Salt Water Test for Spotted Wing Drosophila (SWD) Larvae
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Materials needed (shown above): Tall or flat quart size container, or gallon size zip-lock bag, warm water, salt, measuring cup, tablespoon, and a large spoon.

Fruit needed per test: Healthy, ripe but not overripe fruit; 100 raspberries, 50 blackberries, 100 blueberries or 50 strawberries.

Mix: 8 oz. warm water (1 cup) with 1 tablespoon salt; may need to mix additional salt water solution to properly float berries.

Combine: Fruit and salt water solution until berries are floating in 1-2 inches of water.

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

Inspect: Look for whitish larvae floating in water at top of bag or container. You can gently push berries to bottom of container with spoon or masher 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.

If **MORE** than a few larvae are found (below), consider the following actions:
- reduce the number of days between sprays
- review and possibly change your insecticide selection
- your sprayer nozzles, pressure, gallons per acre, travel speed, etc., might need to adjusted to get more spray to the plants and fruit.

**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. If fruit is still firm, try salvaging by refrigerating immediately after picking to slow egg and larval development and fruit damage. Cool temperatures may kill eggs and small larvae. If infested berries are left at room temperature 1-2 days after picking they will quickly deteriorate.

**Watch YouTube Video:** Search for “Ohio State IPM Salt Water Test YouTube”