

Invasive Species

Spotted Wing Drosophila in Eastern Washington: 2011 Update

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Abstract: Spotted wing drosophila (SWD) was monitored throughout the primary commercial cherry-growing regions of eastern Washington in 2011. The overall results of the trapping program indicated that populations were 90% lower than in 2010; while the reasons for this can only be speculative, the Thanksgiving freeze of November 2010 is highly suspect. A number of growers were able to harvest their crop before SWD was found in their area. Trap designs and baits were tested in the field; a set of six traps from different programs was deployed in six replicate cherry orchards in eastern WA. The Haviland trap (named for Dave Haviland) caught about twice as many SWD as the two next highest traps (Van Steenwyk, Deli cup). This trap also appears to catch slightly earlier than the other traps, also. The mesh-top design may be a factor in either the diffusion of the bait odor, or the preference of the adults to enter or be retained by the trap. The “superbait” mixture of wine, apple cider vinegar and molasses caught the most SWD, followed by apple cider vinegar and a sugar-yeast mixture; however, having a larger trap influenced the catch more than the bait. Most of the treatments tested (Success, Entrust, Warrior, Endigo) provided high levels of fruit protection in a field-lab bioassay; control with Delegate was slightly less so.