

NEERA 2014 State Report

State: New Jersey
Submitted by: George Hamilton

Current Situation: The IPM programs coordinated by Rutgers Cooperative Extension encompassed production agriculture in the areas of blueberries, nurseries, greenhouses, tree fruit, and vegetables. Research conducted by faculty and staff connected to these various programs is helping to increase the adoption of IPM and at the same time reduce our reliance on pesticides as the sole pest management tool being used. During FY13 work was done to develop management strategies for use against the brown marmorated stink bug in vegetables and tree fruit and the spotted wing drosophila in small fruit and blueberries. In addition, the vegetable IPM program was able to impact more acreage through the use of their website that tracks weekly European corn borer and corn earworm population changes in the state. This program has been so successful that it has been linked to a similar network maintained for the Mid-Atlantic States by Pennsylvania State University. Overall, IPM adoption in the state was seen on 7,400 acres of blueberries, 508 acres of nursery stock, 10 greenhouse acres, 8,604 acres of peaches, 2,527 acres of apples, 113 acres of peaches and 27,500 acres in vegetables (carrots, cole crops, high-tunnel tomato production, pumpkins, peppers, snap beans, staked tomatoes, sweet corn, and sweet potatoes) for a total of 66,662 acres. The vegetable and fruit IPM programs faculty and staff also conducted research evaluating the impacts of the brown marmorated stink bug (BMSB) in their programs and participated the mid-Atlantic BMSB working group (Hamilton is a co-organizer/chair). This group is supported by funds provided by the Northeast IPM Center.

EIPM Grant 2013/2014: This grant continues the coordination of IPM programming in New Jersey and the implementation of previously EIPM funded projects in the IPM Implementation in Specialty Crops emphasis area. The project's overall goals are to increase IPM awareness and adoption in NJ by continuing to conduct annual advisory meetings with stakeholders, represent NJ on state and regional committees, respond to IPM-related inquiries, and coordinate and report on state/institutional activities. The goals of the IPM Implementation in Specialty Crops emphasis area project are to 1) integrate validated pest management research results into a delivery program, train growers and seasonal field scouts in pest monitoring methods, reduce insecticide use, optimize the use of reduced risk practices, and reduce excessive use of fertilizers in blueberries and peaches.

Management of the Brown Marmorated Stink Bug: Since its introduction into the US in the mid-1990's, the brown marmorated stink bug has been detected and or established populations in over 40 states. Since 2008, it has become a severe pest of fruit, vegetables, field crops and ornamentals in mid-Atlantic states, a moderate pest in surrounding areas, a moderate pest of these pests in surrounding states and a developing pest in California, Oregon and Washington. Researchers (George Hamilton, Anne Nielsen, Dean Polk and Cesar Rodriguez-Saona) in New Jersey are involved in two multistate USDA funded projects to management this pest. The first is a 3 year project funded by the Specialty Crops Research Initiative program. The second is a 3 year project led by Dr. Anne Nielsen is funded by the Organic Research and Extension Initiative.

Management of the Spotted Wing Drosophila: Following the spread of the spotted wing drosophila from the west coast to the east coast in 2011, this insect has become a severe pest of blueberries, grapes and other small fruit. Because of this growers are require the use of multiple insecticides sprayed multiple times during the season to manage it. Researchers (Anne Nielsen, Dean Polk and Cesar Rodriguez-Saona) in New Jersey are involved in several USDA (SCRI and NE RIPM) and state funded projects to management this pest.