

Section I
Invasive and Emerging Pests

**UPDATE ON USDA-ARS RESEARCH OF THE SPOTTED WING DROSOPHILA,
*DROSOPHILA SUZUKII***

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The spotted wing Drosophila (SWD), *Drosophila suzukii*, was reported in the Pacific Northwest in 2009. Because the fly is able to oviposit directly into intact ripe and ripening fruit it is of great concern to the small fruit industries in region. Nationwide, Washington and Oregon are the top two producers of raspberries and 2nd-3rd in wine grapes, and both are top producers of blackberries, blueberries, cranberries and strawberries. The short generation time and infestation inside the fruit of this pest make control challenging. Because of its recent introduction into our region, it is of critical importance that we determine the extent to which the fly has spread, determine which small fruit crops are most vulnerable, identify available treatment options and begin to understand the seasonal phenology of this insect.

Research Topics:

- Determine the time of year and which small fruits are susceptible to SWD attack?
- Determine the current range of SWD in Oregon and Washington?
- Determine if there are any native parasitoids attacking SWD?
- Assess the effectiveness of chemical applications (both chemistries and treatment interval) on fly control and maintenance of fruit quality.
- Laboratory pesticide trials to evaluate the efficacy of registered products as direct sprays and as residuals.
- Field test various techniques for monitoring the presence and population dynamics of spotted wing Drosophila in the field.