Northern New York Agricultural Development Program

Farmer-Driven Research • Real-World Results • Practical Application

Co-Chairs:
Jon Greenwood, 315-386-3231 • Joe Giroux, 518-563-7523 • Jon Rulfs, 518-572-1960

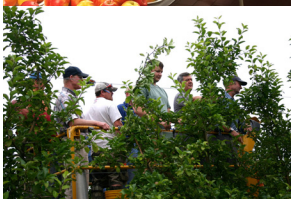
Research news/reports/updates: www.nnyagdev.org • RSS • Email/Text

Farmer-Driven Horticultural Research for NNY:
Growing Regional Food Production

"This project documents for the first time the levels of key parasites and viruses in commercial and hobby bee colonies in Northern New York"
— Cornell Honey Bee Extension Associate Emma Mullen

First-Ever NNY Bee Health Survey

An NNYADP small grant funded the 1st-ever NNY bee health survey and created a NNY Beekeeper Directory. An analysis of the main predictors for colony loss, reducing honey production is underway. *Varroa* mites, considered the most detrimental and widespread parasite of bee colonies were significantly higher in NNY than in other regions of the state, while levels of the parasitic fungal pathogen *Nosema* found in the bee digestive system were 65-82% lower in NNY. The cost to replace a single colony of bees is $100-$200. The NNY survey reports 29 beekeepers with 50 to more than 500 colonies each.



NNYADP Apple Pest Research Shows IPM Value

When orchard pests are low, apple growers save time, labor and money by eliminating orchard treatments. Northern New York's cooler climate generally delays pest emergence by 7 to 14 days. Field work funded by the farmer-driven Northern New York Agricultural Development Program has helped growers identify key pests, learn their life cycles, and use computer modeling to apply integrated pest management (IPM) to more effectively manage the pests. Treatments are guided for application only when the pest pressure reaches economically-damaging thresholds.

Applying IPM also pays off at harvest. Apples grown under IPM practices in orchards in NNY field trials were harvested at 96.6% Extra Fancy grade quality.

The NNY apple industry is estimated to have a value of $16 million.

"The application of IPM in small orchard blocks (first year of trials) was so successful that growers applied the practices to entire orchard blocks (the next year), and continued to do so in 2017"
— Tree fruit specialist Michael Basedow, CCE Eastern NY Commercial Horticulture Program

To receive NNYADP horticulture project results/notices: text 315-408-2841

or email Subject Line: NNYADP Hort Results to karalynn@gisco.net

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Practical Results for NNY Fruit & Vegetable Growers

On-Farm "Super Fruit" Trials Now Underway

- The farmer-driven NNYADP proactively funds new product opportunities and thus funded start-up of the first Juneberry research nursery in New York State.
- The most diverse living collection of wild-collected and commercially-available cultivars of *Amelanchier*, a "super fruit" with high antioxidant value, is located in Willsboro.
- Project leader and botanist Dr. Michael Burgess is based at SUNY Plattsburgh; collaborator and Farm Manager Michael Davis oversees the nursery.
- With the young Juneberry plants now maturing at the nursery, Burgess and Davis have begun working with growers on farms to support the successful adoption and refining of the best Juneberry establishment and management practices under NNY conditions.
- Since the Juneberry nursery was planted in Willsboro in 2014, fruit wholesalers; growers who direct market, supply CSAs, and offer u-pick; and local consumers, especially those with a taste for Juneberry jam, have been eagerly watching the development of Juneberry production in Northern NY.

Watch for New Variety Planting & Soil Health Updates from the NNY Cold-Hardy Grape Nursery in 2018!

NNYADP Research Surprises Tomato Growers with Easier Way

- NNYADP-funded horticultural research provided growers of the high-value cherry tomato with unexpected insight. Project leader Amy Ivy notes the project "*responded to growers struggling with controlling the rampant growth of the cherry-type tomato plants and questioning whether the time they spend pruning this vigorous tomato is worth the effort.*"
- Evaluating the labor, efficiency and yield of 3 tomato training systems: an intensively-pruned single leader, standard double leader, and less intensively pruned 4-leader system revealed significant time-saving differences for growers.

"Most growers felt the intensive system takes too much time, but our research showed that it took less time to train and harvest than the less intensive system which became a tangle of vines that slowed the work"
— Amy Ivy, Cornell University Extension Vegetable Specialist

- The project also compared the popular, but brown leaf mold-susceptible, variety Sun Gold with 3 disease-resistant tomato varieties for taste and productivity; 60 growers and volunteers participated in the testing.
- Results of these cherry tomato trials plus an evaluation of 13 single or mixed summer cover crop options for weed suppression in field-planted vegetable crops are posted at **www.nnyagdev.org**.