Station News Aprogress report for staff

and Friends of America's first Agricultural Experiment Station



Departmental News

CONNECTICUT FLOWER AND GARDEN SHOW

MS. ROSE HISKES, with MR. PETER TRENCHARD and MR. STEPHEN SANDREY, staffed a booth on Asian Longhorned Beetle and the Emerald Ash Borer at the Connecticut Flower and Garden Show at the Connecticut Convention Center in Hartford (February 18, 19, and 21).

This exhibit won first place in the special exhibits division section C education exhibits class 6 "Spicing up learning" and a judges special award. Great job. We were able to distribute 1,000 ALB green tote bags! WOW! We probably had close to 2,000 visitors to our booth.

The theme of the event this year was the SPICE OF LIFE.



Mr. Peter Trenchard talking with a citizen. Image by Dr. Kirby Stafford.



Mr. Peter Trenchard and Mr. Stephen Sandrey talking with citizens. Image by Dr. Kirby Stafford.

TOBACCO RESEARCH MEETING HELD AT SUFFIELD VO-AG CENTER

By Dr. James LaMondia

Over one hundred and thirty five people attended the Connecticut Agricultural Experiment Station's annual Tobacco Research Meeting held at the Suffield High School auditorium on February 17, 2010. Dr. James LaMondia and Anne Willard (Interim Director of the Suffield High School Vo-Ag program) welcomed growers. The meeting addressed a wide variety of issues of concern to growers. Dr. James LaMondia spoke about research on management of tobacco pathogens including poty viruses and progress of the breeding program for multiple pathogen resistance. Dr. Hugh Smith spoke about Management of semi-persistent aphidborne viruses. Ms. Christina Berger of CT DEP spoke about changes in fumigation regulations and pesticide storage issues and Ms. Sherry Wycoff of The New York Center for

Agricultural Medicine and Health updated growers about the ongoing farm worker health and safety project in Connecticut. Mr. Thomas Rathier spoke about nutrient management in shade and broadleaf tobacco, and tobacco cultural considerations. Mr. Clif Parker spoke about updates and changes in the Risk Management program and insurance programs, and Mr. Ty Kalaus of the New England Agricultural Statistics Service provided updates on the Connecticut Valley tobacco crop statistics. Ross Eddy of the Farm Services Administration provided updates on FSA services to growers. Mr. Bill Leahey updated growers about progress on issues of concern to the Conn-Mass Tobacco Association and he and Mr. Edward Kasheta presented Mr. Thomas Rathier with a plaque in recognition of 33 years of outstanding service to tobacco growers. Ms. Michelle Salvas, Ms. Jane Canepa-Morrison and Mr. James 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 nearly 100 persons participated.

Administration

DR. LOUIS A MAGNARELLI gave a presentation on Experiment Station research and outreach activities to the Appropriations Committee of the General Assembly (February 17).

MS. TESS FOLEY wrote an article on CAES food crop scientists new interest in collaborating with the Connecticut Department of Agriculture's Farm-to-Chef program. The Station hosted a "Talk and Tour" for the farmers, chefs, and the food crop scientists will each present a brief overview of the crops they are researching (April 5th).

Analytical Chemistry

MS. TERRI ARSENAULT was an invited instructor at a Food Emergency Response Network (FERN) course entitled "Identification of Toxins by Gas Chromatography – Mass Spectrometry (GC-MS)" in Pearl City, Hawaii (February 9-11).

DR. JASON WHITE attended the Laboratory Preparedness meeting in Hartford at the Department of Public Health and met with Jack Bennett, Section Chief for Environmental Chemistry at DPH, toured their laboratories and discussed ways to increase collaborative work between DPH and CAES (February 1); met with Dr. John Fontana (Director of Public Health Laboratories), Mr. Jack Bennett, and Aristea Kremer of the CT Department of Public Health. We designed a collaborative project based on joint microbial and chemical analysis of CT Market basket products (February 3); Dr. White and staff participated in a Northeast Regional FERN Laboratories conference call (February 9); Dr. White and staff participated in a FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (February 11); Dr. White and Dr. Xiaolin Li participated in a conference call and webinar with Cytoviva Incorporated regarding the potential use of microscopy coupled with hyperspectral imaging to visualize carbon and elemental nanoparticles in plants (February 17); participated in a conference call of the organizing committee for the

7th International Phytotechnologies Conference to be held in Parma, Italy September 26-29. Dr. White is on the organizing committee and is Executive Vice President of the International Phytotechnology Society (February 17); spoke at the Yale University School of Forestry and Environmental Studies on Sustainable Soil Management. The invited lecture was entitled "Phytoextraction of weathered persistent organic pollutants." (February 18); and Dr. White and staff participated in web-based Training Seminar that was offered on the new features found in the FERN website (February 25).

DR. WALTER KROL presented a talk entitled "Biofuels and the Food Supply" to $4^{th} - 12^{th}$ grade students from the Future Problem Solving Program of Connecticut at the CAES in New Haven (120 attendants) (February 24).

Biochemistry and Genetics

DR. NEIL MCHALE presented a seminar in the Department of Molecular, Cellular and Developmental Biology at Yale University titled: "Beyond Meristems: WOX Gene Function in Lateral Organ Primordia" (February 1).

Entomology

MS. ROSE HISKES, with MR. PETER TRENCHARD and MR. STEPHEN SANDREY, staffed a booth on ALB and EAB at the Hartford Flower Show at the Connecticut Convention Center in Hartford (February 18, 19, and 21) and prepared a display board and literature on Asian Longhorned Beetle for display at the Colchester Library (Month of March).

DR. CHRIS T. MAIER spoke about "Invasive Alien Insects in the Forest Understory" and displayed a poster on "Invasive Alien Insects in Connecticut" at the Forest Health Workshop in Jones Auditorium (45 adult attendees) (February 18) and displayed new entomological literature at a meeting of the Connecticut Entomological Society at the University of Connecticut in Storrs (February 19).

DR. GALE E. RIDGE participated in a national webinar hosted by the National Center of Healthy Housing, Environmental Protection Agency (EPA) and advocated education of medical professionals on dermatological injury caused by bed bug feeding because of misdiagnosis and the need for professional identification of the insects prior to remediation efforts (February 25).

DR. VICTORIA L. SMITH presented a talk entitled "Exotic Invaders: the Latest on Emerging Pests and Diseases" at New England Grows, held at the Boston Convention & Exhibition Center, Boston, MA (approx. 2,000 participants) (February 5) and organized the annual Forest Health Workshop, held in the Jones Auditorium, and presented a talk titled "What's the Deal With *P. ramorum*?" (45 participants) (February 18).

DR. KIRBY C. STAFFORD III spoke on Lyme disease and tick control at the Old Ripton Garden Club in Shelton (43 adult attendees) (February 1); participated in a conference call for the multi-state project on collaborative potato breeding (NE-1031) (February 11); was interviewed about the Connecticut state insect, the European praying mantis, by Sean Melony of Fox 61 (February 16); spoke on the Asian longhorned beetle outreach and survey project at the Forest Health Workshop in Jones Auditorium (45 adult attendees) (February 18); with **DR. GALE E. RIDGE**, participated in a meeting of the bed bug committee in the Slate Board Room (February 22); and participated in the meeting of the multi-state project Biology, Ecology, and Management of Emerging Infectious Diseases (NE-1043) at Rutgers University (February 25).

DR. KIMBERLY A. STONER spoke on "Organic Management of Insect Pests" as a part of the Adult Education Program on Sustainable Living at the Middletown High School Agriscience Center (15 attendees) (February 2); spoke on "Threats to the Health of Wild Bees and Honey Bees" at the Whitney Center in Hamden at the invitation of their Environment Committee (45 attendees) (February 4); participated in a meeting on possible changes in legislation regulating the use of lawn care pesticides at schools and day care centers at Department of Environmental Protection in Hartford (16 attendees)

(February 17); participated in a meeting of the Connecticut NOFA Board of Directors by conference call (12 attendees) (February 21); spoke about the "Pest Management Overview" as a part of the Rhode Island NOFA Organic Land Care Course at the Save the Bay Center in Providence, RI (57 attendees) (February 24); participated in a meeting of the NOFA Organic Land Care Committee in Sturbridge, MA (10 attendees) (February 24); spoke on "Plight of the Bumble Bee – Threats to the Health of Wild Bees and Honey Bees" at the Ecological Landscaping Conference in Springfield, MA (60 attendees) (February 25); and participated in "Meet the Experts," a meeting on how to encourage farming on farmland in Connecticut owned by municipalities, land trusts, and other non-profit organizations, organized by Jiff Martin of the American Farmland Trust (25 attendees) (February 26).

MS. TRACY ZARRILLO attended The Bee School, put on by The Connecticut Beekeeper's Association, in Jones Auditorium (February 20).

Environmental Sciences

DR. THEODORE ANDREADIS presented a summary of current research activities and accomplishments on mosquitoes and mosquito-borne diseases at the annual meeting of Multi-State Project NE-1043, *Biology, Ecology & Management of Emerging Disease Vectors*, held at Rutgers University, New Brunswick, NJ (15 attendees) (February 25).

MR. GREGORY BUGBEE presented a seminar entitled, *Soil and Fertilizer* as part of the Bartlett Arboretum arborists training program in Stamford (approx. 20 attendees) (February 4); was interviewed by Mr. Greg Hladky of the New Haven Advocate for a story on "Invasive Aquatic Plants" (February 8); and gave two *Invasive Aquatic Plant Workshops* with Ms. Martha Balfour as part of the 2010 Connecticut Envirothon (approx. 75 attendees) (February 13).

DR. CHARLES VOSSBRINCK participated in a conference on molecular evolution entitled *Conversations with Carl Woese* hosted by the University of Illinois Institute for Genomic Studies that included participants from a variety of fields including mathematics, physics, biochemistry, computer science and industry, which included a meeting with entomologists from the University of Illinois and discussed population biology and soil ecology (12 participants) (February 10-11).

Forestry and Horticulture

DR. JEFFREY WARD spoke on "Landscape design to reduce Lyme disease risk" at the Landscapes that improve human and environmental health seminar sponsored by University of Maine – Cooperative Extension in Lewiston, Maine (100 attendees) (February 9); spoke on "Crop tree management" at 15th annual Forest Health Monitoring Workshop in Jones Auditorium (33 attendees) (February 18); spoke on "Forest management for wildlife and diversity" for the Branford Land Trust stewards (25 attendees) (February 23); and spoke on using propane torches to control invasives at the Yankee-SAF meeting (30 attendees) (February 26).

DR. MARTIN GENT met with Mr. Steve Damian to discuss startup of a facility for hydroponic lettuce production in Bridgeport (February 1); gave a talk to the Branford Garden Club on "Use of row covers, high tunnels, and cold frames to extend vegetable production in Connecticut" (20 adults) (February 8); gave a seminar at Mitchell College New London CT on "My career at the Connecticut Agricultural Experiment Station" (10 students) (February 18); and met with Mr. Jim Rearden of Trueleaf Technologies and Mr. Joe Geremia of Geremia Greenhouse at Lockwood Farm to discuss experiments in the ebb & flood greenhouse (February 22).

DR. ABIGAIL MAYNARD worked with Upper School Biology students at Hamden Hall Country Day School on their research projects (16 students, 1 teacher) (February 18).

DR. WILLIAM NAIL participated in a meeting of the Steering Committee of the New England Vegetable and Fruit Conference in Methuen, MA (February 23).

DR. SCOTT WILLIAMS participated in doctoral committee meeting for Acima Cherian, Ph. D. student in Wildlife Management at the University of Connecticut (February 2); gave invited lecture "Wildlife Laws and Deer Damage Avoidance" at the 9th Annual 5-day Course in Organic Land Care, sponsored by the Northeast Organic Farming Association, Elmsford, NY (45 attendees) (February 16); gave lecture "Preliminary Results From 16 Connecticut Deer Exclosures" at the Forest Health Monitoring Workshop, Jones Auditorium (33 attendees) (February 18); and gave a talk to Boy Scout Pack 475 about wildlife issues in Connecticut and white-tailed deer capture techniques, Guilford, CT (35 scouts, 25 parents) (February 23).

MR. MICHAEL R. SHORT along with **MR. JOSEPH P. BARSKY** attended the "Forest Health Monitoring Workshop" in Jones Auditorium (February 18).

Plant Pathology and Ecology

DR. SANDRA L. ANAGNOSTAKIS gave a talk on chestnuts, butternuts, and elms at the Forest Health Workshop held in Jones Auditorium (45 adult attendees) (February 18).

DR. SHARON M. DOUGLAS participated in the monthly meeting of the Connecticut Tree Protection Agency Board of Directors (12 adult attendees) (February 9); attended the Forest Health Workshop, held in Jones Auditorium, and introduced **DR. YONGHAO LI**, the new Station Diagnostician (45 adult attendees) (February 18); organized and participated in a meeting with George Baldwin and Michele Fucci of the Sound School to discuss collaborations with CAES scientists to develop a curriculum in agricultural biology. Also attending were **DR. DOUGLAS W. DINGMAN** and **DR. RICHARD B. PETERSON** (5 adult attendees) (February 23); gave a presentation titled "Eco-friendly management of plant diseases" at the 16th Annual Conference and eco-marketplace of the Ecological Landscaping Association (50 adult attendees) (February 25); and was interviewed about current diseases of trees by Dan Staruk of Tree Care Industry Association Magazine (February 25).

DR. WADE H. ELMER co-organized and presented a talk titled "Update on emerging diseases, fungicides, and plant nutrition" at the 2010 CAES-UCONN Spring Bedding Plant Workshop held in Tolland (36 adult attendees) (February 9); participated in the governance council of the American Phytopathological Society Council as the Northeastern Division Councilor in St. Paul, MN (28 adult attendees) (February 18-21); and co-organized and presented a talk titled "Update on emerging diseases, fungicides, and plant nutrition" at the 2010 CAES-UCONN Spring Bedding Plant Workshop held in Torrington (35 adult attendees) (February 23).

DR. YONGHAO LI attended the 2010 CAES-UCONN Spring Bedding Plant Workshop held in Torrington (35 adult attendees) (February 23).

DR. ROBERT E. MARRA gave a Sigma Xi lecture titled "Proposing a new species of Fusarium: *F.* 'palustrium,' a pathogen of *Spartina alterniflora* associated with wetland dieback in eastern marshes" at Quinnipiac University in Hamden (50 adult attendees) (February 23).

Valley Laboratory

DR. JOHN AHRENS as co- Program Chairman of the 50th Anniversary of the Connecticut Christmas Tree Association, met with other members of the Association to discuss plans for the meeting on August 6th and 7th at the Jones Family Farm in Shelton, CT (February 3) and spoke at the Pennsylvania Christmas Tree Short Course in College Park, PA on Weed Control Update (125 attendees) (February 11).

DR. RICHARD COWLES presented "Insect Pests in Christmas Trees, Part I" and "Managing Armored Scales in Christmas Trees" at the Penn State Christmas Tree Management Short Course, State College, PA (115 attendees) (February 10-11).

DR. JAMES LAMONDIA welcomed growers and spoke about research on management of tobacco pathogens including poty viruses and progress of the breeding program for multiple pathogen resistance at

the annual CAES Tobacco Research Meeting held at Suffield High School (February 17) and participated in a meeting of the Connecticut Agricultural Information Council to prepare for the Outstanding Young Farmer Award and Ag Day at the Capital (February 23).

DR. TODD L. MERVOSH spoke about "Biological control of mile-a-minute vine in Connecticut" (30 attendees) (February 2) and "Diagnosis of ornamental plant injury symptoms" (30 attendees) (February 3) at the New England Region 1 Pesticide Inspector Residential Training workshop in Windsor (February 2-4); participated in a symposium planning meeting for the Conn. Invasive Plant Working Group at the Valley Lab (February 9); and met with Mr. Calvin Dedrick, a high school student in Waterford, who is preparing a brochure about invasive plants and plans to lead a volunteer group in controlling invasive plants at Ocean Beach for his Eagle Scout project (February 18).

DR. HUGH SMITH gave a presentation at the annual Tobacco Research Meeting in Suffield entitled "Management of semi-persistent aphid-borne viruses" (135 attended) (February 17).

Griswold Research Center

MR. ROBERT DURGY taught Math Calculations and Calibration for pesticide applicator's training in East Haven (45 attended) (February 25) and in West Hartford (35 attended) (March 2); and presented two workshops at the CT-NOFA Annual Conference entitled Top 10 Vegetable Insects (75 attended) (March 6) and Organic Weed Control (52 attended) (March 6).

Journal Articles Approved February 2010

- **Anagnostakis, Sandra**, S. Clark, and H. McNab. Resistance of Chestnut Trees to Infestation by Asian Chestnut Gall Wasp. New Forests
- **Andreadis, Theodore G., Philip M. Armstrong**, and W. J. Bajwa. Studies on Hibernating Populations of *Culex pipiens* (Diptera:Culicidae) from a West Nile Virus Endemic Focus in New York City: Parity Rates and Isolation of West Nile Virus. Journal of the American Mosquito Control Association
- **Bugbee, Gregory J. and Martha E. Balfour**. Connecticut's Invasive Aquatic and Wetland Plants: Identification Guide. Station Bulletin.
- **Cheah, Carole**. Combating the Invasion of Mile-A-Minute in Connecticut. Connecticut Botanical Society Newsletter
- **Cowles, Richard S**. An Effective, Selective, and Less Laborious Approach for Managing Armored Scales. Pennsylvania Christmas Tree Growers' Workshop
- Cowles, Richard S. Managing Root Feeding Insects of Strawberries. New York Berry News
- Cowles, Richard S. Breeding Strawberries for Tolerance to Root Pests. New York Berry News
- **Cowles, Richard S.** Optimizing a Basal Bark Spray of Dinotefuran to Manage Armored Scales (Hemiptera:Diaspididae) in Christmas Tree Plantations. Journal of Economic Etomology.
- Raymond Cloyd and **Richard S. Cowles**. Resistance Management: Principles of Resistance, Mode of Action, and Pesticide Rotation. OFA Bulletin, No. 919
- **Elmer, Wade H**. and M. Daughtrey. Fusariuim Wilt of Cyclamen. In: Fusarium Wilts of Greenhouse Vegetable and Ornamental Crops, A. Garibaldi, J. Katan, and M. Lodovica Gullino (eds.), APS Press, St. Paul, MN

- Li, Xiaolin, William Berger, Craig Musante, MaryJane Mattina. Characterization of Substances Released from Crumb Rubber Material Used on Artificial Turf. Chemosphere
- **Smith, Hugh** and A. L MacVean. Saltahojas Plaga en los Viveros y Paisajes del Estado de Connecticut. CAES website
- Williams, Scott, Jeffrey Ward, and Worthley. Japanese Barberry Can Be Controlled. CT Botanical Society Newsletter

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