

# Invasive Species Monitoring for New York Vineyards

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**Location:** Statewide

**Collaborators:**

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NYS Ag & Markets USDA CAPS

**Abstract**

Invasive species can have a major impact on the ability to export agricultural goods in our global economy. Monitoring for invasive species yet to be found in NYS is a major component of the Cooperative Agriculture Pest Survey, a cooperative project between the NYS Ag & Markets, the NYS IPM Program and Cornell Cooperative Extension grape programs.

**Issues/Needs and Audiences**

Invasive species are becoming more and more common in vineyards across New York State, the Northeast and the United States as a whole. In the recent past it was the Multicolored Asian Ladybeetle that grabbed the attention of grape growers and wine makers at harvest as they sought to keep them, and their potentially offensive odor, out of the crush. Over the past two years Brown Marmorated Stink Bug (BMSB) has become a major pest for both growers of agricultural crops and homeowners in the mid-Atlantic region who find them invading their homes by the thousands and is moving up the east coast into New York State. Spotted Wing Drosophila (SWD), which is similar to the fruit flies found around over ripe bananas in the home, is making its way from the west. What makes the SWD a concern for grape growers is the female's serrated ovipositor, which allows her to cut through the skin of sound fruit to lay her eggs. This direct damage to the grape opens it up to Botrytis bunch rot and the entire bunch rot complex.

These invasive species are but the beginning of what could be an onslaught of invasive species heading toward the vineyards of New York State. The NYS agricultural community is concerned over the potential impact of invasive species that have not yet been found in NYS. With the ease of travel from one area to another, it is now a real concern that pests from areas as far away as the west coast of the US can easily be moved from one location to another. There are a number of states and countries that now look at what pests are found in the areas they are importing products from, and restrict imports of products from those areas with pests they do not want to risk importing. Having a survey system that provides a way of reporting no captures of these pests is important for the export markets of NYS growers.

**Extension Responses**

For the second year in a row, grape growers, along with research and extension from Cornell University are participating in the Cooperative Agriculture Pest Survey (CAPS) through funding provided by the New York State Department of Agriculture and Markets and USDA. This statewide effort involves forty vineyards, 20 in the Lake Erie Region, 10 in the Finger Lakes, 5 in the Hudson Valley and 5 on Long Island.

In 2011 traps were placed for five moths, which had not as yet been found in New York State;

Silver Y Moth  
Light Brown Apple Moth  
European Grape Vine Moth  
False Codling Moth

## Summer Fruit Tortrix Moth

Three traps per target moth were placed in each vineyard following the CAPS protocol resulting in 15 traps per vineyard and a total of 600 traps across NYS. Traps were deployed in early July and monitored on a biweekly basis through the end of September, or harvest, whichever came first. After extensive monitoring (up to 4800 trap checks) during the 2011-growing season there were no captures of any of the target moths reported from any of the trapping areas. For more information on the Cooperative Agricultural Pest Survey for New York State visit the NYS Department of Agriculture and Markets CAPS Home page at <http://www.agriculture.ny.gov/CAPS/index.html>

Through cooperation with Peter Jentsch, Entomology, Hudson Valley Lab and NYS Ag & Markets, traps for BMSB and SWD were provided and set out in each of 10 vineyards in 5 growing areas across NYS. These traps were also checked throughout the growing season and in some cases monitoring continued after harvest. In 2011 BMSB and SWD were found predominately in the Hudson Valley and on Long Island.

### **Accomplishments and Impacts**

- *The CAPS project in grapes was able to report no target species were captured during the 2011 growing season.*
- *This zero result can be used by exporters of New York State agricultural goods to respond to inquiries by those looking to import agricultural products*
- *Companion project involving trapping of the Brown Marmorated Stink Bug and Spotted Wing Drosophila provided fruit and vegetable growers with information to assist in the need for scouting for two invasive species that are beginning to make their way into areas of New York State.*

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