



## Fruit IPM Program

### **Program Leader:**

Juliet Carroll, Fruit IPM Coordinator  
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New York State Integrated Pest Management (IPM) Program  
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### **Program Objectives:**

Promote IPM practices in tree fruit, berry and grape production in NY.  
IPM's goal is to minimize pesticide applications for plant disease, arthropod, weed, and vertebrate pests while protecting the crop, human health and the environment.

Provide extension education on fruit IPM practices through field meetings, winter fruit schools, online, and invited talks.

Coordinate stakeholder input on fruit IPM research and extension priorities.

Conduct research on critical IPM issues facing the fruit industry in NY.



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### **Program Summary:**

I have a 20% research and 80% extension appointment at Cornell University. In fostering IPM practices in apples, grapes, cherries, blueberries, strawberries, etc., I work closely with Cornell Cooperative Extension educators, faculty, legislators, the fruit industry, consultants, and growers.

CAPS orchard survey – surveying apple orchards for four exotic insects, an invasive insect (spotted wing drosophila), an exotic disease, and streptomycin-resistant fire blight.

Bacterial canker of sweet cherry – investigating pruning practices in lieu of copper bactericides.

Blueberry survey – ascertain canker, viral and other diseases.

Organic Guides – coordinating editor of the strawberry, blueberry, and grape organic guides.

Cornell Fruit Resources – coordinating editor of this comprehensive website which indexes fruit information covering cultural practices, IPM, farm safety and business management.

Trac Software – developer of Excel-based software for farmers to improve pesticide record-keeping and reporting for farm traceability. TracApple, TracGrape, TracPear, TracStoneFruit, TracCherry, TracBerry

Network for Environment and Weather Applications (NEWA) – program leader for the NEWA weather mesonet that provides Pest & Disease Forecasts via the Internet; operating in NY, MA, VT and NJ.



Examining strawberry for root diseases and insects.

### **Program Justification:**

In New York, about 47,000 acres of tree fruit, 34,000 acres of grapes, and 2,650 acres of berries are grown with a combined production value of approximately \$370 million. Effective use of IPM for decision support and timing of spray applications can save the average fruit grower \$20,000 per year in spray costs and \$250,000 in crop losses. The NY State IPM Program works with Cornell Cooperative Extension educators and regional specialists to translate research data into local, on-farm impacts that save farmers' money, improve their farm gate value, guard their safety, and protect the environment.

### **Impact to Industry:**

The fruit IPM program partners with faculty and extension educators from Cornell University, Cornell Cooperative Extension, and other land grant universities. In 2009-2011, we helped secure 17 funded projects, bringing in \$1.4 million in external funding to support IPM research and extension to benefit our fruit industries - grapes, tree fruit and berries.

#### Contributions to key publications

[New York and Pennsylvania Pest Management Guidelines for Grapes.](#) Updated yearly.

[Pest Management Guidelines for Commercial Tree-Fruit Production.](#) Updated yearly.

[Pest Management Guidelines for Berry Crops.](#) Updated yearly.

[New York Integrated Fruit Production Protocol for Apples.](#) 2006. F&LS Bulletin 158.

Elements of IPM for [grape](#), [apple](#), [sweet cherry](#), [strawberry](#), [raspberry](#), and [blueberry](#).

The Crop Update. Lake Erie Regional Grape Program Newsletter, and other fruit newsletters.

#### Presentations on IPM

Each year, we deliver fruit IPM education to over 2900 fruit growers, processors, industry rep's, and fruit workers at 47 meetings held across New York and the Lake Erie grape belt.

Responsiveness to fruit industry needs – crop certification workbooks, training and workshops; invasive and exotic species surveys; neighbor relations and pesticide concerns; improving forecast models.

### **Program Team Members:**

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Tim Weigle and grape growers in the Lake Erie grape belt show the 2012-freeze-damaged grapevines to New York State Senator Catharine Young.