

New York State IPM Program
Report to NEERA, Burlington, VT, April 2, 2014
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I. Examples and highlights of Program accomplishments (<http://nysipm.cornell.edu/>):

Agricultural IPM Research

Fruit crops and Hops

- A network of 140 spotted wing Drosophila (SWD) traps included 24 extension faculty and educators in 28 counties in NY, and resulted in distribution maps that alert growers about the need to protect their fruit crops from SWD
<http://www.eddmaps.org/project/project.cfm?proj=9>
- Determined that SWD poses low risk to sweet and tart cherries, except in lower Hudson Valley and Long Island.
- The updated Phenology-based Degree Day model for better timing of grape berry moth management strategies was made available on our weather network (NEWA).
<http://newa.cornell.edu/>
- A biological control project using native entomopathogenic (insect-attacking) nematodes to manage Japanese beetle populations in the sod row middles of grapes in the Lake Erie and Finger Lakes regions of New York State was initiated.
- An IPM hopyard was planted in western NY for IPM research and demonstration.
- An economic analysis of bird damage to fruit projected impacts on loss of yield and farm jobs was conducted.

Vegetable crops

- We're testing organically approved products against 6 pests that farmers identified as causing significant damage—including striped cucumber beetle, crucifer flea beetle, cucurbit downy mildew, swede midge, squash vine borer, and *Alternaria* leaf spot on cauliflower.
- A Cooperative Agricultural Pest Survey of tomato showed that NY is still free of 3 exotic insects and diseases: bacterial spot, bacterial wilt, and the tomato leaf miner.
- We're investigating whether spotted wing drosophila can attack intact tomatoes.

Ornamental Crops

- We're creating a profile of sites that are less likely to promote root rot in fir trees, based on soil and site characteristics. This tool will enable Christmas tree growers to make the best site and plant matches.
- Greenhouses run at cooler temperatures nowadays to save money. We assessed the effectiveness of a fungus gnat biocontrol under these conditions and found they were still effective, and growers could further benefit by modifying watering practices.
- We evaluated mugwort control in field nurseries using late-summer rototilling and fall applied herbicides.

Livestock and Field Crops

- Weekly monitoring of western bean cutworm was conducted at 90 locations in 39 counties. Populations of this new pest of corn and dry beans are increasing, particularly in northern NY.

Agricultural IPM Extension

Multiple crops

- Our Network for Environment and Weather applications (NEWA) expanded in the NE region with 5 other states joining. We improved access for smart phones, increased the number of weather stations in the network by to 249, and now have 30 plant disease, arthropod, and horticulture IPM forecast models. <http://newa.cornell.edu/>

Fruit crops and Hops

- Trac Software workshops reached 37 farmers, and will promote better pesticide recordkeeping and reporting by fruit growers in NY, thus improving stewardship of their land.
- Spotted wing drosophila resources were created including: comprehensive websites <http://www.fruit.cornell.edu/spottedwing/> and http://nysipm.cornell.edu/invasives_exotics/swd/swd.asp; and a blog with 58 posts <http://blogs.cornell.edu/swd1/>.
- Spotted wing drosophila IPM information was extended to 582 direct marketers, growers, consultants, extension educators, and researchers.
- GIS maps of 14,500 acres of 250 grape vineyards in western NY were created to accurately calculate pesticide needs and use NVDI sensor canopy mapping.
- 293 growers and members of the Lake Erie grape industry took part in discussions of timely, research-based IPM topics at 18 weekly “Coffee Pot” meetings in the grape belt.
- 522 growers were educated about hops IPM in four extension presentations.

Vegetable crops

- A survey of sweet corn growers, consultants, and extension staff showed that our Sweet Corn Pheromone Trap Network informed the decisions of 82% of respondents.
- We developed reference collections for Cooperative Extension offices for training on identification of moth pests of sweet corn. Proper identification is needed for good IPM.
- New videos and web features enhance growers’ abilities to scout, identify and manage several vegetable pests. Check out our YouTube Channel <http://www.youtube.com/user/NYSIPM>
- We produced 14 organic crop production guides. They’re freely available and were downloaded nearly 7,500 time in just an 18 month period, http://nysipm.cornell.edu/organic_guide/

Ornamental Crops

- Since 2009 we’ve trained 400 greenhouse growers at 20 IPM in-depth hands-on programs around the state. Over 60% of participants have adopted critical IPM practices like biocontrol.
- IPM alerts and updates were sent to 375 greenhouse growers and 150 Christmas tree growers, nearly once a week.
- We educated 300 people in 6 webinars how to avoid pesticide resistance and use alternatives.

Livestock and Field Crops

- We updated our IPM Guide for Organic Dairies http://nysipm.cornell.edu/organic_guide/dairy_org_guide.asp
- Twenty-three issues of the Weekly Field Crop Pest Report were posted as an online blog (<http://blogs.cornell.edu/ipmwpr/>) directly reaching 100 subscribers and up to 3,000 people via reposted articles shared in Cooperative Extension newsletters and other media.
- Weekly Field Crop Extension Conference Calls regarding statewide pest status and crop conditions improved farmer management decisions.

Community IPM Research

- The NYS IPM Program partnered with the state departments of health and education and the state association of school facilities managers to survey public schools about pest management policies and practices.
- We helped survey rodents in urban areas for pathogens and parasites. Papers are being submitted in 2014.

- Research comparing golf course management systems continued for a 13th year, and reduced chemical management practices were taught intensively to 29 State Park Golf courses.

Community IPM Extension

- We developed an online resource of Best Management Practices for school IPM in the Northeast. URL being released in April 2014.
- We're working with Extension and BOCES district personnel to develop IPM outreach to rural school districts in New York State—and also partnering to extend IPM to non-public schools.
- Four videos on rodent biology and management were developed.
<http://www.youtube.com/user/NYSIPM>
- Bed bugs illustrated: 10 illustrated fact sheets and 5 online presentations (English and Spanish), were created using images and few words.
http://www.nysipm.cornell.edu/whats_bugging_you/bed_bugs/
- 170 health care professionals, library staff, hotel and building management, and school administration were educated about bed bug management at two Nassau County Bed Bug Task Force Workshops.
- Two popular NYS IPM fact sheets were updated: *Don't Let Carpenter Ants Renovate Your Home*, and *Bed Bugs Are Back! An IPM Answer*.
- We funded research on renovating lawns using mowers to scalp grass instead of using herbicides.
- NYS IPM helped create *Best Management Practices for Golf Course Water Quality*.
<http://nysgolfbmp.cals.cornell.edu/>
- NYS IPM staff collaborated with the Village of Cooperstown to manage Doubleday field without pesticides.
- NYSIPM funded projects on wildlife control, IPM for homes, weed management, renovating and managing lawns without pesticides, plant selection and design, and sports turf management under the Child Safe Playing Fields Act. Reports:
<http://nysipm.cornell.edu/grantspgm/projects/proj13/>
- We're studying whether beneficial nematodes can persist in turf fields and reduce white grubs populations.
- Three online bed bug courses were prepared. <http://pmepcourses.cce.cornell.edu/>
- An online pest ID guide was created to help homeowners.
http://nysipm.cornell.edu/pest_key/

II. Budget-related Information:

In 2013–2014 NYSIPM received \$500,000 in state funding for Agricultural IPM, and \$500,000 for Community IPM (a \$100,000 increase). The just-passed 2014–2015 budget includes \$500,000 for Ag, and \$550,000 for Community. Ag levels are still one half of historic levels. We were awarded \$899,100 for EIPM (2013–2016). We hired 3 longterm professional positions this past year in: vegetable IPM; structural IPM; and schools, day care and turf IPM. We offered a mini-grants program in Community IPM and funded 8 projects. Reports are posted at <http://nysipm.cornell.edu/grantspgm/projects/proj13/>