

Station News

A PROGRESS REPORT for staff
and Friends of America's first Agricultural Experiment Station



Departmental News

THOMAS RATHIER RECEIVES "MERIT AWARD"

By Dr. James LaMondia

Mr. Thomas Rathier received the "Merit Award" for 2010 from the Connecticut Christmas Tree Growers' Association at their annual meeting in Middletown CT on March 13 with approximately 100 attendees. Mr. Will Jones of Jones Family Farms of Shelton presented Mr. Rathier with the award. Congratulations, Thomas.



Mr. Thomas Rathier accepting his award.

AEARIAL IMAGES OF THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION IN HAMDEN AND NEW HAVEN



Lockwood Farm, Hamden, CT
Images by Dr. Victoria Smith



Main Laboratories, New Haven, CT
Images by Dr. Victoria Smith

Barros (Wexler-Grant)- Dr. Anuja Bharadwaj; Ms. Misha Holland (Celentano)- Dr. Gale Ridge; Ms. Jayla Manning (Celentano)- Dr. Christina Robb; Ms. Michel Pascal (Wexler-Grant)- Dr. Kim Stoner; Ms. Jamie Swint (East Rock)- Dr. Claire Rutledge; and Ms. Stephanie Trajeski (Wexler-Grant)- Dr. Sharon Douglas. Also assisting with the program were Ms. Vickie Bomba-Lewandoski and Ms. Tess Foley. This program was supported by a grant to The Connecticut Agricultural Experiment Station Research Foundation, Inc. from the Community Fund for Women & Girls, a component fund of The Community Foundation of Greater New Haven.

BIOLOGICAL CONTROL WORKSHOP HELD AT VALLEY LABORATORY

On March 24 the Valley Laboratory hosted a day-long workshop entitled Biological Control of Insects and Mites in Greenhouses. Mr. Hugh Smith organized the workshop which was taught primarily by Ms. Suzanne Wainwright Evans of BugLady Consulting. Mr. Hugh Smith and Ms. Leanne Pundt of the University of Connecticut assisted with the training. The limited-enrollment workshop was attended by 28 participants, including nursery and greenhouse growers from Connecticut and Rhode Island, and extension agents from the University of Rhode Island and Cornell University.



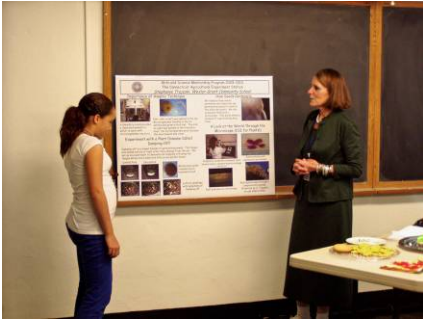
(This photo was substituted because Evelyn was not able to attend the final session.)

CAES GIRLS AND SCIENCE MENTORSHIP PROGRAM COMPLETED

By Dr. Sharon M. Douglas

The Experiment Station's pilot *Girls and Science Mentorship Program* held its final session on March 17th, 2010. During this session, each mentee and their scientist mentor presented an overview of what they learned during the mentorship program to the group of fellow mentees and scientist mentors. These presentations included posters summarizing the diverse topics and skills that they explored during the program. Each mentee also received a framed "certificate of completion." The list of mentees, schools, and mentors is: Ms. Evelyn





Administration

DR. LOUIS A. MAGNARELLI gave a report to the Experiment Station Associates at their annual meeting in Jones Auditorium (March 18); testified at a Judiciary Committee hearing on House Bill 5543 regarding patents, licensing agreements, and trademarks for the Experiment Station (March 26); spoke to participants of a Landscape Designers' course in Jones Auditorium about Station research programs (March 30); and was interviewed by Nancy Cohen of NPR Radio about Asian longhorned beetle and Emerald ash borer regulations (March 31).

Analytical Chemistry

DR. JASON WHITE participated in the monthly Laboratory Preparedness Network meeting at the Department of Public Health in Hartford (March 1); with **DR. CHRISTINA ROBB**, met with Ms. Judy Singer of the Department of Environmental Protection on a collaborative project to use ELISA to quantify

pesticides in surface and groundwater (March 4); Dr. White and staff participated in a FERN Chemistry Cooperative Agreement (CAP) Laboratory conference call (March 11); met with Professor Clive Edwards of Ohio State University and discussed the use of earthworms to assess the bioavailability of chemicals in soil (March 12); led a conference call with the Senior Editorial Board and the publisher (Taylor & Francis, Inc.) of the International Journal of Phytoremediation. The purpose of the call was to discuss the large increase in manuscript submissions this year (March 17); gave a lecture entitled “Phytoremediation of soils contaminated with persistent organic pollutants” at the annual meeting of the Experiment Station Associates (March 18); and with **DR. KROL**, participated in a meeting at the Department of Public Health in Hartford to plan a collaborative project between CAES, DPH, and the Department of Consumer Protection (DCP). The project will be a parallel pesticide and microbial analysis of the annual Analytical Chemistry Market basket study. In attendance from DPH were Dr. John Fontana and Ms. Stacey Kinney; from DCP, the attendees were Mr. Frank Greene, Mr. Ted Faulise, and Mr. Tim Spillane (March 25).

DR. WALTER KROL participated with **DR. WHITE** in a meeting at the Department of Public Health in Hartford to plan a collaborative project between CAES, DPH, and the Department of Consumer Protection. The project will be a parallel pesticide and microbial analysis of the annual Analytical Chemistry Market basket study. In attendance from DPH were Dr. John Fontana and Ms. Stacey Kinney; from DCP, the attendees were Mr. Frank Greene, Mr. Ted Faulise, and Mr. Tim Spillane (March 25).

DR. BRIAN EITZER was a judge at the Connecticut Science Fair at Quinnipiac University in Hamden, CT (March 10-11) and gave a talk entitled “Pesticide Residues in Pollen Collected by Foraging Honey Bees in Connecticut” at the American Chemical Society’s 239th National Meeting in San Francisco, CA (March 25).

DR. CHRISITNA ROBB with **DR. WHITE** met with Ms. Judy Singer of the Department of Environmental Protection on a collaborative project to use ELISA to quantify pesticides in surface and groundwater (March 4).

Biochemistry and Genetics

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

Entomology

DR. CHRIS T. MAIER discussed the invasion of exotic bees with Dr. John Ascher, American Museum of Natural History, New York, while working at the museum (March 23).

DR. GALE E. RIDGE, with Mr. Mike Lipsett, as board member representatives from the Connecticut Coalition Against Bed Bugs (CCABB), advised and assisted the State Attorney General’s Office on policy issues pertaining to the shipment of bedding materials and bed bugs in Connecticut (March 12); spoke on bed bugs at the annual meeting of the International Executive House Keepers Association in Newington where over 50 housing executives representing the hospitality industry including major Connecticut hospitals attended (March 12); was invited to talk with students at the Moran Middle School in Middletown on a Podcast about how young people should prepare for their careers and what they need to know. The Podcast was then put up on YouTube (March 15); spoke about bed bugs and the worldwide pandemic to the Experiment Station Associates (50 attendees) (March 18); held the third Bed Bug Forum within a year at Southern Connecticut State University in New Haven. Attendees were from such entities as immigration, shelters, correctional facilities, halfway housing, pest management professionals, universities, colleges, schools, centers for the aging, soup kitchens, Section 8, local housing authorities, landlords, tenants, visiting nurses, health departments (over 250 attendees) (March 22); did a radio broadcast on WNPR’s Colin McEnroe Show about bed bugs, social stigmas, and what to do (March 31); and wrote a tri-fold handout called “Bed Bugs, How to Deal with Them,” which is designed to be a portable quick and easy reference pamphlet on bed bugs (March 31).

DR. VICTORIA L. SMITH presented a talk titled “Asian Longhorned Beetle: a Threat to Our Forests” to the Greater Bridgeport Men’s Garden Club at the Sterling House in Stratford (20 participants) (March 17) and participated in the National Plant Board Board of Directors meeting held at the Menger Hotel in San Antonio, TX (15 participants) (March 23-25).

DR. KIRBY C. STAFFORD III participated on a conference call of the EPA’s Lyme Disease Prevention Network (March 4); spoke on ticks and Lyme disease at a meeting of the Hill and Dale Garden Club in Glastonbury (46 attendees) (March 11); gave a talk on the Asian longhorned beetle and Emerald ash borer to the Friends of Hammonasset State Park in Madison (44 attendees) (March 16); spoke on ticks and Lyme disease at Western Connecticut State University in Danbury as part of their Science at Night series (65 attendees), which was also recorded (March 18); and participated in the meeting of Northeastern Regional Association of Agricultural Experiment Station Directors (NERA) in Baltimore, MD (March 22-24).

DR. KIMBERLY A. STONER presented a talk on “Threats to the Health of Wild Bees and Honey Bees” at the CT NOFA Winter Conference at Manchester Community College (45 attendees) (March 6); participated in the annual planning retreat of the NOFA Organic Land Care Committee in Chester (12 attendees) (March 12-14); participated in a meeting of the Board of Directors of CT NOFA in Hamden (12 attendees) (March 21); met with Dr. John Ascher of the American Museum of Natural History on identification of wild bees collected in several research projects in Connecticut (March 23); and organized and facilitated a conference call reviewing the NOFA Organic Land Care Standards for Wildlife Management (5 attendees) (March 30).

Environmental Sciences

DR. THEODORE ANDREADIS presented an invited talk entitled *Evidence for Competitive Reduction of Native Mosquitoes in the Northeastern United States by the Invasive Exotic Species, Ochlerotatus japonicus japonicus (Diptera: Culicidae)* at the Annual Meeting of the New Jersey Mosquito Control Association, held in Atlantic City, NJ (approx. 150 attendees) (March 11).

MR. GREGORY BUGBEE with **DR. MARTHA BALFOUR**, gave an “Invasive Aquatic Plant Workshop” to town and lake association officials at the Ellington Town Hall (approx. 30 attendees) (March 2); with **DR. MARTHA BALFOUR**, presented the results of the 2010 Invasive Aquatic Plant Surveys of Lakes Candlewood, Lillinonah and Zoar to The FirstLight and Power Resources Inc. technical committee in New Fairfield (March 3); spoke on *Container Gardening Indoors and Out* to the Connecticut Audubon Society in Fairfield (approx. 40 attendees) (March 17); spoke on *Connecticut’s Invasive Aquatic Plant Problem: Searching for Solutions* at the Annual Meeting of the Northeast Association of Environmental Biologists in Newport, RI (approx. 30 attendees) (March 18); with **MR. MICHAEL CAVADINI**, gave two Environmental Chemistry workshops as part of the 2010 Connecticut High School Science Olympiad at the University of Connecticut in Storrs (approx. 30 attendees) (March 27).

DR. JOSEPH PIGNATELLO presented a talk entitled: *Sorption of the antimicrobial sulfamethazine to biochar* at the 239th American Chemical Society Meeting, Environmental Chemistry Division held in San Francisco, CA (March 21-25).

MR. JOHN SHEPARD presented information on *Mosquitoes and Eastern Equine Encephalitis* at Ag Day at the Capitol (March 18).

MR. MICHAEL THOMAS presented information on *Mosquitoes and Eastern Equine Encephalitis* at Ag Day at the Capitol (March 18).

Forestry and Horticulture

DR. JEFFREY WARD administered practical and oral examination to arborist candidates for the Connecticut Tree Protection Examining Board (March 3); spoke on "How deer effect wildflowers, invasives, and Lyme disease" at the CT Environthon Wildlife Workshop in Burlington (40 children, 5 adults) (March 6); spoke on "Using propane torches to control barberry" at the New England Society of

American Foresters annual conference in Nashua, NH (60 attendees) (March 9); spoke on "Wildflowers and invasives" at the Connecticut Highlands Ecosystem Health workshop at the White Memorial Conservation Center, Litchfield (70 attendees) (March 16); participated in the Connecticut Urban Forest Council meeting in Middlefield (March 17); spoke on "Invasive control strategies: theory and practice" at the "30 Hour Course", a pesticide applicators certification course sponsored by the Cornell University Cooperative Extension, Yaphank, NY (15 attendees) (March 23); visited Harry S. Fisher Elementary School in Plymouth to provide advice on tree planting and care (March 25); and spoke on "Using propane torches to control barberry" at the Flame-Weeding for Invasive Shrub Control Workshop sponsored by the USDA-NRCS in Vernon (42 attendees) (March 30).

DR. MARTIN GENT participated in NCERA101 regional research committee on "Controlled Environment Technology and Use" at the University of Wisconsin, Madison WI (80 attendees) (March 20-22); attended the NE1035 regional research meeting on "Commercial Greenhouse Production: Component and System Development" at the University of Wisconsin, Madison WI (March 20-22); and represented the Station when Ms. Kathleen Merrigan (Deputy Secretary for USDA) and Rep. Rosa Delauro toured Geremia Greenhouses (March 27).

DR. ABIGAIL MAYNARD spoke to Ms. Sandra Fox of the Danbury News Times about the benefits of using compost (March 26).

DR. WILLIAM NAIL met with Mr. Al and Mrs. Tina Torizzo at Haight-Brown Vineyard in Litchfield to discuss pruning, pest management, and general viticulture topics for the upcoming growing season (March 16); participated in a meeting of the Connecticut Farm Wine Development Council at the Department of Agriculture in Hartford (March 17); met with Mr. Mark Langford and Mr. Paul DiGrazia at Digrazia Vineyards in Brookfield to discuss general viticulture topics and strategies for the upcoming growing season (March 22); met with Mr. Manny and Mrs. Maria Miranda at Miranda Vineyards in Goshen to inspect the vineyard and discuss pruning and other management practices for the upcoming growing season (March 25); and met with Mr. Anthony Ferraro of Connecticut Valley Vineyards in New Hartford to discuss drainage, pest management, and general viticultural issues for the upcoming growing season (March 25).

DR. SCOTT WILLIAMS participated in doctoral committee meeting for Acima Cherian, Ph.D. student in Wildlife Management at the University of Connecticut (March 1); with **DR. JOSEPH BARSKY**, participated in the Connecticut Urban Forest Council Executive meeting in Middlefield (March 27); conducted a field visit with members of the Town of Newtown's Conservation Commission and Tick-Borne Disease Action Committee to assess the overall health of four different municipally owned forests and provided some insight into different management strategies (12 attendees) (March 19); spoke on "Efficacy of Repellents in Keeping Deer Away from Roadways and Roadway Vegetation" at the Cornell Cooperative Extension's "30-Hour Course", Riverhead, NY (15 attendees) (March 23); with **DR. JOSEPH BARSKY**, conducted a field visit to the Town of Vernon to assess the feasibility of a small tree planting (March 24); and participated in a conference call with members of the Northeast Organic Farming Association from Connecticut, Massachusetts, and Rhode Island about revising NOFA wildlife management standards (March 30).

MR. J.P. BARSKY attended the Highlands Research Study meeting at White Memorial Conservation Center (March 16); spoke on "Career Opportunities in Natural Resources and Environmental Sciences" to Wilbur Cross High School upper-class students as part of the New Haven Public Schools Career Day Event at Southern Connecticut State University (12 students) (March 25); and spoke on "Safety issues when using a flame weeding device" at the Flame-Weeding for Invasive Shrub Control Workshop sponsored by the USDA-NRCS in Vernon (42 attendees) (March 30).

MS. JOAN L. BRAVO presented a workshop on Garden Planning and Implementation at the Connecticut Family, Career, and Community Leaders of America state conference at Manchester Community College (30 students) (March 16).

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) and Organic Weed Control (52 attended) (March 6).

Plant Pathology and Ecology

DR. SANDRA L. ANAGNOSTAKIS spoke about chestnuts to Dr. Charles Reddington's biology class from Springfield College (20 attendees) (March 1).

DR. DONALD E. AYLOR participated in judging the finalists of the 7th Grade Physical Science Division at the Connecticut Science Fair at Quinnipiac University in Hamden (11 youths attended) (March 11).

DR. SHARON M. DOUGLAS gave a short presentation about plant pathology and the role of the Plant Disease Information Office to Dr. Charles Reddington's biology class from Springfield College (20 attendees) (March 1); was interviewed about the impact of this year's weather on ornamental and agricultural crops by Ms. Jan Spiegel, a reporter from WSHU (March 1); assisted with oral arborist exams conducted by the Connecticut Tree Protective Association and reviewed questions for the written component of the arborist exam (March 3); organized and participated in a meeting of the Education Committee of the CTPA Board (March 8); participated in a meeting of the CTPA Board of Directors (March 9); participated in a conference call to discuss CAES as the host of a meeting of the NE Plant Diagnostic Network in February 2011 (March 10); met with Dr. Clive Edwards, Lockwood Lecturer, and discussed the Station and mission/research/outreach goals of the Department of Plant Pathology and Ecology (March 11); gave a presentation entitled "Recognizing and managing Phytophthora root rot...and other conifer diseases" and examined samples and answered questions on conifer diseases at the Annual Meeting of the Connecticut Christmas Tree Growers Association in Middletown (100 attendees) (March 13); participated in a conference call of the APS Foundation Board of Directors (March 15); and organized the final meeting of the Girls and Science Mentorship Program (March 17).

DR. WADE H. ELMER participated in the Connecticut State Department of Education's State Consulting Committee for Agricultural Science and Technology meeting in Southington (16 attendees) (March 25); spoke on "Soil fertility and vegetable crop diseases" at Crop Production Services Vegetable Night in Glastonbury (65 attendees) (March 25); and presented a brief overview of his research on Sudden Vegetation Dieback and the role of earthworms in plant disease to a group from the Federated Garden Club Landscape Design Class in the Plant Pathology and Ecology greenhouse (16 attendees) (March 31).

DR. FRANCIS J. FERRANDINO presented posters and spoke about his remote weather stations in the grape vineyards to Dr. Charles Reddington's biology class from Springfield College (20 attendees) (March 1).

MS. MARY K. INMAN spoke about seed testing to Dr. Charles Reddington's biology class from Springfield College (20 attendees) (March 1) and spoke about seed testing to a group from the Federated Garden Club Landscape Design Class (16 attendees) (March 31).

Valley Laboratory

DR. JOHN AHRENS, newly appointed chair of the Connecticut Christmas Tree Growers Association Christmas Tree Improvement Committee, met with the committee at the Valley Laboratory to discuss plans for the year (March 2) and spoke at the Connecticut Christmas Tree Growers annual meeting about the new Christmas Tree Improvement Committee (80 attendees) (March 13).

DR. CAROLE CHEAH gave two presentations on Connecticut's biological control program for mile-a-minute invasive weed and on the red bark phenomenon at the Forest Health Monitoring Workshop, at New Haven (40 attendees) (February 18); co-presented with **DR. DE-WEI LI** on the red bark phenomenon at

the Northeast Forest Pest Council Meeting, York Harbor, ME (65 persons) (March 17); and hosted Dr. Ashley Lamb from the University of Tennessee for discussions on HWA biological control and a tour of the Kenneth White Insectary at the Valley Laboratory (March 30-31).

DR. RICHARD COWLES wrote a successful grant proposal on behalf of the Connecticut Christmas Tree Growers' Association for a USDA specialty crop block grant (March 1); participated in a conference call with New England state foresters (ME, NH and VT) to discuss chemical control for quarantine treatments for hemlock woolly adelgids (March 1); participated in the Northeast Regional Hatch Project NE-1025 in Providence, RI, where he presented data from last year's field trials (March 3-4); visited Summerhill Nursery in Madison and discussed "New Insecticides and Miticides for Use in Nurseries" and provided pesticide applicator recertification training credit (6 attendees) (March 9); presented "Managing Armored Scales in Christmas Trees" at the winter meeting of the Connecticut Christmas Tree Grower's Association, in Middletown (60 attendees) (March 13); and spoke about "Facts and Fallacies of Organic Agriculture" to the Windham Garden Club, in Willimantic (15 attendees) (March 17).

DR. JAMES LAMONDIA examined candidates for the Connecticut arborist license and participated in the quarterly meeting of the Connecticut Tree Protection Examining Board in New Haven (March 3); conducted a workshop on nematode diseases of ornamentals for a group from pioneer gardens at the Valley Lab (March 4); spoke about research and services at the Station and summer employment opportunities at the Central Connecticut State University Biology Department Career Fair (40 attendees) (March 15); participated in Agriculture Day at the Capital as a member of the Connecticut Agricultural Information Council (March 18); was interviewed by July Simmons Harrison of WFSB's Better Connecticut about services and research at the Station (March 22-24); participated in a planning meeting for the 2010 NED-APS and NE-1040 Technical Committee annual meetings in Northampton, MA (March 25); met in Middletown NY with cooperators from Pennsylvania State University and Cornell to discuss results and progress on an IPM Cover Crops project (March 29); and was interviewed by free-lance reporter Ms. Staci Heropoulous about the history and importance of tobacco in the Connecticut River Valley (March 30).

DR. TODD L. MERVOSH participated in a state liaison meeting for the IR-4 Specialty Crops Program at the New York State Agricultural Experiment Station in Geneva, NY (March 10-11); spoke about management of invasive plants at the Conn. Christmas Tree Growers' Assoc. annual meeting in Middletown (80 attendees) (March 13); spoke about invasive plants in coastal areas at a community workshop in Chatham, MA (70 attendees) (March 18); participated in a symposium planning meeting for the Conn. Invasive Plant Working Group at the Valley Lab (March 19); presented talks on use of herbicides in integrated vegetation management and on biological control of mile-a-minute vine at a pesticide training course for county employees run by Cornell Cooperative Extension of Suffolk County in Riverhead, NY (15 attendees) (March 24); and spoke about weed identification and management at the Yankee District Convention of the American Rose Society in Taunton, MA (60 attendees) (March 27).

DR. HUGH SMITH gave a two-hour training in Spanish on the identification of pest arthropods and bio-control agents for five workers from Grower Direct, a greenhouse in Somers (March 5) and offered the training in English for three Grower Direct employees (March 11).

Journal Articles Approved March 2010

Aylor, Donald E., D. G. Schmale, III, E. J. Shields, M. Newcomb, and C. J. Nappo. Tracking *Phytophthora infestans* in the Lower Atmosphere Using Unmanned Aerial Vehicles and Lagrangian Stochastic Modeling. *Phytopathology*

Berger, William A., MaryJane I. Mattina. Persistent Organic Pollutant Uptake by Plants: Mechanistic Studies. Abstract Book, American Chemical Society 240th National Meeting, Boston, MA, August, 2010

Cowles, Richard S. Protecting the Environment When Using Systemic Insecticides in Tree Care. Clippings (Published by the Minnesota Turf and Grounds Foundation)

- Elmer, Wade H. and Robert E. Marra.** Analysis of *Spartina alterniflora* dieback in Atlantic Salt Marshes Reveals Undescribed *Fusarium* Species. *Mycologia*
- Nail, William R.** Dry Matter Accumulation and Partitioning in Response to Leaf Removal in Pinot Noir Grapevines. *American Journal of Enology and Viticulture*.
- Pignatello, Joseph J., B. Katz and H. Li.** Sources, Interactions and Ecological Impacts of Organic Contaminants in Water, Soil, and Sediment. An Introduction to the Special Series. *Journal of Environmental Quality*
- Robb, Christina and Brian Eitzer.** The Analysis of Paraquat and Diquat by HPLC-MS/MS with HILIC. Published Abstracts from HPLC 2010
- Smith, Victoria L.** Chrysanthemum Diseases 101: An Inspector's Review. *Horticulture Inspection Society Spring 2010 Newsletter*
- Smith, Victoria L.** The North East Forest Pest Survey and Outreach Project: Working Together to Find Forest Pests. *CTPA Newsletter, Spring 2010*
- White, Jason C.** Inheritance of DDE Phytoextraction Ability in Hybridized *Cucurbita pepo* cultivars. *Environmental Science and Technology*

Grants Received March 2010

Mr. Gregory Bugbee has received a \$32,000 Grant from First Light Resources to conduct invasive weed surveillance on lakes Candlewood, Lillinonah and Zoar.

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).
