Small Fruit Insect Management

Kelly Hamby
Assistant Professor and Extension Specialist
University of Maryland
kahamby@umd.edu

Potato Leafhopper

Hardest on young plants, make sure plants get enough water and nutrients

Two-Spotted Spider Mites

Problems worst during extended hot, dry weather

Can reproduce VERY quickly

Strawberry Clipper

Plants usually compensate and yield normally

Tarnished Plant (Lygus) Bugs

Feeding can cause misshaped fruit

Poor pollination can cause similar symptoms

Matted Row

Favors slugs and sap beetles

Slugs

Slug

Straw mulch provides moist shelter and place to overwinter

Slug Damage

Damage ripe fruit as well as leaves

Slug Damage

Provide entry points for direct and secondary pests

Distinguished as primary problem by slime

Sap Beetles

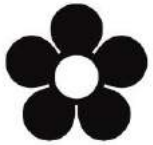
Strawberry

Dusky

Fourspotted

Life Cycle

Multiple generations per year



Sap Beetle Damage

Adults and larvae directly feed in ripe to overripe fruit

Sap Beetle Damage

Will also enter fruit that was already damaged

Sap Beetle Damage

Can introduce pathogens

Sanitation

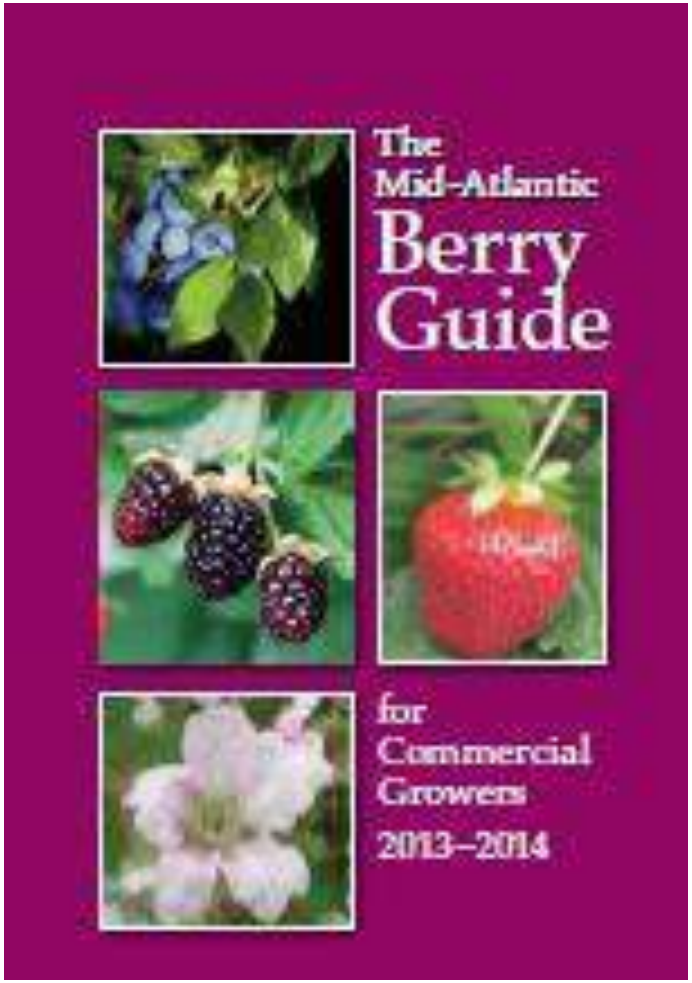
Harvest frequently and keep plantings clean

Cultural Management

Like to feed where fruit touches the ground

Heavy mulch layer encourages build up

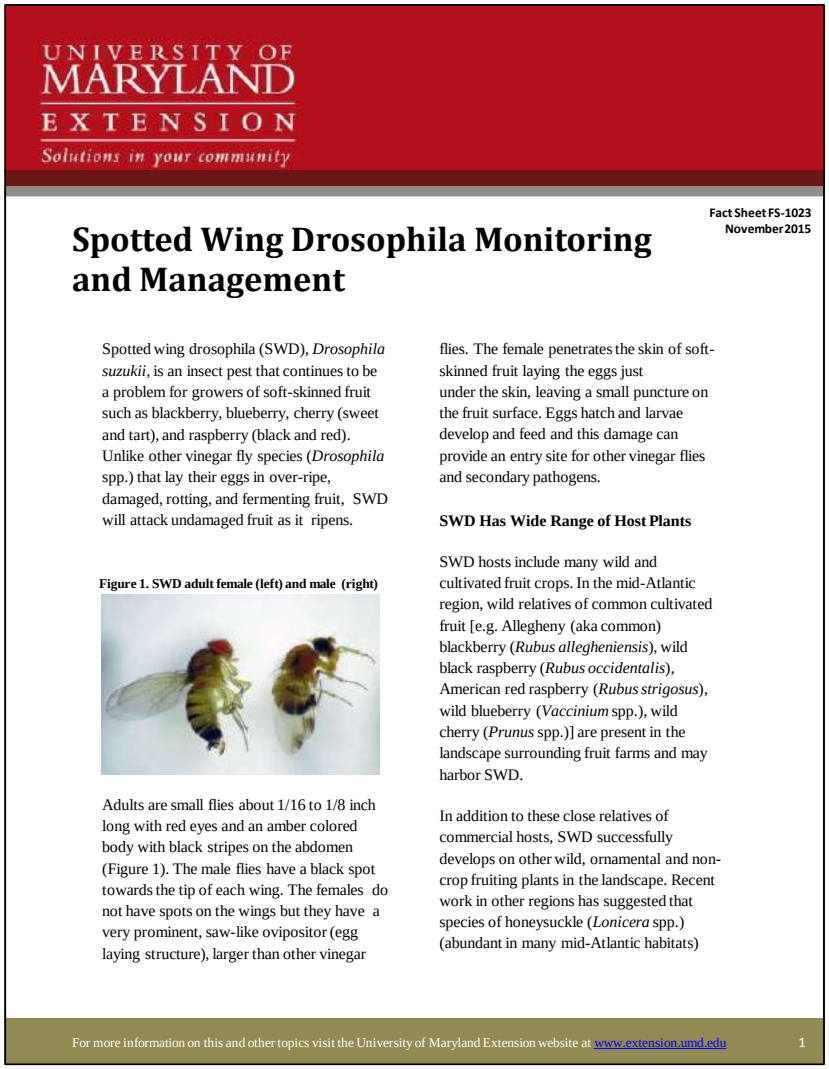
More Information



Mid Atlantic Berry Guide

https://extension.psu.edu/the-mid-atlantic-berry-guide-for-commercial-growers

More Information



UNIVERSITY OF MARYLAND EXTENSION
Solutions in your community

Fact Sheet FS-1023
November 2015

Spotted Wing Drosophila Monitoring and Management

Spotted wing drosophila (SWD), *Drosophila suzukii*, is an insect pest that continues to be a problem for growers of soft-skinned fruit such as blackberry, blueberry, cherry (sweet and tart), and raspberry (black and red). Unlike other vinegar fly species (*Drosophila* spp.) that lay their eggs in over-ripe, damaged, rotting, and fermenting fruit, SWD will attack undamaged fruit as it ripens.

Figure 1. SWD adult female (left) and male (right)

Adults are small flies about 1/16 to 1/8 inch long with red eyes and an amber colored body with black stripes on the abdomen (Figure 1). The male flies have a black spot towards the tip of each wing. The females do not have spots on the wings but they have a very prominent, saw-like ovipositor (egg laying structure), larger than other vinegar flies. The female penetrates the skin of soft-skinned fruit laying the eggs just under the skin, leaving a small puncture on the fruit surface. Eggs hatch and larvae develop and feed and this damage can provide an entry site for other vinegar flies and secondary pathogens.

SWD Has Wide Range of Host Plants

SWD hosts include many wild and cultivated fruit crops. In the mid-Atlantic region, wild relatives of common cultivated fruit [e.g. Allegheny (aka common) blackberry (*Rubus allegheniensis*), wild black raspberry (*Rubus occidentalis*), American red raspberry (*Rubus strigosus*), wild blueberry (*Vaccinium* spp.), wild cherry (*Prunus* spp.)] are present in the landscape surrounding fruit farms and may harbor SWD.

In addition to these close relatives of commercial hosts, SWD successfully develops on other wild, ornamental and non-crop fruiting plants in the landscape. Recent work in other regions has suggested that species of honeysuckle (*Lonicera* spp.) (abundant in many mid-Atlantic habitats)

For more information on this and other topics visit the University of Maryland Extension website at www.extension.umd.edu 1

Hambylab.weebly.com

Contact info, current research, news articles, fact sheets