

## **Reducing New Hampshire Crop Losses to a Serious Invasive Insect**

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Spotted Wing Drosophila (SWD) is a Chinese insect that reached New Hampshire in 2011. It attacks many species of small fruit, plus some tree fruit. In 2012, the first full growing season that it occurred here, it caused \$1.516 million in crop loss in New Hampshire.

The UNH Cooperative Extension IPM team responded by 1) joining a New England-wide task force of extension & research staff on SWD, 2) incorporating the latest research results to improve traps and baits, 3) disseminating the information at grower workshops and on line, 4) running a network of SWD traps on 20 farms across the state, and 5) conducting field research on the effectiveness of the new traps, including a pesticide-treated trap.





As a result, growers improved their monitoring and control methods, and in 2013, New Hampshire SWD damage dropped by 2/3, or \$987,000.

In 2014, I collaborated with Dr. Tracy Leskey (USDA Appalachian Fruit Research Station) to evaluate the effectiveness of pesticide-treated spheres to assist in controlling SWD in raspberries. On four farms (Apple Hill, Poverty Lane, River View and Edgewater Farm) we compared the growers standard SWD controls with this novel approach. On existing raspberry cane support wires, we hung a pesticide-treated, odorbaited red sphere trap over the raspberry plants every 3 meters. Thus the "control" plots had the grower's

standard control system (monitoring with traps and spraying an insecticide if the catch was high enough), and the "sphere" plots had this same system plus the spheres. We evaluated the experiment by counting how many SWD's emerged from the fruit. SWD infestation in the fruit from the sphere plots varied, but was down 65 to 80% from that in the control plots! We are excited by this new approach, and will continue our work.

As this is written, we are gathering data to evaluate the 2014 crop losses, and preparing information to assist farmers this growing season.