

Invasive Species

Spotted Wing *Drosophila* in Eastern Washington, 2010

Elizabeth H. Beers¹, Tim Smith² and Doug Walsh³

Washington State University, ¹Tree Fruit Research & Extension Center, Wenatchee, WA,

²Chelan-Douglas Cooperative Extension, Wenatchee, WA, ³Irrigated Agriculture Research & Extension Center, Prosser, WA

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Abstract: Spotted wing drosophila (SWD) was found for the first time in Eastern Washington in late June of 2010. Traps had been deployed in February in the high-risk areas of the southern growing regions near the Oregon border, where an infestation was discovered the previous year. After the first find, the trapping effort was expanded considerably, extending from the Canadian border to the north, through the Columbia River valley, Columbia Basin, Yakima valley, to the Tri-Cities in the southeast. A total of ca. 583 locations were trapped, about 456 for five or more weeks. The majority of the traps were baited with apple cider vinegar, although wine- and yeast-based baits were also used. Traps were deployed (% of samples checked) in cherries (53%), grapes (23%), peach/nectarine (6%), apricot (3%), raspberry/blackberry (15%), blueberry (7%), strawberry (1%), apple (1%) and pear (0.2%). Most of the traps were located in commercial fields, but packinghouses, backyard trees and feral host plants were also trapped. SWD was detected in all regions where traps were deployed, although there were some "hot spots" around the Wenatchee and Orondo areas, and one near Royal City. Overall, SWD densities tended to highest north of I-90. A small percentage of the traps (12%) remained negative throughout the season; the majority of those traps (91%) were located south of I-90. In paired tests of the deli cup trap vs. the Contech, the deli cup caught about 38% more flies, with no apparent bias between males and females. Both dimethoate and Provado appear to kill larvae in fruit post-harvest, with dimethoate the more effective material; interestingly, both products were much more effective against SWD than other *Drosophila* species.