

Organic Management of SWD at Sunshine Valley Berry Farm, Rochester VT

Rob Meadows and Patricia Rydle run this ten acre organic farm which includes four acres of mature blueberries and three acres of raspberries, both summer and fall bearing. The farm is located in central Vermont, nestled alongside the Green Mountains.

SWD was present in 2012, but despite the use of cider vinegar traps, none were captured or identified until after infestation. The blueberry crop began to collapse on August 10 and was ruined within two days. Control was attempted by spraying with Entrust but was applied far too late. About 40% of the blueberry crop was lost. Spoiled fruit was stripped from the bushes, bagged, and left in the sun to destroy the pest. Fall raspberries were a minor part of the planting that year.

In 2013, extensive use of red cup traps baited with red wine and yeast and a drowning solution for catching flies did give an earlier warning of SWD arrival. Nevertheless, by the time SWD was in the traps some fruit was already infested. Three applications of Entrust alternated with a combination of Pyganic and AzaDirect (neem) seemed to suppress the pest's exponential growth and created some time in which to pick ahead of the worst damage. However, an estimated 20% of the blueberry crop and 5% of the fall raspberry crop, which was still not extensive, was lost to SWD.



Raspberry rows at Sunshine Valley Berry Farm, Rochester, VT

Rob says that “trapping is very time consuming, especially trying to identify and count SWD, and the traps don’t give an early enough warning to act on. My assumption this year is that we’ll have SWD and that egg laying will start soon after fruit starts to color up. I plan to apply the first spray of Entrust about July 15 about 7-10 days after the first blueberries are coloring. The next spray will be 6 to 8 days later, depending on the weather and I also need to make sure the pre-harvest interval does not conflict with a weekend when our pick-your-own market is busiest. The third spray has to be an alternate to Entrust and I’ll again use a mixture of AzaDirect and Pyganic, since it seems to have had a good effect last year and also gives some control of Japanese beetles. Then 2 days after that, in early August, I’ll apply Entrust again. I’ll take stock of spray effectiveness by monitoring traps, which we’ll set out at about 2 per acre. “

“Since I am using only half the labeled dosages of Entrust, with sugar at 2 lb. per 100 gallons to enhance its efficacy, I will be well under the maximum allowed per acre.”

“To help the spray program’s effectiveness we have pruned the blueberries very hard, really opening them up so we’ll get penetration into the plant canopy and good leaf coverage where SWD tends to hang out. Even though we may lose some yield from such heavy pruning, all the fruit should be of a good size and seen by pickers and harvested, which itself will help reduce SWD pressure.”

“Apart from spraying, our strategy is to harvest punctually and then cool the fruit rapidly. Early picking may reduce harvest weight (we mainly sell by the pound) and fruit sugar content but that is better than the alternative. Last year we turned a 9’ x 12’ room into a walk-in cooler with a big window AC unit and a Coolbot that maintained temperatures in the high 30’s. I plan to insulate the floor and the doors with the hope of maintaining a temperature in the mid- to low-30’s, as I’ve read this can kill some SWD. At least it will slow their development and reduce fruit rot, too.”

“For fall raspberries we have primarily Himbo-Top, Autumn Britten, Polana, Anne, and some Prelude and Autumn Bliss. Harvest starts a bit before Labor Day and here we have a lot of cool nights by the end of August, slowing the development of SWD. As with the blueberries I’ll apply Entrust a week or so after fruit starts to color, and again as needed, using the same rotation of materials, and traps to monitor SWD pressure.”

“We are less panicked than we were a year ago. The hope is to delay the exponential growth of SWD population by two to three weeks with well-timed sprays as the season starts, then pick till we drop and get as much fruit as we can into the cooler.”

Vern Grubinger and Rob Meadows 6-13-14