

The Connecticut Agricultural 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.



Griswold Research Center, Griswold



Lockwood Farm, Hamden



Valley Laboratory, Windsor



Main Laboratories, New Haven

Visit the CAES in 2017

Join us at our 2017 events

Associates Annual Meeting—
Wednesday, April 12, 7 p.m.,
Jones Auditorium, New Haven, CT

Plant Science Day—
Wednesday, August 2, 10 a.m.,
Lockwood Farm, Hamden, CT

Visit outdoor exhibit gardens

Nursery growers' gardens (plants discovered by Connecticut growers) in:

- New Haven
- Windsor
- Lockwood Farm in Hamden

Nursery growers' Plant Identification Garden at the:

- Valley Laboratory in Windsor

Bird and Butterfly Garden at:

- Lockwood Farm in Hamden

Research Farm

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. Free admission.



Experiment Station Associates

P.O. Box 6093, Wallingford, CT 06492

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.

Learn More About the CAES



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 plants grown in Connecticut.

Hours

Residents may call or visit the Experiment 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
Other Inquiries: (203) 974-8500

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 06511-2016
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



CAES

The Connecticut Agricultural Experiment Station

Putting Science to Work for Society since 1875

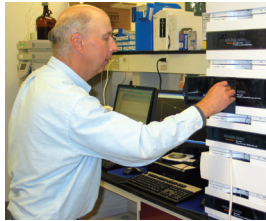
Protecting Agriculture,
Public Health, and
the Environment

Agriculture

Scientists are investigating hops as a new crop to increase economic options for local growers in Connecticut and to add value to other local crops such as malt grains by evaluating disease resistance, and yield on high and low trellis systems.

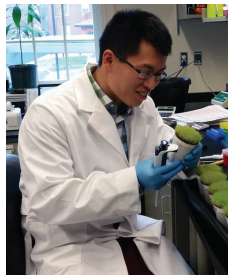


CAES scientists play vital roles in state consumer food safety programs and the federal emergency response to potential terrorist events involving the food supply, by analyzing fresh and manufactured foods from domestic and international



sources for pesticides, heavy metals, toxins, and poisons.

Station scientists are trying to understand the molecular mechanisms of plant diseases and develop novel management strategies. Using genetic and genomic tools, scientists have discovered that plant pathogens use a toxin-antitoxin system to enter into dormant stage as a survival strategy during pesticide treatment. Using artificially synthesized DNA homologues, scientists have developed a new family of antisense bactericides that can kill plant pathogenic bacteria without affecting non target microbes.



Did You Know?

The Department of Analytical Chemistry has been testing consumer products and the food supply for adulteration/contamination for 140 years.

Health



Lyme disease and other tick-borne illnesses continue to be major public health concerns in Connecticut. Station scientists are evaluating novel methods to control ticks and reduce the risk of infection around the home. Recent studies show they can reduce tick

abundance through the combined use of an insect fungus, *Metarhizium anisopliae*, and a rodent bait box that treats mice and to kill feeding ticks, and reduce infection in feeding ticks with a new rodent-targeted Lyme disease vaccine bait.



Station scientists at the Center for Vector Biology & Zoonotic Diseases monitor mosquito-borne viruses that cause human and animal disease including eastern equine encephalitis and West Nile virus throughout the state every year from June through October. Over 190,000 mosquitoes are tested annually. They are also investigating the impact of global climate change on the ecology of these viruses and their mosquito hosts.



Molds develop in indoor environments following water damage and dampness and exposure can trigger allergies, cause infection, or aggravate existing medical conditions.

Research is being conducted to determine the composition and concentration of airborne molds in Connecticut and the incidence and distribution of indoor species. This research aids medical professionals in the diagnosis and evaluation of mold-related health risks in public school buildings and helps professionals mitigate indoor mold problems.

Did You Know?

More than 50% of ticks submitted by CT residents to the Station's Tick Testing Laboratory in 2015 were infected with either *Borrelia burgdorferi* (Lyme Disease), *Babesia microti* (Babesiosis), or *Anaplasma phagocytophilum* (Anaplasmosis).

Environment

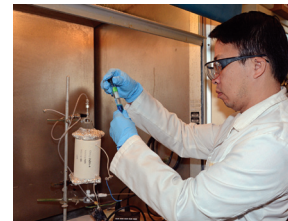
Connecticut's lakes and ponds are experiencing an increase in algal blooms which appear to be driven by nutrient loading. Algae can produce toxins that are harmful to humans and animals. Station scientists are using genetic techniques, including DNA sequencing and genomics, to determine the potential of Connecticut's lakes to harbor these harmful algae and how to better predict blooms.



The trees and forests that frame our roadsides help define Connecticut's sense of place. To increase utility reliability during severe weather, Station scientists

are developing practical, cost-effective methods to foster healthy, storm-resistant roadside forests that combine individual tree care and forest management practices.

Station scientists are researching the behavior of organic chemicals in the environment and developing novel methods to remediate toxic organic pollutants in contaminated soil and water.



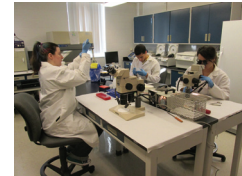
Did You Know?

Connecticut is the fifth most forested state in the nation and has the highest urban forest cover of any state.

Public Service



Testing soil samples for fertility and recommending methods for growing better plants are a continuing no-cost service for citizens of Connecticut. Testing is available at our laboratories in New Haven and Windsor and provides direct economic and environmental benefits by reducing unnecessary fertilizer treatments to lawns, plants, shrubs, and gardens reducing nitrogen runoff into soil and water.



CAES offers a "Tick Testing Program" that is available at no cost to Connecticut citizens. It includes testing for three different tick-

transmitted diseases: Anaplasmosis, Babesiosis, and Lyme disease. Over 3,000 ticks are submitted for identification and testing each year.

Station Inspectors work to safeguard agriculture and forests in Connecticut by inspecting and certifying agricultural products leaving and entering the state and by conducting annual surveys to detect exotic pests that threaten the health and productivity of Connecticut's forests.



Station staff are available in our New Haven and Windsor facilities to answer public inquiries and diagnose insect and plant disease problems

for homeowners, businesses, and pest control professionals. CAES inquiry offices annually answer more than 30,000 questions about plants, insects, and soil from CT residents. Staff also provide outreach programs throughout the state through workshops, exhibits, lectures, and seminars.

Did You Know?

CAES is Connecticut's official seed testing laboratory and works with the CT Department of Agriculture to test vegetable, turf, and crop seed every year.