Station News A progress Report for staff

and Friends of America's first Agricultural Experiment Station



Departmental News

DR. WADE H. ELMER WAS AN INVITED SPEAKER AND AWARDEE

DR. WADE H. ELMER delivered an invited seminar titled "Role of mineral nutrition in plant disease" at the International Conference on Plant Nutrition held in Hyderabad, India. He co-chaired the final session and was presented with three awards: Honorary Co-Chair Guest, Delegate, and Invited Speaker (100 adult attendees, August 9-13).



DR. WADE ELMER displaying his awards.

Administration

DR. LOUIS A. MAGNARELLI attended the 50th anniversary of the CT Christmas Tree Association in Shelton and spoke about Experiment Station programs (August 6); was interviewed about seafood testing by Doug Hardy of the Journal Inquirer (August 16); was interviewed about Experiment Station programs by Anders Helm of MooDog Press (August 19); and was interviewed about mosquitoes and West Nile virus by Bob Miller of the Danbury News Times (August 20).

Analytical Chemistry

DR. JASON WHITE at the Station's Board of Control meeting; he briefed the Board on the current activities in the Analytical Chemistry Department related to nanoparticle research and the testing of seafood from areas of the Gulf of Mexico impacted by the Deepwater Horizon Oil Spill (August 4); together with staff, participated in a FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (August 5); was interviewed by the Waterbury Republication American on the Departments testing of seafood from areas of the Gulf of Mexico impacted by the Deepwater Horizon Oil Spill (August 5); was interviewed by the Connecticut Radio Network on the Departments testing of seafood from areas of the Gulf of Mexico impacted by the Deepwater Horizon Oil Spill (August 9); was interviewed by the Fox News and The Harford Courant on the testing of seafood from areas of the Gulf of Mexico impacted by the Deepwater Horizon Oil Spill (August 9); together with staff, participated in a Northeast Regional FERN conference call. Spoke on the gulf seafood testing being done in the Analytical Chemistry Department (August 10); along with DR. BRIAN EITZER, DR. WALTER KROL and MS. TERRI ARSENAULT, attended the annual FDA Food Emergency Response Network (FERN) Chemistry Cooperative Agreement Program Technical Meeting in Denver, Colorado. DR. JASON WHITE and MS. TERRI ARSENAULT gave a research update presentation on the activities within the Department of Analytical Chemistry over the last 12 months (August 16-19); and together with staff, hosted Professor Mehmet Isleven of Sakarya University (Turkey) and his graduate student Pinar Sevim (August 1-30).

MR. WILLAM BERGER attended the 240th Annual Meeting of the American Chemical Society and gave a platform presentation entitled "Persistent organic pollutant uptake by plants: Mechanistic studies" (August 22-25).

MS. TERRI ARSENAULT along with **DR. BRIAN EITZER**, **DR. WALTER KROL** and **DR. JASON WHITE**, attended the annual FDA Food Emergency Response Network (FERN) Chemistry Cooperative Agreement Program Technical Meeting in Denver, Colorado. Ms. Arsenault and Dr. White gave a research update presentation on the activities within the Department of Analytical Chemistry over the last 12 months (August 16-19).

DR. BRIAN EITZER along with **MS. TERRI ARSENAULT**, **DR. WALTER KROL** and **DR. JASON WHITE**, attended the annual FDA Food Emergency Response Network (FERN) Chemistry Cooperative Agreement Program Technical Meeting in Denver, Colorado (August 16-19).

DR. WALTER KROL along with **MS. TERRI ARSENAULT**, **DR. BRIAN EITZER** and **DR. JASON WHITE**, attended the annual FDA Food Emergency Response Network (FERN) Chemistry Cooperative Agreement Program Technical Meeting in Denver, Colorado (August 16-19).

MR. JOSEPH HAWTHORNE attended the 240th Annual Meeting of the American Chemical Society. He was selected as a finalist in the Undergraduate Research Symposium and gave a platform presentation entitled "Accumulation and toxicity of engineered nanoparticles to agricultural crops" (August 22-25).

Entomology

MS. TIA BLEVINS successfully passed the USDA-APHIS-PPQ's Authorized Certification Official reaccreditation exam with a perfect score of 100 (August 19).

MS. KATHERINE DUGAS, with **MS. ROSE HISKES**, **MS. KATELYNN KING**, and volunteer Stacey Whitney, conducted a survey of host trees of Asian longhorned beetle (ALB) and Emerald ash borer (EAB) in the Norwich Business Park in Norwich (August 19); with **MS. ROSE HISKES** and **MS. KATELYNN KING**, showed "Lurking in the Trees," a video about the Asian longhorned beetle infestation in Worcester, MA, at the Norwich Cooperative Extension Office in Norwich (August 19); staffed an ALB, EAB, and Don't Move Firewood booth at Hammonasset Beach State Park in Madison (August 21 & 28); and with Sam Salorio, UConn, and **MS. KATELYNN KING**, staffed an ALB, EAB, and Don't Move Firewood booth at Rocky Neck State Park in East Lyme (August 28).

MS. ROSE HISKES participated in a tour of the Emerald ash borer infestation in Saugerties, New York (August 10); with MS. KATHERINE DUGAS, MS. KATELYNN KING, and volunteer Stacey Whitney, conducted a survey of host trees of Asian longhorned beetle (ALB) and Emerald ash borer (EAB) in the Norwich Business Park in Norwich (August 19); with MS. KATHERINE DUGAS and MS. KATELYNN KING, showed "Lurking in the Trees," a video about the Asian longhorned beetle infestation in Worcester, MA, at the Norwich Cooperative Extension Office in Norwich (August 19); was interviewed live by Stu Bryer of WICH Radio in Norwich about Emerald ash borer, Asian longhorned beetle, and the survey we completed there (August 24); met with Joe Rodrigues, vocational agriculture teacher in Bloomfield, to plan an educational program about ALB and EAB as well as a field survey for these insects to be conducted by his students (August 25); with MR. THOMAS RATHIER, conducted a forest pest train-the-trainer session covering ALB, EAB, and firewood for arborists from the Scotts Company at the Valley Laboratory in Windsor, and provided materials for them to train the 30 technicians whom they supervise (4 attendees) (August 25); with volunteers Wayne McKinney and Dave Starr and South Windsor Tree Warden Karl Reichle, put on a showing of the "Lurking in the Trees" video and program about ALB and EAB at the South Windsor Library in South Windsor (23 attendees) (August 25); participated in an Invasive Plant Working Group Symposium Planning Committee meeting in Windsor (August 26); and participated in a conference call for the Forest Pest Outreach and Survey Program (August 26).

MR. IRA KETTLE gave a talk on honey bees and pollinators to The Quinnipiac River Watershed Authority at their pollinator garden in Meriden (25 attendees) (August 21); and did a honey bee presentation for the Rosh Hashanah Apple and Honey Family Festival held at Brooksvale Park in Hamden (150 attendees) (August 29).



Children enjoying Ira Kettle's honey bee display on Plant Science Day.

MS. KATELYNN KING, with Hannah Chamberlain, The Nature Conservancy, staffed an ALB, EAB, and Don't Move Firewood booth at the Sharon Audubon Festival in Sharon (August 15); with **MS. KATHERINE DUGAS**, **MS. ROSE HISKES**, and volunteer Stacey Whitney, conducted a survey of host trees of Asian longhorned beetle (ALB) and Emerald ash borer (EAB) in the Norwich Business Park in Norwich (August 19); with **MS. KATHERINE DUGAS** and **MS. ROSE HISKES**, showed "Lurking in the Trees," a video about the Asian longhorned beetle infestation in Worcester, MA, at the Norwich Cooperative Extension Office in Norwich (August 19); staffed an ALB, EAB, and Don't Move Firewood booth at Hammonasset Beach State Park in Madison (August 28); and along with Sam Salorio, UConn, and **MS. KATHERINE DUGAS**, staffed an ALB, EAB, and Don't Move Firewood booth at Rocky Neck State Park in East Lyme (August 28).

DR. GALE E. RIDGE met with staff from the Southern Nevada Health Department in Las Vegas upon their request. She was invited to help them write a best practices document for the reuse of used mattresses, bedding, and upholstered furniture with regard to the management of bed bugs (August 13); and was invited to inspect and talk with West Haven Housing Authority staff on the management of bed bugs in multi-unit housing (August 21).

DR. VICTORIA L. SMITH, with MS. TIA BLEVINS, MR. JEFFREY FENGLER, MR. STEPHEN SANDREY, and MR. PETER TRENCHARD, discussed pest and disease problems and export issues with growers at the Summer Meeting of the CT Nursery and Landscape Association at Canterbury Horticulture in Canterbury (200 participants) (July 14); participated in a meeting of the Board of Directors for the National Plant Board, which was held at the Indianapolis Marriott Downtown in Indianapolis, IN (12 participants) (July 25); participated in the National Plant Board Meeting, held at the Indianapolis Marriott Downtown in Indianapolis, IN, as Vice President of the Eastern Plant Board, a member of the agenda committee, and as the Co-Chair of the Phytophthora ramorum Protocols Working Group (200 participants) (July 26-29); participated in a joint meeting of the National Plant Board Board of Directors and USDA-APHIS-Plant Protection and Quarantine Leadership Team, held at the Indianapolis Marriott Downtown in Indianapolis, IN (45 participants) (July 29); with MS. TIA BLEVINS, MR. JEFFREY FENGLER, MR. STEPHEN SANDREY, and MR. PETER TRENCHARD, traveled to Saugerties, New York, to observe the discovery of Emerald Ash Borer. Techniques for detection and identification of the insect in the field were discussed; approximately 45 state and federal personnel from New York, Massachusetts, and Connecticut participated (August 10); with MR. PETER TRENCHARD, cooperated with personnel from the USDA-APHIS-PPQ office in Wallingford, CT, to certify cold-storage facilities of apples for export from a local fruit grower to Israel (August 18); and along with MS. TIA BLEVINS, MR. JEFFREY FENGLER, MR. STEPHEN SANDREY, and MR. PETER TRENCHARD, traveled to Pittsfield, MA, for an emergency preparedness summit for Emerald Ash Borer, held at the South Mountain Regional Headquarters of the Massachusetts Department of Camping and Recreation (35 participants) (August 31).

DR. KIRBY C. STAFFORD III spoke on Plant Science Day on the history of summer field days at the Station's farm (August 4); participated in a conference call on preparedness for Emerald Ash Borer (August 5); participated in a conference call of the EPA's Lyme Disease Prevention Network (August 5); participated in a conference call on planning for an EPA-sponsored Lyme Disease Prevention Workshop for Spring 2011 (August 19); at the request of the CT Beekeepers Association, answered questions as a panel member following a showing of the documentary "Vanishing of the Bees" at Real Art Ways in Hartford (55 attendees) (August 20); conducted Diversity Training for seasonal and new full-time employees (August 23); was interviewed about beekeeping in CT by Christopher Brooks of The New York Times (August 30); and participated in a regional meeting of state and federal officials in Pittsfield, MA, to review and discuss plans to address the Emerald Ash Borer (55 attendees) (August 31).

DR. KIMBERLY A. STONER participated as a representative of Connecticut in the Interstate Council meeting of the seven state chapters of NOFA at the University of Massachusetts in Amherst, MA (16 attendees) (August 13); visited Old Maids Farm in South Glastonbury to survey bees on pumpkins and squash (August 18); visited the Killam & Bassette Farmstead in South Glastonbury and High Hill Orchard in Meriden to survey for bees on summer and winter squash (August 20); visited Riverbank Farm in Roxbury and Fort Hill Farm in New Milford to survey for bees on summer and winter squash (August 24);

with **DR. HUGH A. SMITH**, visited Dzen Brothers Farm in Ellington to survey for bees on pumpkin and to advise on plantings for pollinator habitat funded by the Natural Resources Conservation Service (August 26); and visited the Cecarelli Farm in Northford, CT to survey for bees on summer and winter squash (August 27).

Environmental Sciences

DR. THEODORE ANDREADIS was interviewed about the detection of West Nile virus in mosquitoes collected in Bethel, Bridgeport, Meriden, Norwalk and Orange by Jocelyn Maminta WTNH TV8 and Amanda Cuda CT Post (August 3); was interviewed about the detection of West Nile virus in mosquitoes collected in Meriden by David Moran, Meriden Record Journal (August 5); was interviewed about West Nile virus activity in Connecticut and protection methods by Nancy Schoeffler, Hartford Courant (August 6); was interviewed about the detection of West Nile virus in mosquitoes collected in Fairfield, Manchester, Milford, Westport and Wethersfield by Amanda Cuda CT Post, and Steve Kotchko CT Radio Network (August 17); was interviewed about the human case of West Nile virus in a New Haven resident by Jocelyn Maminta, WTNH TV8 (August 24); was interviewed about the detection of West Nile virus in mosquitoes collected in Darien, Greenwich, New Britian, Newtown, Stratford, and Trumbull by Fox 61 News (August 25); was interviewed about mosquitoes. West Nile virus and eastern equine encephalitis by Keith Kuntz and Jocelyn Maminta WTNH TV8 (August 25); participated in a conference call of the State Mosquito Management Committee with representatives from CT DEP, DPH, and Agriculture to discuss the current status of West Nile virus in Connecticut (August 26); was interviewed about mosquitoes, West Nile virus, eastern equine encephalitis and the CAES Mosquito and Arbovirus Surveillance Program by -Harold Cobin, Wilton Patch (August 27); and was interviewed about the detection of Eastern equine encephalitis in mosquitoes collected in North Stonington by Steve Kotchko Connecticut Radion Network and Jocellyn Maminta WTNH TV8 (August 31).

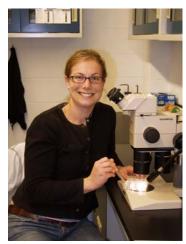
MR. GREGORY BUGBEE gave two demonstration talks on *Identifying Invasive Aquatic Plants* at Plant Science Day (August 4).

DR. GOUDARZ MOLAEI Jennifer Giulietti a student of the Sacred Heart Academy in Hamden, CT, completed summer internship in the laboratory.

DR. CHARLES VOSSBRINCK met with Jon Panciera the QA Manager of Sligan Plastics Corporation, Deep River, Connecticut. Sligan Plastics makes bottles for use in the medical industry for compounds such as polyethylene glycol. The bottles have become contaminated with insects and spiders on shipment. Sligan Plastics has had over a million bottles rejected. **DR. VOSSBRINCK** is helping to do visual and molecular identification of the insects in an effort to identify where and how they are getting into shipments to Florida (August 26).

New Staff

Two new Postdoctoral Scientists have joined the Department of Environmental Sciences.



DR. MELISSA HARDSTONE earned her Ph.D. in Entomology in the Department of Entomology at Cornell University in Ithaca, NY. Melissa comes with a strong background in insecticide resistance in mosquitoes and joins Dr. Theodore Andreadis's group in the Center for Vector Biology & Zoonotic Diseases. She will be conducting research on the ecology of *Ochlerotatus japonicus*, an invasive exotic mosquito that was recently introduced into the United States from Japan.



DR. MARK JUNE-WELLS earned his Ph.D. in Ecology in the Department of Biological Sciences at Rutgers University in Newark, NJ. Mark comes with a strong background in plant ecology and statistics and joins Mr. Gregory Bugbee in the Invasive Aquatic Plant Program. He will be evaluating aquatic plant community structure in Connecticut lakes and ponds in response to invasive species.

Forestry and Horticulture

MR. MICHAEL SHORT and DR. SCOTT WILLIAMS with fawns that are part of a deer movement study.





DR. JEFFREY WARD was interviewed about forest change in Connecticut by Ann DeMatteo, New Haven Register (August 4); along with **MR. JOSEPH P. BARSKY**, visited Great Mountain Forest, Norfolk, and White Memorial Forest, Litchfield, to discuss controlling invasive shrubs (August 18); spoke on controlling invasive shrubs to the Aspetuck Land Trust in Weston (10 attendees) (August 19); interviewed about effect of drought on fall leaf colors by Gil Simmons of WTNH-8 (August 19); along with **MR. JOSEPH P. BARSKY**, attended the summer meeting of the Connecticut Chapter - Society of American Foresters at the Pomfret School, Pomfret (August 20); spoke on "– Flame Weeding, A Technique For Killing Exotic Invasive Shrubs" at Vermont Woodlands Association's "Forestry School Series" workshop in Brattleboro, VT (43 attendees) (August 28); and interviewed about fall foliage by Michael Mako of the Connecticut Post (August 28).

DR. MARTIN GENT attended the International Horticultural Congress in Lisbon Portugal to present an oral paper "Water use efficiency with rapid watering of potted plants on flooded floors" and a poster "managing a simple system to recycle nutrient solution to greenhouse tomato grown in rockwool." (August 21-28).

DR. WILLIAM NAIL evaluated a prospective vineyard site with Dave Held in Baltic (August 17); inspected historic conservatory grapevines at Harkness State Park (August 17); inspected and evaluated the vineyards at Chamard Vineyards in Clinton (August 17); met with Jamie Jones and Larry McCulloch at Jones Family Farms in Shelton to discuss harvest and late season pest control strategies (August 24); and

participated in the National Viticulture Extension Leadership Conference and joined the eXtension Grape Community of Practice (CoP) in Fresno, CA (August 30 - September 2).

DR. SCOTT WILLIAMS along with **MR. MICHAEL R. SHORT**, made a field visit to Joshua's Land Trust to discuss invasive control with Joan Hill and Scott Matthies in Hampton (August 12).

Plant Pathology and Ecology

DR. SHARON M. DOUGLAS gave an invited talk titled "Diseases in Christmas tree plantations 2010" and participated in the 50th Anniversary Meeting of the CT Christmas Tree Growers Association hosted by Jones Family Farms in Shelton, CT (95 adult attendees) (August 6); appeared on WNPR's Colin McEnroe Show to discuss agriculture in Connecticut and late blight of tomato, and why things were different in 2009 and 2010 (August 9); and participated in the August meeting of the Board of Directors of the CT Tree Protective Association (August 9).

DR. FRANCIS J. FERRANDINO was interviewed about the remote access weather station located in the experimental vineyard at the Valley Laboratory by Julie Harrison of WFSB Channel 3 for "Better CT" (August 31).

MS. MARY K. INMAN gave brief presentations on "Needlecast diseases of Douglas-fir" as part of the farm tour at the 50th Anniversary Meeting of the CT Christmas Tree Growers Association hosted by Jones Family Farms in Shelton (100 adult attendees) (August 6); and presented "General care and common problems of houseplants" at the Lucy Robbins Welles Library in Newington, as part of their "Water Your Mind" adult summer reading program (19 adult attendees) (August 19).

DR. YONGHAO LI presented a poster titled "Evaluation of resistance to *Pucciniastrum hydrangea* in *Hydrangea arborescens*" at the Annual Meeting of The American Phytopathological Society in Charlotte, NC (August 6-11).

Valley Laboratory

DR. JOHN AHRENS attended the 50th Anniversary Meeting of the Connecticut Christmas Tree Grower's Association at the Jones Family Farm in Shelton, CT, served as co-chair of the program, and spoke on the walking tours about "Weed suppression on steep hillsides" (150 attendees); and received a commendation, signed by Governor Rell, and delivered by **DR. LOUIS MAGNARELLI**, for his longtime service to the Christmas tree industry (August 5-7).

DR. CAROLE CHEAH together with **DR. TODD MERVOSH**, gave a demonstration on the mile-aminute biological control program in Connecticut in the morning, as well as the afternoon on Plant Science Day (approximately 100 & 30 people, respectively) (August 4); and co-authored a presentation with Dr. Allen Cohen, on hemlock woolly adelgid predator diets and a poster on process and quality control systems in HWA predator mass rearing at the Fifth HWA Symposium at Asheville, NC (August 17-19).

DR. RICHARD COWLES presented "Managing armored scales in Christmas trees" to the Connecticut Christmas Tree Growers' Association in Haddam, CT (50 attendees) (June 9); presented the same subject to the CCTGA at the Valley Laboratory (50 attendees) (July 20), as well as six more times for the CCTGA's 50th Anniversary Meeting, in Shelton, CT (100 attendees) (August 6); and presented "Difficult to manage insects" for that meeting (100 attendees) (August 6).

DR. JAMES LAMONDIA was interviewed about the tobacco crop and tobacco diseases by Dana Whalen of WTIC radio (August 9); discussed tobacco breeding and the Connecticut program for resistance to plant pathogens with Ray Rinehart and Richard Kent of Lancaster Leaf (August 10); was interviewed about tobacco blue mold severity and potential fungicide resistance by Dan Chunglo for the Insurance industry (August 11); and was interviewed by July Simmons Harrison of WFSB's Better CT about grape harvest and grape diseases at the Station (August 24 & 31).

DR. TODD L. MERVOSH spoke about his research on invasive plant management to a group of highschool and middle-school science teachers as part of the ISIS (6th-year certificate education) program at Southern Connecticut State University in New Haven (12 teachers) (July 1); organized the meeting and gave a talk on weed management at the Conn. Christmas Tree Growers Assoc. twilight meeting at the Valley Lab in Windsor (60 attendees) (July 20); presented two demonstrations with **DR. CAROLE CHEAH** on control of Oriental bittersweet vines and biological control of mile-a-minute weed at Plant Science Day (approximately 80 attendees) (August 4); spoke to six separate tour groups about weed control in Christmas trees at the 50th annual meeting of the Conn. Christmas Tree Growers Assoc. at Jones Family Farm in Shelton, CT (150 attendees) (August 6); was interviewed on a public radio station (WHDD 91.9FM, Sharon, CT) about CAES and invasive plants, gave a presentation on biocontrol of mile-a-minute weed at the Sharon Audubon Festival (15 attendees) (August 15); and participated in a symposium planning meeting for the Conn. Invasive Plant Working Group at the Valley Lab (August 26).

DR. HUGH SMITH gave a presentation entitled "Basic Biology of Some Common Biocontrol Agents" during a meeting, which was sponsored by University of Connecticut Cooperative Extension and University of Massachusetts Cooperative Extension, at Grower Direct Nursery in Somers, CT (67 attendees) (August 11).

Journal Artícles Approved August 2010

Dingman, Douglas W. Interactivation of P. larvae endospores by a hydrogen peroxide/peroxyacetic acid brociole. Journal of Apicultural Research

Douglas, Sharon M. and Mary K. Inman. Seed germination and purity analysis 2010. CAES Technical Bulletin

Robb, Christina S., and Brian D. Eitzer. The analysis of diquat and paraquat by PALC. LC/GC

Stafford, III, Kirby C. Lockwood Farm and the History of Plant Science Day. Frontiers of Plant Science.

White, Jason C. "Connecticut Agricultural Experiment Station Tests Seafood from Gulf of Mexico". CT Weekly Agricultural Report

Williams, Scott C., A. J. Denicola, and S. R. Patton. Usage of a GPS-Ready Digital Aerial Sketch Mapper for Conducting Aerial Snow Counts of Deer (Abstract). Transactions of the 46th Annual Meeting of the Northeast Deer Technical Committee

Grant updates and Awards August 2010

In August, the Centers for Disease Control (CDC) awarded supplemental funding of \$62,500 to **Drs. Kirby Stafford and Anuja Bharadwaj's** Natural Products for Tick Control Cooperative Agreement to bring total funding for year 3 to \$312,500.

Dr. Joseph Pignatello has been awarded a 5-yr USDA Technical Assistance for Specialty Crops grant entitled *Retaining Export and Food Safety of US Specialty Crops: Low-Emission Methyl Bromide Funigations for Quarantine and Pre-Shipment Uses* in cooperation with the California Dried Plum Board (\$513,000).



The Connecticut Agricultural Experiment Station (CAES) prohibits discrimination in all of its programs and activities on the basis of race, color, ancestry, national origin, sex, religious creed, age, political beliefs, sexual orientation, criminal conviction record, genetic information, learning disability, present or past history of mental disorder, mental retardation or physical disability including but not limited to blindness, or marital or family status. To file a complaint of discrimination, Abstract write Director, The Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, CT 06504, or call (203) 974-8440. CAES is an equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services at (203) 974-8442 (voice); (203) 974-8502 (FAX); or Michael.Last@ct.gov (E-mail).