



SERVING AN INDUSTRY WITH A FARM  
GATE VALUE OF \$182 MILLION



8,684 MEETING/TRAINING ATTENDEES



47K+ NEWSLETTERS AND REPORTS



199 MEETINGS AND TRAININGS

# Cornell Cooperative Extension

## Eastern NY Commercial Horticulture Program

# 2022 ANNUAL REPORT

Serving the educational and research needs of the commercial small fruit, vegetable, grape and tree fruit industries in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Putnam, Rensselaer, Saratoga, Schoharie, Schenectady, Ulster, Warren, and Washington counties.





# PROGRAM HIGHLIGHTS

## Supporting Beginning, Organic, and Spanish-Speaking Growers in Reducing Pesticide Use Risks

Northeast Extension Risk Management Education (NERME) grant funding supported ENYCHP vegetable specialists in their effort to help organic and Spanish-speaking growers to manage risks related to pesticide use through the “Spray Safe, Spray Well” project. Recordings of the workshops in both Spanish and English can be found on the [ENYCHP YouTube channel](#). The workshop series attracted an audience of over 100 unique participants, many of whom had no previous working relationship with the ENYCHP team.



## Reducing Labor Costs with Robotics

Interest in robot weeders on large farms is growing as farm labor expenses rise. CarbonRobotics representatives visited with growers and CCE staff to learn about needs of northeast vegetable production. The company hopes to tailor equipment that will better suit the weeds, soil and cultural practices here in New York.

## Predicting Incidence of Bitter Pit Impacts Farm Profits

Bitter pit, a calcium related disorder common in ‘Honeycrisp’ apple, can reduce packouts by more than 50%, making bitter pit prediction crucial to fruit growers. Extensive field surveys prior to harvest followed by emailed reports, help growers to make informed decisions about harvest and fruit storage and have a direct impact on farm profitability.

## Encouraging Annual Bearing Habit in ‘Honeycrisp’

A current research project focuses on discouraging the over-production of ‘HoneyCrisp’ apple flower buds in years following poor crops by using naturally occurring plant hormones. With an orchard value of \$25K+ per acre, reducing overcropping by 25-30%, and returning trees to balanced production, will result in significant financial benefit to Eastern NY producers.



## Beyond Pesticides—Using Ultraviolet-C for Disease Control

ENYCH staff are working with researchers at the Icahan School of Medicine at Mount Sinai Light and Health Research Center and local vegetable growers to evaluate light in the UVC spectrum for control of plant pathogens in squash. Ultraviolet-C (UVC) does not have any of the harvest limitations that pesticides do, and could be an organic production tool. In the photo at left, Lighting Engineer Nick Skinner and Matt Eckhart of Kinderhook Creek Farms pose in front of “The Dragon”, getting ready to dose squash plants with UVC for controlling Powdery Mildew and other disease pathogens.

## The Next Generation of Produce Farmers

The NextGen program targets farmers in multi-generational farm operations with the goal of helping them move into a leadership or ownership position on the farm. The program offers opportunities to gain production and business skills while networking with peers in the region.

## Farm Financial Peer Learning Circles—Helping Farmers Make Better Business Decisions

With support from NY Ag and Markets, ENYCH and the Cornell Small Farms Program are offering “Farm Financial Peer Learning Circles” to farmers across New York State. Farmers receive technical assistance, on-line training and conduct regular group meetings to improve decision making. learn best practices in farm financial management and how to use their financial data to make informed business decisions.





## NY Ag Overtime Laws—What Will it Mean for Eastern NY Farmers

The Farm Laborer Fair Labor Practices Act (FLFLPA) regulating New York farm employers went into effect January 1, 2020. ENYCHP staff worked with Cornell faculty to examine the economic effects of New York overtime laws. The report has been used to help inform the Wage Board hearings in January 2022. The full report is available at <https://cornell.app.box.com/s/mjicgs1x06r6m9l4kch7fa71lhhyqxdg>.

## Pesticide Sprayer Calibration and Education Workshops Prioritized in 2022

Workshops focusing on improving pesticide application efficacy and applicator safety reached over 150 growers throughout the region. The air blast sprayer workshops revealed an estimate of cost savings after sprayer modification at the two host farms at \$14 - \$44/acre per spray application. Backpack sprayer calibration on urban farms and boom sprayer calibration were taught at some workshops. Additionally, training programs helped over 50 growers and workers prepare to take the Department of Environmental Conservation pesticide applicator test to become licensed applicators.



## Small Investment to Tackle Big Bird Problems

ENYCHP staff used seed money from our program to jump start work on Laser Scarecrows now funded by NYFVI and a USDA SCRI. Over 50 growers joined an educational webinar to learn about using this technology to manage increasing bird damage on farms. The cost of the University of Rhode Island Laser Scarecrows is \$650.00 per unit – compared to \$10,000 commercial units. The inexpensive, portable units fit eastern NY's small field scale much better resulting in skyrocketing grower adoption in 2022.

## Fight the Mite!

New York is the 4th largest garlic producing state in the nation, and the number of garlic farmers here has been consistently increasing year after year. A Northeast SARE grant is funding eastern NY research focused on managing microscopic Eriophyid mites that damage an estimated 25% of garlic in storage. Information gathered will help hundreds of farmers reduce their storage losses and increase profitability.

## Fifth Annual ENYCHP Fruit & Vegetable Conference—A 'Virtual' Success

ENYCHP held its fifth annual Fruit and Vegetable Conference, for the second time in the virtual format. After nearly two years of virtual programming during the pandemic, participation in the conference was strong: 142 registrants gained access to the full conference program and recordings. The conference included a climate

change session, along with 8 fruit and vegetable sessions .

## Team Supports Sustainability on Small Scale Farms

A NYFVI-funded tarping initiative helps increase climate resilience and enhance nutrient cycling on small farms. On-farm replicated trials will inform ENYCHP staff when they develop best practices and introduce the use of tarps as a long-term production tool on small-scale vegetable operations .

## Climate Impact on Eastern NY Viticulture—Digital Tools to Assist with Decision Making

Interest in the consequences of climate-change on farming continues to expand while interest in new vineyard plantings also grows. Mapping and analyzing weather across eastern NY and at individual vineyards helps growers understand climate variability across the region, and provides tools to help mitigate climate risks. The tools are constantly being refined and improved, resulting in improved information delivered to growers daily.



# PROGRAM HIGHLIGHTS CONTINUED

## Utilizing Cover Crops on Vegetable Farms

Cold-tolerant brassica crops, including forage radish and mustards, are excellent options for fall cover crops in northern climates. When established in late summer, they produce a large quantity of biomass in the fall until a hard freeze in November or December. Vegetable and field crops growers and agricultural service providers learned how to choose, plant, manage and utilize cover crops on their farms.



## 2022 Collaborators

Cornell Cooperative Extension, County and Regional Programs  
Cornell Farmworker Program  
Cornell Institute on Climate Smart Solutions  
Cornell Small Farms Program  
Garlic Seed Foundation  
Glynwood  
Grow NYC  
Hudson Valley Farm Hub  
Hudson Valley Research Laboratory  
Louisiana State University  
Michigan State University  
National Institute of Food & Agriculture  
NE Sustainable Agriculture Research & Education  
New World Foundation  
New York Apple Association  
New York Farm Viability Institute  
New York State Vegetable Growers Association  
Northeast Organic Farmers Association-NY  
Northeast SARE  
Northern NY Ag Development Program  
NY and NE Integrated Pest Management  
NY Apple Research and Development Program  
NY Center for Agricultural Medicine & Health  
NY Farm Bureau  
NYS Berry Growers Association  
NYS Dept of Agriculture and Markets  
NYS Dept of Environmental Conservation  
NYS Dept of Health  
NYS Dept of Labor  
Onion Research and Development Program  
Orange County Vegetable Growers Association  
Pennsylvania Dept. of Agriculture  
Produce Safety Alliance  
Maine Organic Farmers and Gardeners Association  
University of Maine  
University of New Hampshire  
University of Rhode Island  
University of Vermont  
US Dept of Agriculture  
North American Raspberry and Blackberry Association  
US Dept of Labor  
Zero Foodprint

## STAFF

### ENYCHP Specialists

Charles Bornt, Vegetables  
Ethan Grundberg, Vegetables  
Elisabeth Hodgdon, Vegetables  
Teresa Rusinek, Vegetables  
Crystal Stewart-Courtens, Vegetables  
Maire Ullrich, Vegetables/Hemp

Laura McDermott, Small Fruit  
Michael Basedow, Tree Fruit  
Daniel Donahue, Tree Fruit  
James Meyers, Viticulture/Grapes  
Liz Higgins, Business

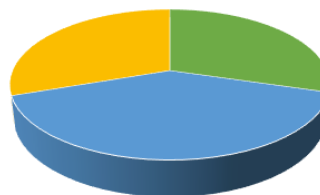
### Technicians

Natasha Field  
Kaitlyn McNamee  
Miles Todaro

### Administrative Staff

Chelsea Truehart  
Marcie Vohnoutka

## 2022 OPERATING BUDGET



- Supporting County Association Shares: \$295,913.00
- ENYCHP Grants & Funds<sup>1</sup>: \$401,494.00
- Cornell University Federal Funds<sup>2</sup>: \$302,806.00

<sup>1</sup> Includes funds from reserve accounts, grants, donations, program revenue, Ag & Markets, money market investment interest, Cornell Dept.

<sup>2</sup> USDA National Institute of Food and Agriculture Smith Lever Funds

# Cornell Cooperative Extension

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