# Station News Aprogress report for staff

and Friends of America's first Agricultural Experiment Station

## **Departmental News**

#### THE DARWIN COFFEE

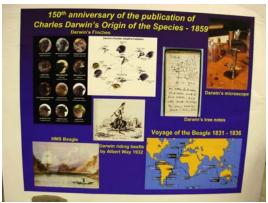
By Gale Ridge

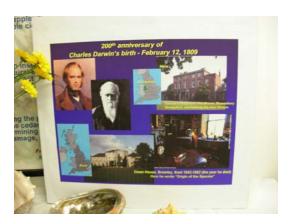
On Friday, February 20th, Dr. Gale Ridge hosted a coffee to celebrate Darwin's 200th birthday. Display tables showing Darwin's life and work, were set up in the Entomology Department. Dr. Chris Maier displayed some of his magnificent shell collection, as well as part of his beetle collection. Darwin had a love for beetles. Dr. Kirby Stafford brought in his Darwin book collection and Dr. Gale Ridge presented posters and brought in some Wedgwood China. The Darwin and Wedgwood families inter-married for several generations and it was Josiah grandfather Wedgwood, Darwin's who encouraged him to sail on the Beagle in its historic voyage around the world.

Dr. Ridge will be giving a lecture on Darwin's life and work on April 1<sup>st</sup>, at noon in the Jenkins Laboratory conference room. Mark the date on your calendar.











# TOBACCO RESEARCH MEETING HELD AT SUFFIELD VO-AG CENTER

By James LaMondia

Over one hundred and twenty people attended the Connecticut Agricultural Experiment Station's annual Tobacco Research Meeting held at the Suffield High School auditorium on February 17, 2009. Dr. Jim 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. Thomas Rathier spoke about nutrient management in shade and broadleaf tobacco, and tobacco cultural considerations. Hugh Smith presented information about management of insect pests. Dr. Marcia Trape. Director of the Employee Health and Occupational & Environmental Health Center Clinics at the University of CT Health Center and School of Medicine informed growers about the ongoing Farmworker Health and Safey Project. James LaMondia spoke about research on management of tobacco pathogens including root rots and tobacco mosaic virus and progress of the breeding program for multiple pathogen resistance. Mr. Clif Parker spoke about updates and changes in the Risk Management program and insurance programs and 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 Mr. Gary Keough of the New England Agricultural Statistics Service provided updates on the CT Valley tobacco crop statistics. Michelle Salvas, Jane Canepa-Morrison and Jim 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 over 100 persons participated. Posters on 'Avoiding Tobacco Mosaic Virus Transmission' 'Tobacco risk management' and 'Farm Worker Health and Safety' were presented.

# CAES AT THE CONNECTICUT FLOWER AND GARDEN SHOW

By Rose Bonito



Above Ira Kettle, State Bee Inspector, with The Station's live honey bee display had volumes of information to educate the public concerning honey bees in the state. (photo taken by Rose Bonito)

We hosted two posters concerning our honey bee research along with live bees at the Connecticut Flower and Garden Show held at the Connecticut Convention Center in Hartford from February 19-22. Visitors to our exhibit were interested in our research and pleased to have further information available on numerous subjects. Staff that hosted and helped with the display were Ms. Rose Bonito, Ms. Lisa Kaczenski, Mr. Peter Trenchard, Mr. Ira Kettle, Mr. Stephen Sandrey, and Ms. Vickie Bomba-Lewandoski.

#### Administration

DR. LOUIS A. MAGNARELLI attended the Board meeting of the Experiment Station Associates and gave a report on research findings (February 2); attended an Invasive Plants Council meeting in Windsor and spoke on Experiment Station research (February 10); welcomed attendees of the Forest and Parks

Association in Jones Auditorium and gave an overview of Station history and research (February 11); welcomed bedding plant growers in Jones Auditorium and gave an overview of Station research programs (February 20); and welcomed the Future Farmers of America in Jones Auditorium (February 27).

## **Grants and Fundraising Office**

MS. TESS FOLEY was appointed to the Board of Directors for the Fairfield County Farm Bureau and to the Legislative Committee for the Connecticut Farm Bureau Association (CFBA) (February); held a conference call with the national Produce for Better Health Foundation, with Dr. Abigail Maynard, to discuss a joint outreach campaign to CT farmers and growers (February 13); attended the Legislative Committee meeting of CT Farm Bureau in Windsor (20 attendees) (February 18); and held conference call with the Propane Education Resource Council with Drs. Jeff Ward and Scott Williams to discuss funding for their barberry research (February 25).

### **Analytical Chemistry**

DR. BRIAN EITZER presented a paper on pesticides in honey bee pollen at the American Bee Research Conference (February 4–6) in Gainseville, FL.

### **Biochemistry and Genetics**

DR. NEIL SCHULTES served as a judge for forty eight 7<sup>th</sup> grade science projects and poster presentations at the Adams Middle School in Guilford, CT (February 3) and along with DR. RICHARD PETERSON hosted Dr. Thomas Brutnell form the Boyce Thompson Institute for a visit to The Experiment Station. They discussed recent data concerning an ongoing collaboration in maize C4 photosynthesis research (February 12).

DR. DOUGLAS DINGMAN attended the 2009 New England Grows conference (Boston, MA) (February 4); discussed research projects with Dr. A. L. Sonenshein (Tufts Medical College, Boston, MA) (February 5); participated in a telephone conversation with Dr. Tom Cronin (Simsbury, CT) on bee activity and AFB levels in his hives (February 11); attended the CT Beekeepers Association quarterly meeting (Bee School; New Haven, CT) (February 14); and presented a seminar (Honeybee health and American foulbrood) to students and faculty at Albertus Magnus College (New Haven, CT) (February 20).

## Entomology

MS. ROSE BONITO helped set-up and staff an exhibit and answer questions on the Asian Longhorned Beetle and Honey bees at the 27<sup>th</sup> Annual CT Flower & Garden Show held at the CT Convention Center in Hartford (20,000 visitors to show) (February 19-22).

MS. ROSE HISKES gave a talk on 'Introduction to Insects' to the Connecticut Orchid Society in Cheshire, (February 11)(25 attendees); gave a talk on 'Native Plants for Connecticut Gardens' to landscapers at Planter's Choice Nursery in Newtown (40 attendees) (February 17); participated in a meeting with USDA APHIS PPQ and DEP Forestry regarding an Asian Longhorned Beetle Outreach and Survey project in Wallingford (February 18); and participated in a meeting with the Connecticut Tree Protective Association and the Department of Information Technology on putting the Pesticide Guide Toward IPM for Arborists on the web in East Hartford (February 25).

MR. IRA KETTLE helped staff an exhibit and answer questions on Asian Longhorned Beetle and Honey bees at the 27<sup>th</sup> Annual CT Flower & Garden Show held at the CT Convention Center in Hartford (20,000 visitors to show) (February 19-22).

DR. CHRIS T. MAIER spoke on "Overview of Alien Longhorned Beetles (Cerambycidae) in Eastern North America" at the Forest Health Monitoring Workshop in Jones Auditorium (February 19); displayed new entomological literature at a meeting of the Connecticut Entomological Society at the University of

Connecticut, Storrs (February 20); and discussed invasive beetles with Phil Perkins, Curator, while working with the cerambycid collection at the Museum of Comparative Zoology, Harvard University, Cambridge, MA (February 24).

DR. GALE E. RIDGE hosted a Darwin coffee in the Entomology Department to celebrate the 200<sup>th</sup> anniversary of Darwin's birth (February 23). Displays were prepared. Dr. Chris Maier showed off his shell collection and some of his beetle collection, a nod to Darwin who had an interest in beetles, Dr. Kirby Stafford III brought in his Darwin book collection, and Dr. Ridge prepared posters following his life and noting the 150<sup>th</sup> anniversary of the publication of his seminal book *Origin of the Species* in 1859. She also brought in some Wedgwood china pieces since the Wedgwood and the Darwin families intermarried over several generations and the Wedgwood's were a great influence on Darwin's career. Staff from around the station came by and enjoyed a large lemon birthday cake and coffee.

DR. CLAIRE RUTLEDGE gave lecture entitled 'Asian Longhorned Beetle on our doorstep' Connecticut Parks Association Winter meeting. Jones Auditorium, New Haven (25 attendees) (February 11); taught class on 'Integrated Pest Management, and Insects that Attack Trees" to the Bartlett Arboretum Aboriculture 101 class, Bartlett Arboretum, Stamford CT (17 attendees) (February 12); gave lecture entitled 'Using a native wasp to find the Emerald Ash Borer" to the Forest Health Workshop, Jones Auditorium, New Haven (40 attendees) (February 19); and taught class on 'Insects that Attack Trees' to the CTPA aboriculture 101 course, Jones Auditorium, New Haven (45 attendees) (February 25).

MR. STEPHEN SANDREY helped staff an exhibit and answer questions on Asian Longhorned Beetle and Honey bees at the 27<sup>th</sup> Annual CT Flower & Garden Show held at the CT Convention Center in Hartford (20,000 visitors to show) (February 21).

DR. VICTORIA SMITH hosted and organized the Annual Forest Health Workshop, held in the Jones Auditorium. Current results of surveys for forest pests and diseases were discussed, and ten Station scientists presented research findings (approximately 35 participants) (February 19).

DR. KIRBY C. STAFFORD, III participated on an Asian longhorned beetle meeting with USDA/APHIS/PPQ in Wallingford, CT (February 18); welcomed participants to the Forest Health Workshop in Jones Auditorium (35 attendees) (February 19); and spoke to FFA teachers touring the Station about the Department of Entomology research, service, and surveys, including Asian longhorned beetle (February 27).

DR. KIMBERLY A. STONER co-authored a paper with Brian Eitzer. He presented the paper entitled "Measuring Pesticide In Pollen Trapped From Honey Bee Hives In Connecticut" at the American Bee Research Conference in Gainesville, FL (February 5); participated in a meeting called by Dr. Jerry Silbert of the Watershed Partnership and Brad Robinson of the CT Department of Environmental Protection to consider modifications of the ban on pesticides at day care centers and school grounds of K-8 schools (12 attendees) (February 10); and presented the "Pest Management Overview" in the NOFA Organic Land Care Course in Providence, RI (51 attendees) (February 27).

MR. PETER TRENCHARD helped staff an exhibit and answer questions on Asian Longhorned Beetle and honey bees at the 27<sup>th</sup> Annual CT Flower & Garden Show held at the CT Convention Center in Hartford (20,000 visitors to show) (February 19 & 21).

#### Forestry and Horticulture

DR. JEFFREY WARD was interviewed about status of mountain laurel in Connecticut by Brigitte Ruthman of the Waterbury Republican (February 3); participated in a meeting of Connecticut Tree Protection Examining Board to revise the oral examination (February 11); spoke on "Barberry control alternatives" at 14th annual Forest Health Monitoring Workshop in Jones Auditorium (33 attendees) (February 11); participated in a Connecticut Forestlands Council - Executive Board meeting in Middlefield (February 24); and spoke on forestry and horticultural research for Future Farmers of America teachers (8 teachers) (February 27).

DR. MARTIN GENT attended a meeting to evaluate the Sound School Agricultural Program at the Sound School New Haven and spoke on my interactions with the program (15 educators, 5 others) (February 3); and Bruce Gresczyk senior and junior from Gresczyk Farms, New Hartford CT visited Lockwood Farm to discuss greenhouse production of tomatoes and hydroponic lettuce (February 9).

DR. ABIGAIL MAYNARD worked with students at Hamden Hall Country Day School with their science projects (41 students, 3 teachers) (February 5 & 19); spoke on composting and utilization of compost to the Lyme Garden Club (42 adults) (February 10); gave a talk on composting and utilization of compost to the Haddam Garden Club (34 adults) (February 11); reported about Station research at a meeting of the State Technical Committee in Windsor (22 adults) (February 18); and participated in a meeting of the Solid Waste Advisory Committee at DEP (February 24).

DR. WILLIAM NAIL gave a workshop on assessing and quantifying winter bud damage at a meeting of the Connecticut Vineyard and Winery Association in Farmington (February 2).

DR. SCOTT WILLIAMS gave an invited lecture "Wildlife Laws and Deer Damage Avoidance" at the 8th Annual NOFA Course in Organic Land Care in Jones Auditorium (70 attendees) (February 1); with MR. JOSEPH BARSKY met with Michael Robertson, Craig Jones, and Scott Stewart of the Greenwich Council of the Boy Scouts of America about white-tailed deer research and future educational outreach opportunities (February 13); gave a lecture titled "Even More Ticked Off About Japanese Barberry" at the Forest Health Monitoring Workshop in Jones Auditorium (35 attendees) (February 19); gave an invited lecture titled "Wildlife Laws and Deer Damage Avoidance" at the 8th Annual NOFA Course in Organic Land Care in Schodack, New York (30 attendees) (February 20); and gave an invited lecture titled "White-Tailed Deer as Seed Dispersal Agents" at Science Day 2009 at Housatonic Valley Regional High School in Falls Village, CT (approximately 70 students, 20 faculty and visitors) (February 26)

### **Plant Pathology and Ecology**

DR. SANDRA L. ANAGNOSTAKIS met with Kathleen Lundgren of the New Haven Garden Club to discuss a project on "Elms for the Elm City" (February 18); and gave a talk entitled "Chestnut, butternut, oaks---All that tree stuff" at the Forest Health Monitoring Workshop in Jones (35 adult attendees) (February 19).

DR. DONALD E. AYLOR gave a talk entitled "Quantifying aerial dispersal of maize pollen" in the Department of Agronomy at Iowa State University in Ames, IA (10 adult attendees) (February 26); discussed plant disease epidemiology with Professors X. B. Yang and Forrest Nutter and a group of graduate students in the Department of Plant Pathology at Iowa State University in Ames, IA (February 26) and participated in a PhD prospectus examination of Brian Viner on meteorological modeling of pollen transport in the Agronomy Department at Iowa State University in Ames, IA (February 27).

DR. BOTOND BALOGH gave a talk entitled "Update on emerging diseases and new fungicides for spring crops" at the 2009 CAES-UCONN Spring Bedding Plant Workshop in Vernon (24 adult attendees) (February 10); gave a talk entitled "Common tree diseases of 2008" at the Forest Health Monitoring Workshop in Jones (35 adult attendees) (February 19); gave a talk entitled "Update on emerging diseases and new fungicides for spring crops" at the 2009 CAES-UCONN Spring Bedding Plant Workshop in Jones (26 adult attendees) (February 20); gave a talk entitled "Bacteriophage-based biocontrol of tomato bacterial spot" at the University of Massachusetts in Amherst, MA (20 adult attendees) (February 24); and gave a talk entitled "Update on emerging diseases and new fungicides for spring crops" at the 2009 CAES-UCONN Spring Bedding Plant Workshop in Torrington (25 adult attendees) (February 25).

DR. SHARON M. DOUGLAS participated in the monthly meeting of the Board of Directors of the CTPA (14 adult attendees) (February 3); presented an invited talk entitled "Combatting plant diseases in the nursery" and discussed disease management strategies with attendees at 2009 New England Grows held at the Boston Convention and Exhibition Center in Boston (2,500 adult attendees) (February 5); attended the annual CAES-Forest Cooperators Meeting in Jones (32 adult attendees) (February 19); and discussed

service and research efforts of the Department of Plant Pathology and Ecology with FFA teachers (9 adult attendees) (February 27).

DR. WADE H. ELMER co-organized and presented a talk entitled "Managing plant nutrition to limit disease susceptibility" at the 2009 CAES-UCONN Spring Bedding Plant Workshop in Tolland (24 adult attendees) (February 10); co-organized, moderated, and presented a talk entitled "Managing plant nutrition to limit disease susceptibility" at the 2009 CAES-UCONN Spring Bedding Plant Workshop in Jones (26 adult attendees) (February 20); and co-organized and presented a talk entitled "Managing plant nutrition to limit disease susceptibility" at the 2009 CAES-UCONN Spring Bedding Plant Workshop in Torrington (25 adult attendees) (February 24).

DR. FRANCIS J. FERRANDINO, with the help of Dr. Richard Kiyomoto, has deployed five remote-accessed weather stations in Connecticut as part of his grape IPM project. Three of these weather stations are located at the Station's three experimental sites: Lockwood Farm in Hamden, the Valley Laboratory in Windsor, and the Griswold Research Center in Griswold. The other two are at commercial vineyards located in New Preston and Colchester. The stations monitor air temperature, relative humidity, rainfall, wind speed and direction, soil temperature (20 cm), solar radiation, and leaf wetness. A summary of the data collected is accessible on the Web (https://www.hobolink.com/s/d0696313715dd96f86b25f35552cc1f47).

DR. ROBERT E. MARRA participated in a meeting of the Steering Committee for the Connecticut Conference on Natural Resources at UCONN in Storrs (February 9) and gave a talk titled "Bleeding cankers on European beeches" at the Forest Health Monitoring Workshop in Jones (35 adult attendees) (February 19).

#### Soil and Water

DR. THEODORE ANDREADIS presented an overview of the Research and Surveillance Programs on Mosquitoes and Mosquito-borne Diseases at the Station to Zahir Shah, Assistant Director of the Office of Vector Surveillance and Control, NYC Department of Health and Mental Hygeine and Pushpa Narine, Laboratory Microbiologist (February 6); presented a summary of current research activities and accomplishments on mosquitoes and mosquito-borne diseases at the annual meeting of Multi-State Project NE-507, Biology, Ecology & Management of Emerging Disease Vectors, held at Rutgers University, New Brunswick, NJ (12 attendees) (February 10-11); attended an International Symposium on the Asian Tiger Mosquito: Ecology, Evolution, Epidemiology, and Control held at held at Rutgers University, New Brunswick, NJ and moderated a session on Surveillance and Control (200 attendees) (February 12-13); attended the 2009 West Nile Virus Conference sponsored by the Centers for Disease Control and Prevention, and the American Mosquito Control Association, held in Savannah, GA (300 attendees) (February 19-20); and presented an overview of The Mosquito Trapping and Testing Program for Mosquitoes and West Nile Virus to a group of Future Farmers of America teachers visiting the Station (11 attendees) (February 27).

DR. PHILIP ARMSTRONG gave a tour of the Bio-safety Level 3 Laboratory and described protocols for arbovirus isolation and identification to Zahir Shah, Assistant Director of the Office of Vector Surveillance and Control, NYC Department of Health and Mental Hygeine and Pushpa Narine, Laboratory Microbiologist (February 6).

MR. GREGORY BUGBEE presented a seminar on *Soils* to candidates training for the Connecticut supervisory arborist license at the Bartlett Arboretum in Stamford (25 attendees) (February 5); presented two *Invasive Aquatic Plant Identification Workshops* at the 2009 Connecticut Envirothon held at Sacred Heart University in Fairfield (95 attendees) (February 7); presented a talk, *CAES Update on Invasive Aquatic Plants* at the 12th Annual Meeting of the Connecticut Association of Wetland Scientists at Mountain Ridge in Wallingford (Approx. 100 attendees) (February 26); presented an overview of *Connecticut's Invasive Aquatic Plant Problem* to a group of Future Farmers of America teachers here at CAES (11 attendees) (February 27).

DR. GOUDARZ MOLAEI discussed the Station's Mosquito Molecular Biology Research Program with Zahir Shah, Assistant Director of the Office of Vector Surveillance and Control, NYC Department of Health and Mental Hygiene and Pushpa Narine, Laboratory Microbiologist (February 6).

MR. JOHN SHEPARD and MR. MICHAEL THOMAS gave a tour of the Station's Mosquito Research Laboratories and described the procedures used for mosquito trapping and identification in State Mosquito Trapping and Testing Program for Mosquitoes and Arboviuses to Zahir Shah, Assistant Director of the Office of Vector Surveillance and Control, NYC Department of Health and Mental Hygiene and Pushpa Narine, Laboratory Microbiologist (February 6).

#### **Valley Laboratory**

DR. RICHARD COWLES spoke to the Connecticut Forest and Parks Association on "White grubs and their management" at their annual meeting, New Haven (20 attendees) (February 11); presented "Activity and persistence of systemics for managing hemlock woolly adelgids," at the Connecticut Forest Health Workshop, New Haven (25 attendees) (February 19); and participated in an ad hoc committee meeting organized by Brad Robinson of DEP, to develop compromise legislation that could permit the use of low-toxicity pesticides on school grounds (15 attendees) (February 10).

DR. JAMES A. LAMONDIA participated in a special meeting of the Connecticut Tree Protection Examining Board in New Haven (February 11); hosted the CAES Tobacco Research Meeting for growers in Suffield and spoke about research (February 17); participated in the meeting of the Connecticut Agricultural Information Council in Windsor (February 23); and was interviewed about garden vegetable production by Theresa Sullivan-Barger, free-lance journalist for the Hartford Courant (February 25).

DR. TODD L. MERVOSH was an invited speaker on the subject of weed management in nursery fields at an ornamentals workshop (40 attendees) and spoke about his research on control of pale swallow-wort (30 attendees) at the annual meeting of the Northeastern Weed Science Society in Baltimore, MD (January 5-8); reported on his pale swallow-wort control project on Mt. Tom at the Silvio O. Conte National Fish & Wildlife Refuge office in Sunderland, MA (10 attendees) (January 16); presented a research poster about herbicide impacts on pale swallow-wort and other vegetation at the Weed Science Society of America conference in Orlando, FL (approximately 400 attendees) (February 9-12); and provided information at the Connecticut Invasive Plant Working Group display at the Connecticut Flower & Garden Show in Hartford (February 22).

DR. HUGH SMITH gave a presentation entitled "Key Pests of Tobacco" at the annual Tobacco Research Meeting in Suffield (approximately 120 attendees)(February 17).

# **Journal Articles Approved February 2009**

- Cowles, Richard S. and A. F. Lagalante. Activity and persistence of systemic insecticides for managing hemlock woolly adelgids. Proceedings of the 20<sup>th</sup> Interagency Forum on Invasive Species.
- Gent, Martin P. N., Wade H. Elmer, and Richard J. McAvoy. Rapid watering to achieve partial saturation of root medium on flooded floors. HortScience (Abstract). American Society for Horticultural Science. July 2009, St. Louis, MO.
- Gent, Martin P. N., Michael R. Short. Recycling nutrient solution for greenhouse tomato grown in rockwool. HortScience (Abstract). American Society for Horticultural Science. July 2009, St. Louis, MO.
- Li, De-Wei, Jingyuan Chen, and Yixun Wang. Two new species of dematiaceous hyphomycetes from Hubei, China. Sydowia.
- Maier, Chris T. New distributional records of three alien species of megachilidae (Hymenoptera) from Connecticut and nearby states. Proceedings of the Entomological Society, Washington.

- Maynard, Abigail A. Utilization of leaf compost in cut flower production. Station Bulletin.
- Molaei, Goudarz, Jamesina Scott, Ary Farajollahi, Randy R. Gaugler, and Theodore G. Andreadis. Human blood feeding by the recently introduced mosquito, Aedes *japonicus japonicus* (Diptera: Culicidae) and public health implications. Journal of the American Mosquito Control Association.
- Stoner, Kimberly. Organic methods of insect management for the home vegetable garden. CT Horticultural Society Newsletter.
- J. B. Slizovsky, Jason C. White, J. W. Kelsey. Evaluation of extraction methodologies for the determination of pesticide residues in vegetation. International Journal of Phytoremediation.

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).