



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

# The 112<sup>th</sup> Plant Science Day



#CT\_CAES

## Wednesday, August 3, 2022 • 10am-4pm

— Free Admission —

# OPEN HOUSE

## THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION

LOCKWOOD FARM - 890 EVERGREEN AVENUE, HAMDEN, CT

THE SAMUEL W. JOHNSON LECTURE • PRESENTATIONS ON RESEARCH • BARN EXHIBITS • PESTICIDE CREDITS  
FIELD EXPERIMENTS • TECHNICAL DEMONSTRATIONS • CENTURY FARM AWARD • PASSPORT FOR CHILDREN



**Katie Scharf Dykes** is the Commissioner of Connecticut's Department of Energy & Environmental Protection (DEEP). She was nominated by Governor Ned Lamont to serve as the Commissioner of DEEP, and was confirmed on February 20, 2019.

Katie previously served as Chair of the Connecticut Public Utilities Regulatory Authority (PURA) from 2015-2018, and as Deputy Commissioner for Energy at Connecticut DEEP from 2012-2015. Katie also served as the Chair of the Board of Directors of the Regional Greenhouse Gas Initiative, Inc. (RGGI) from 2014 to 2017, and is the current Chair. RGGI is a multi-state effort focused on reducing carbon emissions from electric generating facilities.

Katie joined CT DEEP in March 2012 after prior service as Deputy General Counsel for the White House Council on Environmental Quality and as a Legal Advisor to the General Counsel for the U.S. Department of Energy.



**New Haven 203.974.8500 • Toll-free 877.855.2237 • [portal.ct.gov/caes](http://portal.ct.gov/caes)**

*The Experiment Station is a state-supported scientific research institution where theory and practice have marched together to improve the well-being of Connecticut.*

**DIRECTIONS: FROM INTERSTATE 91 TRAVELING NORTH:** Take Exit 10. Follow the Route 40 connector for 3.1 miles. Turn right onto Whitney Avenue (Route 10) and go north for 0.6 miles. Turn left onto Evergreen Avenue at the traffic light; go 0.1 mile and turn right onto Kenwood Avenue. The farm is on the left; enter the 2nd driveway.

**TRAVELING SOUTH:** Take Exit 10. Follow the Route 40 connector for 3.0 miles. Turn right onto Whitney Avenue (Route 10) and go north for 0.6 miles. Turn left onto Evergreen Avenue at the traffic light; go 0.1 mile and turn right onto Kenwood Avenue. The farm is on the left; enter the 2nd driveway.



# The 112<sup>th</sup> Plant Science Day

Wednesday, August 3, 2022

**NO PETS, PLEASE.  
SERVICE  
ANIMALS ONLY.  
RAIN OR SHINE  
FREE ADMISSION**

Gates open at 9:30 am  
Programs begins at 10:00 am • Event 10:00 am - 4:00 pm

**10:00 a.m. – 10:15 a.m.**

## **MORNING GREETING AND OPENING REMARKS**

Dr. Jason C. White, Director  
The Connecticut Agricultural Experiment Station

**PAVILION**

**10:15 a.m. - 10:45 a.m.**

Dr. Leigh Whittinghill, Assistant Agricultural Scientist II, Department of Environmental Science and Forestry. *Urban Agriculture for Food Security in Challenging Spaces*

**PAVILION**

**10:15 a.m. – 10:35 a.m.**

## **TECHNICAL DEMONSTRATION TENT**

(20-minute demonstration, repeated twice during the day, 10:15 a.m. & 2:30 p.m.)  
Mr. Mark Creighton, Agricultural Research Technician I, Department of Entomology. *Beekeeping Systems Used in Connecticut*

**10:40 a.m. – 11:00 a.m.**

## **TECHNICAL DEMONSTRATION TENT**

(20-minute demonstration, repeated twice during the day, 10:40 a.m. & 3:15 p.m.)  
Mr. Gregory J. Bugbee, Associate Agricultural Scientist, Department of Environmental Science and Forestry. Assisted by: Ms. Summer Stebbins, Agricultural Research Technician I, Department of Environmental Science and Forestry. *Managing Weeds in Lakes and Ponds*

**10:45 a.m. - 11:05 a.m.**

## **CENTURY FARM AWARD**

Fairholm Farm, Woodstock, CT

**PAVILION**

**11:05 a.m. – 11:15 a.m.**

## **EXPERIMENT STATION ASSOCIATES**

Ms. Cheryl Cappiali, President, Experiment Station Associates

**PAVILION**

**11:15 a.m. – 12:00 noon**

## **THE SAMUEL W. JOHNSON MEMORIAL LECTURE**

Ms. Katie S. Dykes, Commissioner  
Connecticut Department of Energy and Environmental Protection (CT DEEP)

**PAVILION**

**1:15 p.m.-1:45 p.m.**

Dr. Itamar Shabtai, Assistant Agricultural Scientist II, Department of Environmental Science and Forestry. *Soil Organic Carbon: A Key Component of Soil Health in a Changing Climate*

**PAVILION**

**1:45 p.m.-2:15 p.m.**

Dr. Carlos Tamez, Assistant Agricultural Scientist II, Department of Analytical Chemistry. *Laboratory Analyses of Processed Foods, Raw Agricultural Commodities and Animal Feed in Connecticut*

**PAVILION**

**2:15 p.m.**

Adjourn Main Talks

**PAVILION**

**2:30 p.m. – 2:50 p.m.**

## **TECHNICAL DEMONSTRATION TENT**

(20-minute demonstration, repeated twice during the day, 10:15 a.m. & 2:30 p.m.)  
Mr. Mark Creighton, Agricultural Research Technician I, Department of Entomology. *Beekeeping Systems Used in Connecticut*

**3:15 p.m.-3:35 p.m.**

## **TECHNICAL DEMONSTRATION TENT**

(20-minute demonstration, repeated twice during the day, 10:40 a.m. & 3:15 p.m.)  
Mr. Gregory J. Bugbee, Associate Agricultural Scientist, Department of Environmental Science and Forestry. Assisted by: Ms. Summer Stebbins, Agricultural Research Technician, Department of Environmental Science and Forestry. *Managing Weeds in Lakes and Ponds*

**3:35 p.m.**

## **TECHNICAL DEMONSTRATION TENT**

Adjourn Technical Demonstrations

**3:35 p.m.**

## **SIGN-OUT**

(For those requesting pesticide credits) (R)  
Attendees can pick up their Pesticide Credit forms at the registration table (R).

## **LOCKWOOD FARM WALKING TOUR**

**(Meet at the Registration Desk, R)**

**11:00 a.m.–12:00 p.m.**

Dr. Robert E. Marra, Associate Agricultural Scientist, Department of Plant Pathology and Ecology

**Tour of Native Woody Shrubs (Plot 36) 1:00 p.m.-1:30 p.m.**

**MEET AT THE WOOD ARBOR OF THE NATIVE WOODY SHRUBS (Plot 36)**  
Dr. Jeffrey S. Ward, Emeritus Scientist, Department of Environmental Science and Forestry Assisted by: Alexander Amendola, Forester I, Connecticut Department of Energy and Environmental Protection (CT DEEP)

## **BARN EXHIBITS (BARN B)**

### **Nano-enabled Agriculture Research at CAES**

#### **Department: Analytical Chemistry**

Investigators: Dr. Nubia Zuverza-Mena, Dr. Washington da Silva, Dr. Susanna Keriö, Dr. Milica Pavlicevic, Dr. Shital Vaidya, Dr. Yi Wang, Dr. Chaoyi Deng, Dr. Inès Karmous, Dr. Wade Elmer (Emeritus), Dr. Christian Dimkpa, and Dr. Jason C. White

### **Wild Bee Biodiversity in Connecticut**

#### **Department: Entomology**

Investigators: Ms. Tracy Zarrillo and Dr. Kimberly Stoner (Emeritus), assisted by Ms. Morgan Lowry (Retired)

### **A New Environmentally-Friendly Phosphate Fertilizer: Delivery of Less Leachable Nutrients from Biochar to Plants**

#### **Department: Environmental Sciences**

Investigator: Dr. Philip Wang, Mr. Tyler Swanson, Dr. Yi Wang, Mr. Alex Waller, Dr. Wade Elmer (Emeritus), and Dr. Joseph Pignatello (Emeritus)

### **Mycorrhizae and Urban Tree Health**

#### **Department: Forestry and Horticulture**

Principal Investigator: Dr. Susanna E. Keriö  
Co-Investigators: Dr. Nubia Zuverza-Mena, Dr. Wade H. Elmer (Emeritus), Dr. Adriana (Arango-Velez) Puralewski assisted by Mr. Joseph P. Barsky

### **Beech Leaf Disease in Connecticut**

#### **Department: Plant Pathology and Ecology**

Investigator: Dr. Robert E. Marra, assisted by Ms. Alexandra Farah

### **Armored Scale Pests of Christmas Trees**

#### **Department: Valley Laboratory**

Investigator: Dr. Richard S. Cowles

## **ANSWERS TO YOUR QUESTIONS**

(Plot 16)

Staff members in the “questions and answers” tent are prepared to give information on identification of insects, plant disorders, soils and their management, and other problems of growers and gardeners.

## **KIDS' KORNER**

(Plot 21)

Come to the Kids' Korner to pick up your child's passport and a gift.

## **SELF-GUIDED ACTIVITY**

(Plot 22)

For all children, including Girl Scouts

## **CONNECTICUT PESTICIDE CREDITS**

(Registration, R)

Connecticut pesticide credits will be offered. All categories and private applicator (PA) category/3.25 total credit hours.

