



## Cornell University Cooperative Extension

### Lake Ontario Fruit Program Quarterly Report July-September 2017



**Overview:** The growing conditions during the early part of the this summer proved to be a continuation of the spring. Through July, temperatures were cooler than normal, and precipitation was greater than normal. In addition, many orchards across Western NY were further impacted by hailstorms. Some were hit on multiple occasions. August also had cooler than normal temperatures, but it was much drier. Dry conditions continued through nearly all of September. However, we finally received adequate precipitation, followed by summer-time temperatures. From September 21-27, temps across most of the region were in the mid to upper 80's, with even low 90's in a few hot spots. The warm temps, coupled with the intense sun, advanced maturity on most later-season apple varieties. In addition, sunburn was seen on several varieties. Consequently, grower interest in hail netting/shade cloth is at an all time high, and may now be cost effective. Mario has an Expo session planned on this topic, and trials on deck for next season. The continuation of performing tasks/collecting data on applied research projects were the main focus for the team. Starting in late August, the Harvest Maturity Program began for Craig and Liz. Harvest for various projects began in earnest in September. Tess continued to monitor Sudden Apple Decline on a number of orchards.

**Team News:** The search to fill the Production Economics/Labor Management position on the team produced two candidates that were formally interviewed in mid-August. However, it was unanimous among the search committee and other industry personnel that we not offer the position. We've opened the position again and are hopeful for stronger candidates in this round.

**Education:** The annual LOF Summer Fruit Tour was held on five cutting edge farms in Niagara, Orleans, and Monroe Counties on July 12. Over 200 growers and other industry folks attended. Evaluations indicated that the tour was an excellent one.



Cornell's Dr. Greg Peck talks about his Hard Cider research at the brand new Blue Barn Cidery.



Specialist	Site Visit	Phone/Email
Grasswitz	10	11
Kahlke	1	25
Miranda-Sazo	15	80



Project/Field Activity	1 <sup>o</sup> LOF Person	Project/Field Activity	1 <sup>o</sup> LOF Person
Preparing New Farmers and Employees to Support Viable Farm Business	Miranda Sazo	Spotted wing drosophila monitoring	Grasswitz
Mechanical Blossom Thinning	Miranda Sazo	Monitoring for 3 potentially invasive exotic pests of apples and stone fruit	Grasswitz
ARDP String thinning with Kerik Cox	Miranda Sazo	Monitoring for 3 potentially invasive exotic pests of berry fruit	Grasswitz
Comparing seasonal nutrient requirements between Honeycrisp and Gala trees on M.9 rootstock	Miranda Sazo	Apple pest monitoring – on-going monitoring programs for codling moth, oriental fruit moth, oblique-banded leafroller and black stem borer	Grasswitz
ARDP Virus Work with Fuchs	Miranda Sazo	On-farm pilot project on leopard moth biology and phenology	Grasswitz
ARDP – String thinning work with Kerik Cox	Miranda Sazo	Collaborator in multi-state research project (SCRI) on brown marmorated stink bug biology & management	Grasswitz
Honeycrisp nutritional project with Lake Ontario Fruit Inc., (Orleans fruit growers)	Miranda Sazo	ARDP- Incidence & possible causes of Sudden Apple Decline (SAD)	Grasswitz
USDA-SCB- Measuring & Extending the Benefits of a More Accurate Honeycrisp Harvest Prediction	Kahlke	Harvista™ & ReTain™ trials on Gala, Honeycrisp, and Fuji for improved fruit quality	Kahlke
ARDP- Viruses in Apples	Kahlke	ARDP– Crop Load and Harvest Management for Hard Cider Orchards	Kahlke



**Grower Jim Bittner talks about his organic tall spindle apple planting**



## *Quarterly Highlight for Cultural Practices*

### **“A three-year project offers a new educational platform for WNY Hispanic orchard workers”**

**Background:** Over 40% of the cost of production in a commercial tree fruit farm business is in labor, the largest single cost to a grower. Therefore, a well-trained, reliable labor force is the single most important factor in keeping a commercial tree fruit grower viable and sustainable. Studies have shown when workers understand the “whys” behind the tasks they are asked to perform, they are more valuable to the farm operation, and excited and motivated to excel in the workplace. In addition, there are opportunities for advancement.

**LOFT Response:** CCE LOF partnered with Anu Rangarajan (Cornell Small Farms Program) and initiated a major labor readiness project titled “Preparing New Farmers and Employees to Support Viable Farm Business”, which provides a great opportunity for WNY Hispanic orchard workers to get trained on horticulture, labor, and management. The project will allow well qualified WNY Hispanic orchard workers to improve even further their horticultural skills, and at the same time, climb the ladder from labor to management. The three-year project will be conducted from August 2017 to July 2020. It was announced for the first time to Spanish employees at the 3<sup>rd</sup> CCE LOF Hispanic fruit summer tour conducted at the NYSAES in Geneva on July 22, 2017.



**Guilherme Fontanella Sander and Peter Herzelle (both from Cornell Geneva research fruit team) explain how dwarfing rootstocks are evaluated at one of the NC-140 rootstock trials.**