

The Nation's First State Agricultural Experiment Station



Griswold Research Center, Griswold
Opened 2008

Scientists at The Connecticut Agricultural Experiment Station (CAES) investigate the growth of plants and study their pests. Research continues on invasive plants, diseases, insects, ticks, soil and water quality, biofuels, and food safety. Staff members also performed analyses for state agencies, registered 316 nurseries, conducted 748 inspections, and certified 2,628 honey bee colonies. Thousands of individual plants or other regulated materials being shipped into or from Connecticut were examined in 2008. The Station began its work in a laboratory at Wesleyan University in Middletown in October 1875. It moved to Yale University in 1877 and to its current location in New Haven in 1882. The research at CAES has helped keep farmers on the farm, and it is the Connecticut farmer who has preserved our pastoral landscape.



Jenkins Laboratory, New Haven

Join us at our 2009-2010 events

2009

Associates Annual Meeting—March 30, 7 p.m.
Spring Open House—April 23, 1 p.m.
Plant Science Day—August 5, 10 a.m.

2010

Associates Annual Meeting—March/April (TBA)
Spring Open House—April 22, 1 p.m.
Plant Science Day—August 4, 10 a.m.

Visit outdoor exhibit gardens

Nursery growers' gardens (plants discovered by Connecticut growers) in New Haven, Windsor, and at Lockwood Farm in Hamden

Nursery growers' Plant Identification Garden at the Valley Laboratory in Windsor

Bird and Butterfly Garden at Lockwood Farm

Research Farm



Lockwood Farm in Hamden

The Experiment Station's 75-acre research farm in Hamden, called Lockwood Farm, is open to the public during normal business hours. Parking is available inside the gate.

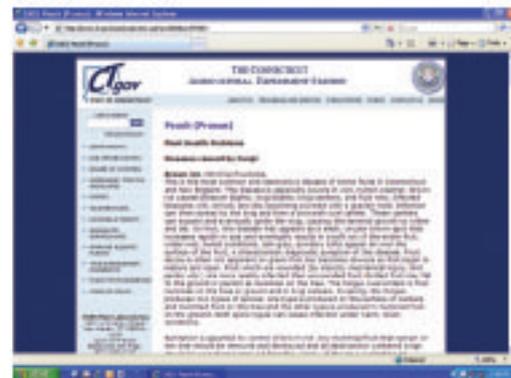
Experiment Station Associates

P.O. BOX 3560, AMITY STATION
NEW HAVEN, CT 06525

The ESA is a proactive, volunteer group of Station supporters who assist in promoting the research work carried out at the CAES. All interested persons are welcome to join. Benefits include participation in field trips to Connecticut's leading agricultural businesses and publications highlighting the latest research developments at the Station. For more information, visit the Station web site and click on the Experiment Station Associates.

*Printing of this leaflet was funded by
the Experiment Station Associates*

WWW.CT.GOV/CAES



The Experiment Station's web page features an extensive electronic Plant Pest Handbook, arranged by plant name, which covers diseases, insects, and cultural and nematode problems of Connecticut plants. During 2008, there were 1,758,400 page views for the entire web site.

Hours

Residents may call or come to the Station during normal business hours, 8:30am-4:30pm, Monday through Friday, except state holidays.

Telephone Numbers

New Haven area: *Plants:* (203) 974-8601
Insects: (203) 974-8600, *Soils:* (203) 974-8521

Hartford area: *All inquiries:* (860) 683-4977

Statewide: *Toll free:* (877) 855-2237

Locations

Main Laboratories (203) 974-8500
123 Huntington St.—New Haven, CT 06504-1106

Valley Laboratory (860) 683-4977
153 Cook Hill Road—Windsor, CT 06095-0248

Lockwood Farm (203) 974-8618
890 Evergreen Avenue—Hamden, CT 06518-2361

Griswold Research Center (860) 376-0365
190 Sheldon Road—Griswold, CT 06351-3627

The Connecticut Agricultural Experiment Station 2009-2010



Carole A. Cheah

Valley Laboratory, Herlock Woolly Adelgid Research

Putting science to work for society

*The Experiment Station is a
state-supported scientific research
institution dedicated to improving
the food, health, environment
and well-being of
Connecticut's residents since 1875*

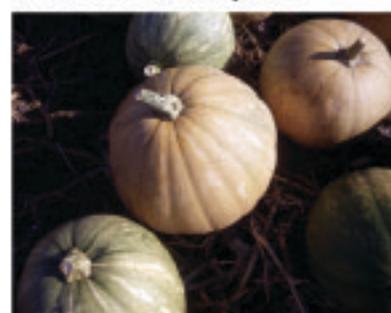
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Food

Beach Plum
Beach plum is a fruiting shrub native to the coastal dunes of the Northeast. Beach plum jam has



become a premium product. We are growing plants from seeds collected from 35 sites from Maine to Delaware. Grown commercially, we have found that heavy-yielding plants produce as much as 35 lbs./plant.



Calabaza fruit in all stages of maturity

Calabaza squash, also known as tropical pumpkin, is mostly grown in tropical and semi tropical

climates. Station scientists are developing a cultivar that produces fruit on shorter vines.

Vegetable amaranth comes in various leaf colors such as white (light green), dark green, red, purple, and variegated



Vegetable amaranth or calaloo is widely grown

in the tropics and is one of the most important leafy vegetables in the lowlands of Africa and Asia. Station scientists are evaluating different varieties and cultural methods for their suitability to Connecticut's soils and climate.

Did you know that a honey bee can visit flowers a mile or two away from the hive?

Health



Bed bug, *Cimex lectularius*, showing partially digested blood

Outbreaks of bed bugs have recently been reported in many areas of Connecticut. We are testing the efficacy of traps in detecting infestations in buildings and evaluating the effectiveness of insecticides in controlling these insects.

Station scientists discovered an introduction of the Asian tiger mosquito, *Aedes albopictus*, for the first time in New England at a commercial tire recycling plant in Connecticut. Seasonal establishment in the surrounding woodlands was documented, but the mosquito did not survive winter conditions to enable permanent colonization. Scientists continue to monitor sites for re-invasion as global warming and milder winter temperatures may provide suitable conditions in the future for colonization of this invasive species.

Asian Tiger Mosquito, *Aedes albopictus*



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A new test has been developed to detect antibodies to the West Nile virus in horses.

Did you know that the first culture of the West Nile virus in North America was accomplished by Station scientists in 1999?

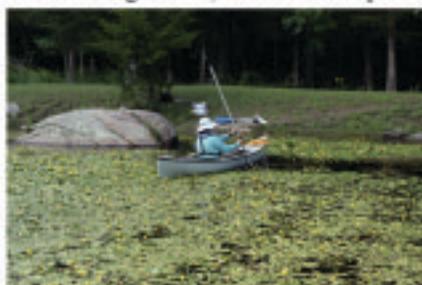
Environment

Phytoremediation uses plants to clean contaminated soil. Research within the Department of Soil and Water focuses on the plant-facilitated remediation of soils contaminated with persistent organic pollutants such as PCBs, DDT/DDE, and Chlordane.



Cucurbit species growing in PCB-contaminated soil from a Brownfield site

Nymphaeodes peltata (yellow floating heart), defined by CT Public Act No. 04-203 as invasive and banned from sale or movement since October 1, 2005, was found by CAES staff members in a small, private pond in Columbia, CT on August 11, 2008. This plant also has been found in RI, MA, and VT.



A *Nymphaeodes peltata* infestation in a small pond in northeastern Connecticut

Station scientists are determining the concentration of pesticides in pollen collected by foraging honey bees. These results will help us determine what role pesticides may play in the decline of honey bee populations.



Did you know that 61% of the 139 lakes surveyed thus far in Connecticut have one or more invasive plant species present?

Public Service



Plant Science Day 2008, Lockwood Farm, Hamden



Research tour at the Valley Laboratory, Windsor



Demonstration on honey bees in a New Haven school

Station staff members answered 30,000 public inquiries in 2008 and have attended or participated in many exhibits, conferences, and outreach programs throughout the state.



Inquiry office at our main laboratories in New Haven.

Did you know that there are 50 mosquito species in Connecticut?