year perspective on an emerging mosquito-borne disease in the western hemisphere" to a group of secondary school teachers from Connecticut as part of the "Peabody Fellows Program on Biodiversity and Vector-Borne Diseases (approximately 15 in attendance) (July 14); appeared on the WFSB TV3 Three on Your Side program with Al Terzi to discuss impact of the June and July rains on mosquito populations around the state, arbovirus activity this summer and the mosquito trapping and testing program (July 22); was interviewed about the impact of the June and July rains on mosquito populations around the state and projected arbovirus activity this summer by Judy Benson, The Day, New London. (July 30); and was interviewed about the impact of the June and July rains on mosquito populations around the state and projected arbovirus activity this summer by Dan Kane-WFSB TV3 (July 31).

**MR. GREGORY BUGBEE** spoke on the 2008 CAES Invasive Aquatic Plant Program aquatic plant survey of Coventry Lake at a town meeting held at the Coventry Town Hall. (approx. 25 attendees) (July 8) and spoke on "Control of Variable Milfoil in Bashan Lake" at the annual meeting of the Bashan Lake Association in East Haddam. (Approx. 65 attendees) (July 18).)

**DR. JASON WHITE** met with Professor Saion Sinha of the University of New Haven concerning collaborative research on the impact of nanoparticles on agricultural plants (July 15).

## Valley Laboratory

**DR. JOHN AHRENS** attended a Board of Director's meeting of the Connecticut Christmas Tree Growers Association in East Hartford, CT as an advisor to that group (July 8); spoke about vegetation control in the summer with selective postemergence treatments and shearing of pine versus true firs to 50 attendees at a twilight meeting of the Connecticut Christmas Tree Growers Association held at the Valley Laboratory (50 attendees) (July 9).

**DR. CAROLE CHEAH** attended a CAPS meeting and gave an update on CT's biological control program for Mile-a-minute vine Valley Laboratory, Windsor (June 2); was interviewed by Penny Overton from The Republican American on biological control of mile-a-minute in CT (June 12); together with **DR. TODD MERVOSH**, visited Sticks and Stones Nursery in Newtown to check for mile-a-minute infestations and met with Rob Sibley from the Town of Newtown for further surveys of mile-a-minute infestations (June 18); was interviewed by Frank MacEachern of the Greenwich Times on biological control of Mile-a-minute; together with **DR. TODD MERVOSH** and Donna Ellis of UCONN, accompanied by Logan Senack, UCONN/DEP, CT Invasive Plant Coordinator, with press coverage from the New Haven Register and the Republican American, conducted the first releases of *Rhinoncominus latipes*, an introduced weevil for biological control of mile-a-minute vine, in Connecticut at Quinnipiac River State Park in North Haven (July 2); together with **DR. TODD MERVOSH** and Donna Ellis of UCONN, accompanied by Logan Senack, UCONN/DEP, CT, Kathleen Nelson (Mad Gardeners) and Rob Sibley (Town of Newtown) and further press coverage from the Greenwich Times and Danbury News Times, conducted more releases of *R. latipes* at sites in Greenwich, Bridgewater, New Milford, and Newtown (July 30), bringing the total number of *R. latipes* released in Connecticut to 7,000 to date.

**DR. JAMES A. LAMONDIA** attended the annual meeting of the Society of Nematologists in Burlington VT to participate in the Executive Board meeting, meet with committee chairs and present a poster entitled "Brassica Glucosinolate Profiles Associated With Biofumigant Activity Against Meloidogyne Hapla" (July 11-15) and participated in the meeting of the Connecticut Agricultural Information Council in Windsor (July 27).

**DR. DEWEI LI** gave a 3.5-hour lecture "AP Biology-Fungi" to a group of 15 high school AP Biology teachers at ECSU (15 teachers) (July 10) and attended the ASTM Johnson Conference on molds at the University of Vermont and gave a presentation on "Airborne Fungi Associated with Greenhouses" (110 attendees) (July 12-15).

DR. TODD MERVOSH with research partners DR. CAROLE CHEAH (CAES) and Donna Ellis (Univ. of Connecticut) and summer assistant Zachary Donais (CAES), released 1,000 weevils (Rhinoncomimus latipes) as biological control agents for the invasive mile-a-minute vine (Persicaria perfoliata) in Quinnipiac River State Park in North Haven and collected initial data; Logan Senack (CT Invasive Plant Coordinator, DEP / UConn), Patricia Douglass (State Plant Health Director, USDA-APHIS) and a reporter and photographer from both the New Haven Register and the Republican-American (Waterbury) were present (July 2); was interviewed by Jim Shelton of New Haven Register and Penelope Overton of Republican-American about mile-a-minute biocontrol (July 2); with Donna Ellis, Logan Senack and Zach Donais, released a total of 1,000 R. latipes weevils at two sites infested with mile-a-minute vine in Newtown [six other people present], and was interviewed and photographed by Kendra Bobowick of The Newtown Bee (July 9); spoke about weed management and presented an informational display of weeds at a twilight meeting of the Conn. Christmas Tree Growers Assoc. at the Valley Laboratory in Windsor (50 attendees) (July 9); with Donna Ellis and Logan Senack, released 1,000 R. latipes in mile-a-minute patches at the Audubon Society's Gimbel Sanctuary in Greenwich [ten others present], and was interviewed by a reporter for Cablevision News 12 (Norwalk) (July 10); with DR. CAROLE CHEAH, Donna Ellis and Logan Senack, released a total of 4,000 R. latipes at several sites infested with mile-a-minute in Greenwich, New Milford, Bridgewater and Newtown (representatives from Audubon Greenwich, Town of Greenwich, Mad Gardeners Inc., and Town of Newtown were present), and was interviewed by Frank MacEachern of The Greenwich Time and photographed by Lisa Weir of The News-Times (Danbury) (July 30).

**DR. HUGH SMITH** gave a presentation in Spanish entitled "El monitoreo de plagas en viveros en Connecticut" (Monitoring pests of Connecticut nurseries) at the summer meeting of the CNLA at Imperial Nursery in Granby (20 attendees) (July 16); and gave an invited presentation at the annual meeting of the American Society for Horticultural Science in St. Louis (30 attendees) (July 27). The talk was called "Ecological approaches to the management of arthropod pests of horticultural crops."

#### Journal Articles Approved July 2009

Anagnostakis, Sandra L. Identification of chestnut trees. The Nutshell

Elmer, Wade, Jason C. White, Joseph J. Pignatello. Impact of biochar addition to soil on the bioavailability of chemicals important in agriculture. Proceedings of the North American Biochar Conference, Boulder, CO, August 9-12, 2009

Smith, Hugh. Leafminer pests of Connecticut nurseries. Fact sheet

- Esposito, Lisa, Kirby Stafford. Protect our trees: Look out for the Asian longhorned beetle! The Laurel
- Sasidharan, T. O., O. K. Remadevi, J. Bhattacharya, Charles R. Vossbrinck, and P. D. Rajan. Pathological effects of an unidentified microsporidium from the Teak defoliator, *Hyblaea puera* Cramer (Lepidoptera: Hyblaeidae). Journal of Invertebrate Pathology
- Ward, Jeffrey S. and Scott C. Williams. Effectiveness of deer repellents in Connecticut. Connecticut Gardener
- Ward, Jeffrey S. Guide 6 Following up with seedling care and protection. Northeastern hardwood region tree planting and reforestation guide. Cornell University
- White, Jason C. and L. A. Newman. Phytoremediation of soils contaminated with organic pollutants. International Union of Pure and Applied Chemistry Series entitled "Biophysico-chemical Processes in Environment Systems. Book Chapter

#### Grant Awards July 2009

Drs. Cowles, Li and Mervosh received \$600, \$600, and \$300, respectively, from the Connecticut Christmas Tree Growers Association

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