



College of Agriculture, Human and Natural Sciences

Disaster Education Response Team



Spotted Wing Drosophila

Karla Addesso and Jason Oliver

The spotted wing drosophila (SWD) is an invasive pest of small fruits that has become established in Tennessee. The fly lays eggs in fruits and the resulting maggot infestation causes premature fruit drop that renders the crop unsuitable for human consumption. It has been found in Unicoi, Blount and Warren Counties, but is likely to be present elsewhere in Tennessee.

• Identifying Spotted Wing Drosophila

- SWD attacks strawberry, blueberry, blackberry, cherry, and other fruits to a lesser extent.
- SWD are about 1/8 inch long, have red eyes, yellow bodies with black stripes on the abdomen and a single pair of wings. Only males have a black spot on the front tip of their wings. Females have a dark, serrated egg laying organ at the tip of the abdomen that allows them to cut into fruit.



• Managing Spotted Wing Drosophila

- Harvest fruit as soon as they ripen and destroy fallen fruit.
- Monitor for SWD using a clear, red or yellow drinking cup with a lid. Punch 10 holes the diameter of a pencil around the top of the cup and fill with a few ounces of apple cider vinegar. Hang the trap near susceptible crops before fruit begins to ripen. Flies will be attracted to the apple cider vinegar and drown in the cup. Replace bait and check traps weekly.
- Males are the easiest to identify with a hand lens. Suspect flies can be identified at your local county extension office. If SWD is confirmed by trap catches, current recommendations are to apply a pesticide when fruit begins to color. Make sure the product label says it can be safely applied on fruits close to harvest.
- Conventional and organic pesticide trials are ongoing. Currently, malathion, zeta-cypermethrin, beta-cyfluthrin, beta-cyfluthrin, spinosad and spinetoram showed the best control in field trials.
- Contact your county extension agent for additional information.

Always follow pesticide label instructions.



