

Tree Fruit and Berry Pathology

Program Leader:

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Program Summary:

My extension program develops educational programming and provides stakeholder services for the diagnosis and management of fruit diseases in New York. My program endeavors to develop educational materials and tools to improve the diagnosis and management of fruit diseases in NY. I also strive to provide services to assist fruit stakeholders to address emerging disease epidemics and management concerns specific to their operations. As the number of small farms and interest in local farming increases, educational tools and stakeholder services that provide support specific to individual stakeholder operations will be of critical importance for the sustainability of fruit crops in NY.



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Program Goals:

Goal 1: Develop educational materials and tools to improve the diagnosis and management of fruit diseases in NY.

This goal is concerned with the development of web-based tools that would empower growers to solve disease problems and develop their own management programs. This goal also includes the creation of educational materials and educational programming that promote good agricultural practices for disease management.

Goal 2: Provide services to help fruit stakeholders overcome barriers to disease management specific to their operations.

This goal is concerned with developing programs that provide a sustainable service for NY fruit growers. Such services would be designed to help growers address emerging disease epidemics and overcome production barriers related to disease management concerns.



Shoot blight of sweet cherry caused by *Monilinia laxa*

Program Justification: New York State has a substantial fruit industry with apples being the premier fruit crop. According to the National Agricultural Statistics Service in 2011, New York ranked second in the nation in terms of total bearing acreage (42,000 Acres) and total utilized production value (\$226.8 Million USD) for apples alone. Diseases of fruit crops greatly limit annual fruit production and profits. Hence, educational programming on fruit disease management is needed to help mitigate production and profit loss for the NY fruit industry

Impacts to Industry:

- *Develop educational materials and to improve the diagnosis and management of fruit diseases in NY.*
 - Helped establish a web-based disease forecasting and decision aid support system for apples through consolidated efforts with other Cornell and State institutions
 - Developed comprehensive educational disease and pesticide stewardship resource information (see extension web content below)
- *Provide services to help fruit stakeholders overcome barriers to disease management specific to their operations.*
 - Developed a program for the detection and diagnosis of emerging stone fruit shoot blight and small fruit virus epidemics for NY fruit stakeholders.
 - Provided a sustainable statewide fungicide resistance-monitoring program for brown rot of stone fruit and apple scab.

Program Team Members:

Sara Villani, Research Technician
Zackary Frederick, Graduate Student
Many undergraduate researchers

Please visit my extension web content:

Program website: <http://www.fruit.cornell.edu/tfabp/>

Fungicide resistance survey service:

<http://www.fruit.cornell.edu/tfabp/smor.htm>

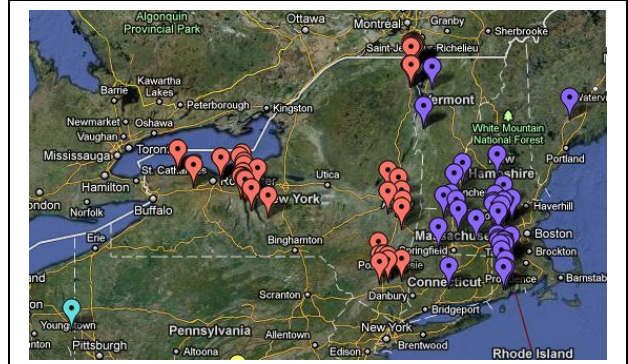
Disease forecasting:

http://newa.nrcc.cornell.edu/newaModel/apple_disease

Decision aid support system for apples:

<http://treefruitipm.info/>

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Google map displaying fungicide sensitivity profiles for regional apple scab populations.