

Spotted Wing Drosophila in New Hampshire, 2013
(Drosophila suzukii)

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We set out most of our SWD traps June 25-30th this year. Most traps were in Hillsborough, Rockingham, Strafford, Grafton and Merrimack counties, with one site each in Carroll and Sullivan counties. We had traps on 17 farms. In each crop where we placed traps, we set them out as that crop was ripening, and removed them when harvest was completed. At most sites we also had 2 traps in the “woods” that stayed there all season. The term “woods” is misleading for some, which were just brushy field edges.

This year we made visual changes to the traps, modified their placement, and modified the bait. We used the modified red solo cup trap that CT & RI colleagues perfected, with a series of small holes near the top, and a black band of tape near the top. We used the same liquid bait as last year (grape juice/apple cider vinegar/ethanol), but this year added insert cups that contained flour/oil/yeast/water bait. We also ensured that traps were buried in foliage, not exposed. Last year we had yellow sticky cards inside the traps, but this year we eliminated them. We counted only the males in the traps, since this is what our growers would be doing. Unlike last year, this year’s bait/trap/placement procedures were good at predicting the need to treat crops.

In 2012 we had our first trap captures July 11th. This year (2013) the first capture was on July 2. Our cherry and “June” strawberry crops were unaffected by SWD (as happened last year). Blueberries, brambles, plums seem to have been significantly attacked, beginning a 5-7 days earlier than in 2012. As last year, traps in shrubs & trees in wooded field edges were the first to detect SWD’s, and trapped the most, by far. One trap in a brushy edge in the seacoast caught extremely high numbers for much of the season. There were lots of heavily-fruiting tartarian honeysuckle (and glossy buckthorn?) nearby.

Trap catches in the southern regions (Rockingham, Hillsborough, Merrimack, and Strafford counties) had more SWD’s than sites in Belknap, Grafton and Carroll counties, which are farther north, and at higher elevation. We did not trap in Cheshire or Coos counties. Because of concerns about sensationalizing reporters and farm confidentiality, we did not post catch data anywhere, but gave management summaries through our usual information routes.

Overall, it appears that damage was less severe than last year, but we are just beginning to collect data to evaluate that. In fall 2012, we ran an on line survey to commercial fruit growers, asking them to report their losses. The responses revealed a 25% SWD crop loss to blueberries [\$1,328,250]; 38% loss to blackberries [\$47,880]; 25% loss to fall raspberries [\$68,625]; 5% loss to summer raspberries [\$13,725]; 13% to grapes [\$13,104]; 3.5% loss of plums [\$1,470]; 3.7% loss of peaches [\$35,858]; and 19% loss of “fall” strawberries [\$7,600]. Total crop losses: \$1,516,512.00; this does not consider added insecticide spraying, labor or equipment costs. We are current developing the 2013 survey.