

Spotted wing drosophila in huge numbers

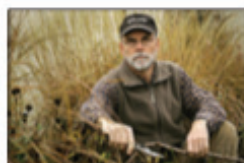
Q: Last year nearly all my cherry and berry crops turned soft and mushy before I picked them. They looked normal from the outside but I lost nearly all of both crops. What is happening?

A: What you are describing sounds like the damage from one of our newest invasive insect pests, the Spotted Wing Drosophila (SWD). This pest is a very small vinegar fly that is closely related to the fruit flies that often hover around any ripe fruit or glass of wine left out on your kitchen counter.

The big difference with the SWD is that the females will lay their eggs in ripening fruit while it is still on a tree or berry bush. When the eggs hatch in a few days, the larvae will feed on the inside of the fruit. The feeding will cause the fruit to rapidly soften, making it turn mushy in your hand when you pick it.

The SWD arrived in our area about 6 years ago from Asia. It has taken this pest a number of years to become established in Oregon. They are now well established and have a large number of agricultural crops to support them, as well as non-crop native and landscape plants.

The SWD seem to favor soft fruits like blackberry, raspberry, blueberry, cherry, and fig. So far they



Steve Renquist
Home and Garden Q&A

have not shown much interest in thicker skinned fruits like peach, nectarine, apple, pear, persimmon, and grapes. They have been found on grapes, peaches, and nectarines where the fruit

skin was broken by birds.

If you have a diverse landscape designed to be appealing to wildlife by having many fruit bearing plants, they might also be appealing to the SWD. Research during the past few years has confirmed that SWD can be sustained by the fruits of barberry, blackberry, cotoneaster, currants, dogwood, elderberry, honeysuckle, salmonberry, snowberry, sweet box, and wild cherry. Having these plants in your landscape will make it necessary to implement strict controls for your food crops.

The secret to controlling these pests is to monitor them in the weeks leading up to the start of the ripening process of your fruit crops. You should hang clear plastic cups in your trees or berry bushes that contain about two inches of apple cider vinegar or old wine. The cups that work well are the ones used for iced coffees that can hold 12-16 ounces.

The cups should have a lid with no big opening at the top. The small straw split opening is OK. You should drill or punch a few holes in the upper sides of the cup with a diameter no larger than 5/16ths of an inch. The small hole

limits access by larger insects. You

can visit the OSU website at <http://swd.hort.oregonstate.edu/gardeners> to



PHOTOS COURTESY OF
OSU EXTENSION SERVICE

The female *Drosophila* lays eggs in ripening soft fruit.

learn more about making a trap and identifying SWD.

Once you know the SWD are in your landscape and around your fruit crops as they start to color, you should be prepared to control them. Make sure to make your first spray before the fruit has fully colored or matured. There is ample evidence that the SWD females start laying eggs at the first sign or smell of maturation.

Most homeowner spray products that are recommended for control of SWD will do a good job, but usually not last for more than 5-7 days. Your strategy should be to spray at the first sign of maturity if you have identified SWD in traps, wait for the recommended pre harvest interval (PHI) after you spray (this is on the product label), then pick the fruit as rapidly as it ripens.

If you spray once and then let fruit hang for more than 7 days it will be vulnerable to egg laying again, so pick daily. A few sprays that are registered for use are Spinosad, Malathion, and Pyganic.

There is currently research being done at OSU with insect predators for SWD. Before these



Use a trap to test for Spotted Wing Drosophila in your garden.

predators can be released, it is necessary to test whether they will feed on other potentially beneficial insects.

Weather also plays a part in the control of the SWD. When we have a harsh winter with a few weeks of below freezing temperatures, overwintering SWD are few. But when we have a mild winter like 2014-2015 with very few days below freezing, large numbers of SWD overwinter and begin building their population early in the spring. That is why the summer of 2015 potentially will be very difficult for soft fruit

growers in Oregon.

Do you have a gardening question? Please email, call, or visit the Douglas County Master Gardener Plant Clinic at douglasmg@oregonstate.edu, 541-672-4461, or 1134 S.E. Douglas Ave., Roseburg. Or visit the satellite plant clinic at Kruse Farms every Saturday morning 9am-12:30pm through September 19.

Douglas County Master Gardeners are trained volunteers who help the OSU Extension

