

# Spotted Wing Drosophila (SWD)



**SWD larvae**

Hearldandnews.com



Umn.edu



Entomophily.wordpress.com



Ucanr.edu



SWD egg

## SWD Identification – key characters

**Male**

Black spot on wings

2 black combs on front legs

**Female**

She inserts saw-like device (ovipositor) into fruits and lays eggs

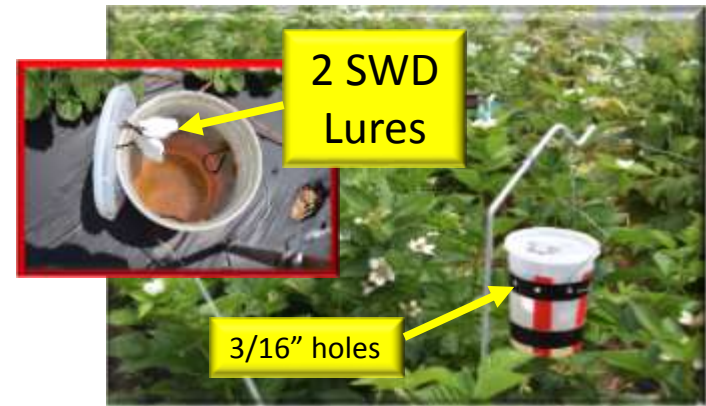
**Male:**

- ✓ Black spot on the end of the first wing vein
- ✓ Two sets of combs on the front legs
- ✓ Antenna with many hairs (branched)
- ✓ Large red eyes

**Female:**

- ✓ No black spot on wing
- ✓ Sclerotized, double serrated ovipositor (>12 teeth per side)
- ✓ Antenna with many hairs (branched)
- ✓ Large red eyes

Active Ingredient	Trade name	IRAC #	Blueberry	Caneberry	Strawberry	Probable Efficacy
			PHI (days)	PHI (days)	PHI (days)	
Carbaryl	Sevin 80S	1A	7	7	7	Fair/Good
Methomyl	Lannate LV	1A	3	Not labeled	Not labeled	Excellent
Phosmet	Imidan	1B	3	Not labeled	Not labeled	Excellent
Malathion	Malathion	1B	1	1	3	Excellent/Good
Bifenthrin	Brigade	3	1	3	0	Excellent
Esfenvalerate	Asana	3	14	7	Not labeled	Excellent
Fenpropathrin	Danitol	3	3	3	2	Excellent
Zeta-cypermethrin	Mustang Max	3	1	1	Not labeled	Excellent
Pyrethrin	Pyganic*	3	0	0	0	Fair
Spinetoram	Delegate	5	3	1	Not labeled	Excellent
Spinetoram	Radiant	5	Not labeled	Not labeled	1	Excellent
Spinosad	Entrust*	5	3	1	1	Excellent



### Trapping Flies

- **Trap Placement:** put 4 traps in planting at height of ripening fruit. During season, move traps to next block of ripening fruit.
- **Best trap** - 1 qt transparent deli cup. Melt or drill 20 holes (each 3/16" diameter) in upper part of cup. Add red and black 1" strips of tape (visual lure).
- **Trap lure** - wire 2 spotted wing drosophila lures to the lid inside the trap. Replace lures every 3 to 4 wks (\$3 per dual bait; Great Lakes IPM; Phone: 800-235-0285).
- **Trap fly drowning solution and lure** - weekly add ¾ cup apple cider vinegar to trap.
- **Weekly**, strain out flies from vinegar and note if SWD flies are present. Add new vinegar to trap and **discard old vinegar or lures in garbage**.

*If SWD flies are in trap and fruit is ripening, spray weekly, but reapply after rain. Use insecticides with different IRAC # to delay SWD resistance.*

### Detecting Larvae and Eggs

Collect 30 ripened raspberries, blackberries, strawberries or blueberries you would eat:

1. Use hand lens to see fly eggs or fly larvae in fruits **or**
2. Mix 1 qt water with either ¼ cup salt or ¾ cup sugar and pour over fruit. Wait 30 minutes and check for floating larvae.



**For SWD fly confirmation, mail vial of flies to:**

Ms. Barbara Lewis  
 AGRI 319, Department of Entomology  
 University of Arkansas  
 Fayetteville, AR 72701