# Station News A progress Report for staff

and Friends of America's first Agricultural Experiment Station

## MOLECULAR PLANT DIAGNOSTICS LABORATORY

The newly renovated Molecular Plant Diagnostics Laboratory, in the Department of Plant Pathology & Ecology of The Connecticut Agricultural Experiment Station, is now outfitted with expert staff and stateof-the-art technology. Through rapid identification of infected plants, the MPDL will aid in containment and control of Ramorum Blight and other new and emerging diseases that threaten Connecticut.





Molecular Plant Diagnostics Laboratory, Jason Corwin (pictured), Research Technician, working in the newly equipped laboratory for molecular detection of plant diseases that threaten Connecticut.



#### CONNECTICUT FLOWER AND GARDEN SHOW

We attended the Connecticut Flower and Garden show at the EXPO Center, February 23<sup>rd</sup> through the 26<sup>th</sup>. CAES hosted posters "Plant Partners: Butterflies and Flowers and Invasive Aquatic Plants", distributed many of the Station's publications, and displayed our live honey bee exhibit. Thank you to Ira Kettle, Lisa Kaczenski, Peter Trenchard, Rose Bonito, Stephen Sandrey, and Rose Hiskes for donating their time and expertise to the exhibit. (Thursday, February 23<sup>rd</sup>, 914 visitors) (Friday, February 24<sup>th</sup>, 1,656 visitors) (Saturday, February 25<sup>th</sup>, 2,603 visitors) (Sunday, February 26<sup>th</sup>, 1,991 visitors).





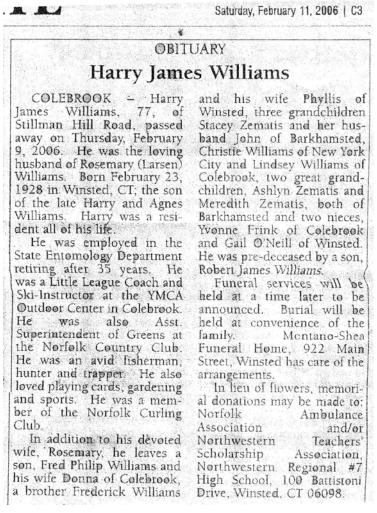
The Connecticut Agricultural Experiment Station - Station News

#### **TOBACCO RESEARCH MEETING HELD AT SUFFIELD VO-AG CENTER**

About one hundred and thirty people attended the Connecticut Agricultural Experiment Station's annual Tobacco Research Meeting held at the Suffield High School auditorium on February 22, 2006. Dr. Jim LaMondia and Harrison Griffin, Director of the Suffield Vo-Ag program welcomed growers. The meeting addressed many topics of concern to growers. Dr. James LaMondia spoke about research on management of tobacco pathogens including blue mold and tobacco mosaic virus and results of the breeding program for pathogen resistance. Thomas Rathier spoke about nutrient management under plasticulture, black root rot and diagnostic problems in 2005. David Stokes of the CT DEP spoke about waste management and pesticide disposal requirements and Brad Robinson spoke about issues and concerns with soil fumigation. Dr. Frank Ferrandino presented research on mist blower spray coverage and crop interactions. Ross Eddy of the Farm Services Administration provided updates on their services to growers. Robin Helrich of the New England Agricultural Statistics Service provided updates on their services to growers. Colleen Kisselberg spoke about risk management, crop insurance and other services to growers. Dr. Todd Mervosh was present to discuss weed management with growers. Jane Canepa-Morrison and Rich Horvath assisted with much of the behind the scenes work for the meeting. The meeting qualified for pesticide applicator recertification credit in both Connecticut and Massachusetts. Posters on 'disease management using plant genetic resistance' and 'Seed production to maintain resistance and cultivar identity' were presented.

#### HARRY JAMES WILLIAMS

Mr. Harry James Williams passed away on Thursday, February 9, 2006. He was employed at the Station for 29 years until he retired on June 1, 1979. He worked for the Department of Entomology as a Nursery Inspector.



# **Departmental News**

# Administration

DR. LOUIS A. MAGNARELLI visited the Connecticut National Guard Headquarters in Hartford to view their mobile laboratory (February 9); participated in an invasive plants meeting in Hartford (February 14); and hosted and attended a meeting of the Experiment Station Associates Board in Slate Laboratory (February 16).

# Analytical Chemistry

DR. MARYJANE INCORVIA MATTINA, DR. BRIAN EITZER and WILLIAM IANNUCCI-BERGER met with Joan Larned of the Kent Land Trust and Megan Haney to discuss analysis of soils bordering the Housatonic River for PCB content (February 2).

DR. BRIAN EITZER attended a class on the operation of the Thermo LTQ liquid chromatograph mass spectrometer in West Palm Beach Florida (February 20-23).

# **Biochemistry and Genetics**

# Entomology

ROSE BONITO assisted at the station exhibit at the CT Flower and Garden Show, Hartford (February 25 & 26).

IRA KETTLE assisted at the station exhibit at the CT Flower and Garden Show, Hartford (February 23 - 26).

DR. CHRIS T. MAIER discussed the biology of cicadas with Thomas Moore and exotic insects with Mark O'Brien while visiting the Museum of Zoology, University of Michigan, Ann Arbor, MI (February 10) and Exhibited European scientific literature on flower flies (Syrphidae) at a meeting of the Connecticut Entomological Society at the University of Connecticut in Storrs (February 17).

CLAIRE RUTLEDGE taught class 'Insects and Mites that Attack Trees' for Connecticut Tree Protection Association's Aboriculture 101 course (about 35 students) (February 22)

STEPHEN SANDREY assisted at the station exhibit at the CT Flower and Garden Show, Hartford (February 25).

DR. VICTORIA SMITH completed Incident Command System level 200 training, an online course presented by the National Incident Management System (February 6); presented a talk at the CT Groundskeepers Association Meeting titled "Diseases of Landscape Plants" and organized and staffed a table at the same meeting, held CT Convention Center in Hartford; (approximately 140 attendees for the talk and approximately 1,000 for the meeting) (February 15).

DR. KIRBY C. STAFFORD, III spoke on tick management at the NOFA Organic Land Care Course in Jones Auditorium (February 10); interviewed by Marion Brown, Connecticut Post, on the gypsy moth (February 16); and interviewed by Fred Baumgarten, Lakeville Journal, about the impact of winter weather on insect and tick activity (February 17).

DR. KIMBERLY A. STONER presented "Introduction to Organic Land Care" at the Organic Land Care Course, New Haven. (60 attendees) (February 8); presented "Insect Pest Management in Organic Land Care" at the Organic Land Care Course, New Haven. (60 attendees) (February 10); participated in a meeting of the Board of Directors of CT NOFA, Hamden (12 attendees) (February 19), presented "Cabbage Maggots: What Do We Know and What Can We Do?" at a meeting of the Northeast SARE project on

improving Brassica production, Grafton, Massachusetts (12 attendees) (February 28); and chaired a meeting of the Organic Land Care Committee, Windsor (8 attendees) (February 28).

PETER TRENCHARD assisted at the station exhibit at the CT Flower and Garden Show, Hartford (February 23 - 25).

## Forestry and Horticulture

DR. JEFFREY WARD participated in the Connecticut Tree Protective Association, Board of Directors meeting in New Haven, CT (February 6); spoke on "Native trees and shrubs" for the Spring Glen Garden Club at Lockwood Farm (16 attendees) (February 9); chaired Connecticut Forest Council- research committee meeting in Middlefield (February 15); interviewed by Carol Savage of the Reminder Newspaper about species diversity in Connecticut (February 10); spoke on "Homeowner's tree care" to Hadlyme Garden Club in Hadlyme (24 attendees) (February 22); attended annual meeting of the Yankee Society of American Foresters in Enfield (February 23); and presented a paper "Defoliation and oak mortality in southern New England" at the 15th Central Hardwood Forest Conference in Knoxville, TN (45 attendees) (February 28).

DR. MARTIN GENT presented a paper "Effect of shade on quality of greenhouse tomato" at the International Society for Horticultural Science Symposium on 'Advances in soil and soilless culture under protected environment" in Agadir, Morocco (February 19-24, 300 attendees); toured Morocco to observe agricultural practices (February 25-26).

DR. WILLIAM NAIL Presented a poster presentation, "Pruning and training system effects on yield and vegetative growth of Concord grapevines in Michigan", at the 6th International Cool Climate Symposium for Viticulture and Oenology in Christchurch, New Zealand (505 attendees) (February 7).

J.P. BARSKY presented the Annual Report of the Chair at the Yankee Division - Society of American Foresters Annual Winter Meeting in Enfield (February 23).

SCOTT WILLIAMS spoke on "Wildlife Laws and Deer Damage Avoidance" at the Northeast Organic Farming Association Conference in Jones Auditorium (60 attendees) (February 14).

# Lockwood Farm

## Plant Pathology and Ecology

DR. SHARON M. DOUGLAS gave a lecture on "Introduction to plant diseases" to the 5<sup>th</sup> Annual Organic Land Care Course sponsored by CT NOFA in Jones Auditorium (approximately 65 attendees) (February 14); and participated in the Connecticut Nursery and Landscape Association Foundation Lecture Series by giving a lecture entitled "Diseases of native plants" at the Valley Laboratory in Windsor (approximately 25 attendees) (February 22).

DR. WADE H. ELMER co-organized the Bedding Plant Meeting with UCONN Cooperative Extension in Vernon, Connecticut, and presented a talk entitled "Update on biological fungicides in Connecticut" at the Bedding Plant Meeting in Vernon (32 attendees) (February 8); and co-organized the Bedding Plant Meeting with UCONN Cooperative Extension in Litchfield, Connecticut, and presented a talk entitled "Update on biological fungicides in Connecticut" at the Bedding Plant Meeting in Vernon (40 attendees) (February 28).

DR. FRANCIS J. FERRANDINO gave a talk entitled "Pesticide spray coverage in shade tobacco: Mistblower application" at the Annual Meeting of the Tobacco Growers Association in Suffield (160 attendees) (February 22).

#### Soil and Water

GREGORY BUGBEE gave a seminar on Soil health in Relation to Tree Care to an arborist class at the Barttlet Arboretum in Stamford (February 9).

DR. JOSEPH PIGNATELLO presented an invited seminar, Advances in our understanding of the sorption of hydrophobic organic pollutants to natural organic matter to the Department of Chemistry, Louisiana State University, Baton Rouge, LA (February 10).

DR. JASON WHITE hosted two graduate students from the Royal Military College in Kingston, Ontario. Melissa Whitfield (a Ph.D. candidate) and Alissa Lunney (a M.S. candidate) who conducted experiments related to the phytoremediation of weathered persistent organic pollutants (February 13-March 10).

# Valley Laboratory

TIMOTHY ABBEY presented Insect Pests of Trees and Shrubs to a Pesticide Applicator Training Class in East Haven (February 14) and West Hartford (February 16); Woody Plant Pest Management and Care to a University of Connecticut Master Gardener class in Torrington (February 15); Vernon (February 24) and Stamford (February 27); Organic Pest Management for Ornamental Insect Pests at the Northeast Organic Farming Association Organic Land Care Course at CAES New Haven (February 14); and Insect Pests of Trees to a arborist training class at Bartlett Arboretum in Stamford (February 21).

DR. RICHARD COWLES presented "Hemlock Woolly Adelgids: What We Learned from Hemlock Hill" with Peter DelTredici (Arnold Arboretum) at the New England Grows meeting, Boston, MA, (500 attendees) (February 2); "Organic Management of Turf Insects" to the Organic Land Care Seminar for the Connecticut Northeast Organic Farm Alliance, New Haven, (58 attendees) (February 14); "Turf Insect Management," at the Connecticut Grounds Keepers Association meeting, Hartford, (80 attendees) (February 15); and "Insect and Mite Pests of Native Plants" for the Connecticut Nursery Foundation Seminar Series, (15 attendees) (February 15); attended a meeting jointly sponsored by Bayer, USDA Forest Service, and USDA APHIS to discuss forest use of imidacloprid, and presented "Optimizing imidacloprid dosage for managing hemlock woolly adelgids and to protect aquatic resources," Research Triangle Park, NC, (25 attendees) (February 23).

ROSE HISKES gave a talk to the Cheshire Garden Club on vertebrate garden pests and invasive plants in Cheshire (35 attendees) (February 6); participated in a Connecticut Invasive Plant Working Group Symposium planning committee in Windsor (February 8); served as a judge at the Suffield Vocational Agriculture speech competition in Suffield (February 9); gave a talk on invasive plants at Asnuntuck Community College in Enfield (20 attendees) (February 22); and staffed the Connecticut Nursery and Landscape Association booth at the Connecticut Flower Show in Hartford (February 24) and the Station Booth (February 26).

DR. JAMES A. LAMONDIA discussed techniques used in breeding for pathogen resistance and quality characteristics of pathogen-resistant shade tobacco with Windsor Shade Tobacco breeder Duane Adams and farm manager Dan Regan (February 2); presented 'Epidemiology and management of tobacco blue mold' at Lunch club in New Haven (February 21); spoke about research on management of tobacco pathogens including blue mold and tobacco mosaic virus and results of the breeding program for pathogen resistance at the CAES Tobacco Research Meeting held in Suffield (130 attendees) (February 22); and spoke about the Experiment station and summer research assistant opportunities at a Career Day and Job Fair held at Central Connecticut State University (35 attendees) (February 27).

DR. DEWEI LI attended a board meeting of the Analytic Accreditation Board (AAB) of American Industry Hygiene Association (AIHA) in Nashville, TN (February 2-5); and is serving as a board member of AAB in AIHA.

DR. TODD L. MERVOSH participated in a symposium planning meeting for the Connecticut Invasive Plant Working Group at the Valley Laboratory (9 attendees) (February 8); and presented a research poster on "Management of Oriental bittersweet and pale swallowwort at a Connecticut coastal reserve" and was

chair of the Turf & Ornamentals section at the annual meeting of the Weed Science Society of America in New York City (300 attendees) (February 13-16).

# Journal Articles Approved February 2006

- Cowles, Richard S. The Connecticut Agricultural Experiment Station hybridizes strawberries to develop cultivars tolerant to soil-dwelling pests. Connecticut Weekly Agricultural Report
- Gent, Martin P. N. Effect of shading on quality of greenhouse tomato. Acta Horticulturae
- Li, De-Wei and Yang, Chin. Microscopic analysis methods for fungi. Sampling and Analysis of Indoor Microorganisms (book)
- Yang, Chin and De-Wei Li. The ecology of fungi in the indoor environment. Sampling and Analysis of Indoor Microorganisms (book)

Stafford, Kirby C., III. Dealing with ticks in the home landscape. NOFA Guide to Organic Land Care

Stoner, Kimberly A. and Steve Gilman. Upper Forty Farm Case Study. Real World Organic: Exemplary Organic Farms in the Northeast

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