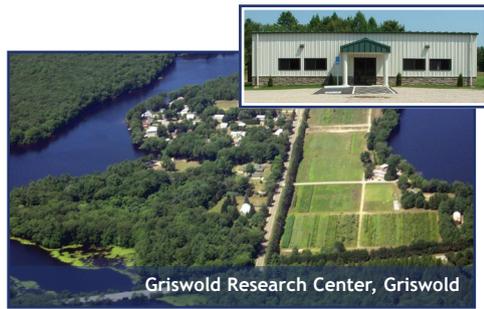


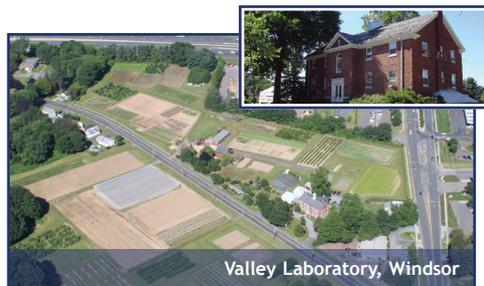
The Connecticut Agricultural Experiment Station is a state-supported scientific research institution dedicated to improving the food, health, environment and well-being of Connecticut's residents since 1875.



Griswold Research Center, Griswold



Lockwood Farm, Hamden



Valley Laboratory, Windsor



Main Laboratories, New Haven

Visit the CAES in 2015

Join us at our 2015 events

Associates Annual Meeting—
Wednesday, April 8, 7 p.m.,
Jones Auditorium, New Haven, CT

Plant Science Day—
Wednesday, August 5, 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 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

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. During 2014, there were 190,397 visits for the entire web site.

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



2015



CAES

The Connecticut Agricultural Experiment Station
Putting Science to Work for Society since 1875

Protecting Agriculture,
Public Health, and
the Environment

Agriculture

CAES scientists are evaluating new specialty crops and conducting variety trials on common



vegetables to determine those best suited for Connecticut's soil and climate. Over 64 fruits and vegetables have been studied in the New Crops Program including beach and Japanese plums, globe artichoke, heirloom tomatoes, radicchio, vegetable amaranth, sweet potato, okra, tomatillo, broccoli, corn, and lettuce.



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.

Fire blight is a devastating disease of apple and pear, especially for many popular apple varieties such as 'Gala' and 'Fuji'.



Station scientists are studying the disease mechanisms to develop novel control approaches as possible alternatives to applications of the antibiotic streptomycin, which is currently the most effective management option.

Did You Know?

Did you know that the only testing of food in the state of Connecticut for pesticides, heavy metals and toxins is conducted by the CAES Department of Analytical Chemistry?

Health



Lyme disease and other tick-borne illnesses continue to be major public health concerns in Connecticut. Station scientists are conducting tick management studies to evaluate a combination of methods to reduce tick abundance and the risk of tick-borne

diseases using a biological control agent (fungus) within a rodent bait box that treats mice and kills feeding ticks on mice and a new rodent-targeted oral Lyme disease vaccine.

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 is assisting medical professionals in the diagnosis and evaluation of mold-related health risks in public school buildings and aided professionals in the mitigation of indoor mold problems.

Did You Know?

Did you know that in addition to Lyme disease, there are four other human disease causing pathogens identified from ticks in Connecticut: *Babesia microti* (Babesiosis), *Anaplasma phagocytophilum* (Anaplasmosis), *Ehrlichia chaffeensis* (Erlchiosis), and Powassan virus?

Environment

Salt marshes are the most productive ecosystems on the planet, producing 40% more biomass than tropical rainforests.



Productivity of coastal marshes of Connecticut and the Eastern seaboard is being threatened by Sudden Vegetation Dieback (SVD), the sudden loss of salt marsh grass, mainly *Spartina alterniflora*. Station scientists are investigating the factors contributing to SVD, from drought to pest pressure from herbivores and disease.



Station scientists are using new technologies that employ sound waves and electrical currents to quantify internal decay in living trees and its

role in carbon cycling. This research will contribute to a more thorough understanding of the importance of forests in mitigating against global warming and climate change.

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?

Did you know that the emerald ash borer, first detected in CT in 2012 by CAES scientists, is the most destructive invasive forest pest in US history, having already killed over 60 million trees nationwide?

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 benefit by reducing unnecessary fertilizer treatments to lawns, plants, shrubs and gardens reducing nitrogen runoff into soil and water.



Testing of blood engorged ticks, free to Connecticut citizens since 2000, has been expanded and improved to include three human disease causing pathogens: *Anaplasma phagocytophilum* (Anaplasmosis), *Babesia microti* (Babesiosis), and *Borrelia burgdorferi* (Lyme disease).

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 diagnosis 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?

Did you know that 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?