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Salt Water Test for Spotted Wing Drosophila Larvae in Fruit

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Materials needed: Water, salt, container (flat preferred) or gallon bag, measuring cup, measuring spoon, stirring spoon (optional, coarse screen for separating fruit and larvae).

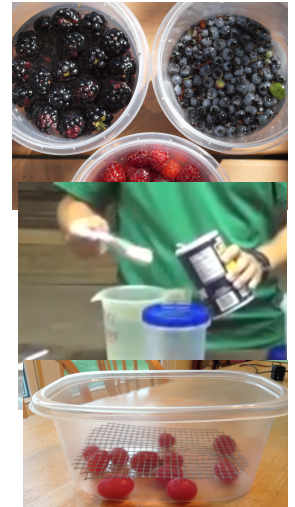
Fruit needed per test: Healthy, ripe but not soft or overripe fruit; 75 raspberries, 50 blackberries, 100 blueberries or 50 strawberries are suggested sample sizes.

Mix: 8 oz. warm water (1 cup) with 1 tablespoon salt; may need 24-32 oz. of salt water solution to properly float berries.

Combine: Fruit and salt water solution until berries are floating in 1-2 inches of water, cover with screen if available.

Wait: Let berries soak in salt water for 10 minutes.

Look: Inspect for whitish larvae floating in water at top of bag or container. If no screen was used, gently push berries to bottom of container with large slotted spoon to see larvae easier; DO NOT crush fruit, this will make finding larvae more difficult. Image on right of raspberries with larvae circled in yellow.

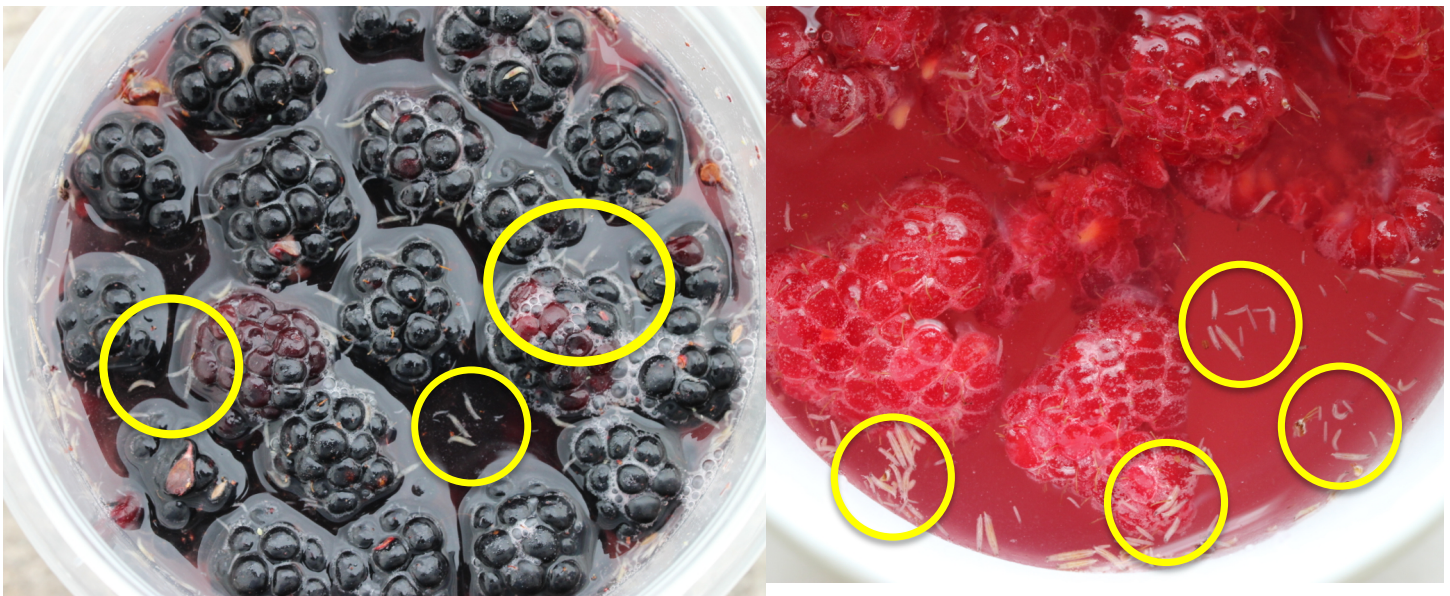


Determination: If **NO** larvae are found, great, keep monitoring and checking fruit weekly.

If a **FEW** larvae are found, still doing very good but SWD are in the area, need to keep spray program active while harvesting berries, refrigerate fruit.

If **MORE** than a few larvae are found (see below), consider the following actions:

- reduce the number of days between sprays; review insecticide selection
- ensure sprayer equipment is functioning properly; obtain better coverage
- refrigerate fruit to 35-40° F immediately after harvest; cool temperatures may kill eggs and small larvae.



Fruit Management: If there are significant amounts of larvae floated from berries (100's), it means they are heavily infested and probably should not be sold. Infested berries left at room temperature 1-2 days after picking will quickly deteriorate.

Watch Updated YouTube Video: Search for “OSU IPM Salt Water YouTube”



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