# **Hops IPM in the Northeast**

**Educator(s):** Tim Weigle, NYS IPM Program

#### **Collaborators:**

Steve Miller, Hops Extension Educator, Madison County CCE Heather Darby, Professor, University of Vermont Bryan Hed, Department of Plant Pathology, Penn State University Jody Timer, Department of Entomology, Penn State University Member of the Northeast Hops Alliance

Location: Cornell Lake Erie Research and Extension Laboratory, Portland, NY

#### Abstract

Planting a 600-hill demonstration and research hopyard along with the creation of a Northeast Hops IPM Working Group are just two of the ways the NYS IPM Program and Lake Erie Regional Grape Program are helping the hops industry stage a comeback in the Northeastern United States.

#### Issues/Needs and Audiences

The reemerging and geographically diverse hops industry in New York, and the Northeastern United States, is being driven by a popularity of microbrews, home brewing and the buy local food movement. The problem in this reemergence is not in the enthusiasm that potential hops growers' show (145 potential hops growers from around the Northeast attended HOPS 101 courses in Utica and Cooperstown, NY and another 42 attended the HOPS 201 course in Cooperstown during 2010) but rather the limitation in agricultural background that many bring with them. This has lead to a dramatic increase in the number of phone calls about hops production, particularly hops pest management questions, from across New York State in the past several years. Today, the production of hops in the United States is centered in the Northwest where the average size of a hops bineyard in the Yakima Valley of Washington State is between 500 - 600 acres. There have been a number of Integrated Pest Management (IPM) resources developed for these large commercial farms including the Field Guide for IPM in Hops, the APS Compendium of Hops Diseases and Pests and Disease Forecast Models available on the Washington Ag Weather Network. In contrast, vineyards in the reemerging Northeast hops industry tend more toward the 1 to 10 acre bineyards and while they face many of the same pests as growers in the Northwest, as well as other pests specific to the climate of the Northeast, the scale of the bineyards in the Northeast create both obstacles and opportunities for the implementation of established IPM practices.

### **Extension Responses**

To better understand the IPM needs of the Northeastern hops industry a Northeast Hops IPM Working Group was formed through a Northeastern IPM Center - IPM Partnership grant. The working group meeting at Brown's Brewing in Troy, NY had 21 participants from Maryland, Massachusetts, New York, Pennsylvania, and Vermont with representation from hops growers, consultants, university research and extension personnel as well as a member of the Vermont Brewers Association. Prior to the meeting, an on-line survey using Survey Monkey was distributed to the members of the Northeast Hops Alliance asking for their input on what they felt was the most important NE Hops IPM needs for insect, disease, weed and vertebrate management, as well as what educational resources for hops IPM were needed. Twenty-four people responded to the survey and this information was collated and presented at the working group meeting. Members of the hops Working Group (WG) provided their own ideas of IPM needs, and by the end of the day, members had prioritized the IPM needs for Northeast Hops production. This list of IPM needs for NE Hops can be found on the Northeastern IPM Center website at http://www.northeastipm.org/working-groups/hops/

Teaming up with Steve Miller, Hops Extension Educator, Madison County CCE and members of the Northeast Hops Alliance, Tim Weigle, Statewide Grape IPM Specialist, NYS IPM Program was able to provide IPM educational programming through two grower meetings. The first talk, Hops IPM presented at the Summer Hop Yard Tour and Picnic at Climbing Bines Hopyard in Penn Yan, NY while the second talk was on Weed Management in Northeast Hopyards at the Fall Hops Conference in Troy, NY.

The available hops acreage for applied research, demonstration and implementation projects is extremely limited in the Lake Erie Region. Hopyards that are available are not of the size that would allow for projects with any risk of crop loss so a demonstration research hopyard was planted in the spring of 2011 at the Cornell Lake Erie Research and Extension Laboratory, Portland, NY. The hop yard consists of 12 varieties, a total of 600 hills trained on both standard 18' trellis, as well as, a 9' trellis to be evaluated for use with a retrofitted mechanical grape harvester.

#### **Special funding sources**

Northeastern IPM Center - IPM Partnership Grant Trade Adjustment Assistance - Northeast Center For Risk Management Education Lake Erie Regional Grape Program

## **Accomplishments and Impacts**

- A 600-hill research and demonstration hopyard has been planted at Cornell Lake Erie Research and Extension Vineyard to address the applied research and demonstration needs for IPM in the Northeast Hops Industry. Research and demonstration projects involving in row weed management; cover crops and insect management (aphids and spider mites) are being planned for 2012.
- A Northeast Hops IPM Working Group has been formed and developed prioritized Hops IPM needs for the Northeast. These needs are currently being used to develop grants by research and extension personnel in New York and Vermont to address use of cover crops in NE hopyards and the development of a regional IPM Publication, Hops IPM Guidelines. This list of IPM needs for NE Hops can be found on the Northeastern IPM Center website at http://www.northeastipm.org/working-groups/hops/
- Hops IPM Educational Programming was developed and delivered at two grower meetings, the Summer Hop Yard Tour and Picnic at Climbing Bines Hopyard in Penn Yan, NY attended by 61 hops growers and potential growers and the Fall Hops Conference at Brown's Brewing Conference in Troy, NY attended by 180 members and potential members of the Northeast hops industry.

Contact Person(s): Tim Weigle

Address: 6592 West Main Road, Portland, NY 14769

Phone: (716) 792-2800 x 203

Fax: (716) 792-2805 e-mail: thw4@cornell.edu