## **Small Fruit Commodity Survey – 2017**

**Project Leader** – Juliet Carroll, NYS IPM Program (IPM)

**Project Collaborators** – Tess Grasswitz, Lake Ontario Fruit Program (LOF); Laura McDermott and Amy Ivy, Eastern NY Commercial Horticulture Program (ENY); and James O'Connell, Ulster County Cornell Cooperative Extension (CCE).

## Introduction

A Small Fruit Commodity Cooperative Agricultural Pest Survey was conducted for exotic insects including summer fruit tortrix moth (SFT), light brown apple moth (LBM), and silver Y moth (SYM) on small fruit farms in New York (NY). All the agricultural pests in the survey pose significant threats to NY fruit industries.

## **Objectives**

1. Monitor and scout for the target species in small fruit plantings throughout the growing season of 2017 and submit suspect samples for identity determination.

## Methods & Results

We adjusted the USDA APHIS written protocols for NY small fruit planting and growing season conditions. We prepared a handout describing the survey, which was provided to the collaborating growers that were allowing us to set and monitor traps for the target insects. We monitored for the insects listed in Table 1, all of which are exotic pests not found in the Northeastern US.

**Table 1.** The insects in the survey included those listed below with the number of farms in each region shown.

| Target species            |       |                      | Farms per collaborator |     |     |     |
|---------------------------|-------|----------------------|------------------------|-----|-----|-----|
| Insect or Disease         | Abbr. | Scientific name      | IPM                    | LOF | ENY | CCE |
| summer fruit tortrix moth | SFT   | Adoxophyes orana     | 5                      | 4   | 4   | 2   |
| light brown apple moth    | LBM   | Epiphyas postvittana | 5                      | 4   | 4   | 2   |
| silver Y moth             | SYM   | Autographa gamma     | 5                      | 4   | 4   | 2   |

Two traps per species were used at each farm site. Farms were located in the following counties: Albany, Cayuga, Niagara, Onondaga, Orleans, Saratoga, Schuyler, Washington, Wayne, and Ulster. Traps were set out in early June and serviced every two weeks until September. Lures were replaced at the specified intervals in the APHIS protocols. A total of 90 traps were monitored by IPM, LOF, ENY, and Ulster CCE, evenly divided among the three insect species, and serviced six to nine times during the season.

Suspect insect specimens were brought back to our labs for pre-screening. A total of 643 non-target insects were caught in the traps, not counting LOF data, which was submitted independently. A subset of these non-target species, which couldn't be ruled out as target species, were sent in for determination. Pre-screened suspect specimens of LBM, SFT or SYM were sent to Jason Dombroskie, Insect Diagnostic Lab, Dept. of Entomology, Cornell University for determinations.

The commodity survey trapping data spreadsheets were submitted to the NYS Department of Agriculture and Markets. Tess Grasswitz, LOF, provided her written report separately to the Department, as well.

No quarantine pests, LBM, SFT, or SYM, were found by the small fruit commodity survey in 2017.