Northern Michigan FruitNet 2010
Special Alert
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EARLY DETECTION PROGRAM FINDS A NEW INVASIVE PEST OF FRUIT IN MICHIGAN

EAST LANSING, Mich. – Spotted Wing Drosophila (Drosophila suzuki), or SWD, a small vinegar fly native to Asia, has been found in traps deployed this year by Michigan State University (MSU) entomologists in southwestern Michigan. This pest is established in the western United States, damaging fruit in California and the Pacific Northwest, but this is the first time it has been found in the Midwest.

SWD is a pest of berry crops, cherries, grapes and tree fruit, with a preference for softer fleshed fruit. No flies were trapped in Michigan through the summer months this year, but in late September and early October, monitoring traps in southwestern Michigan picked up male and female SWD. This pest has not been found in any fruit, and flies were trapped only after crop harvest was complete.

A Michigan SWD response team was formed earlier this year to survey the states’ fruit industries and to develop a pre-emptive Early Detection-Rapid Response (ED-RR) Plan as part of an integrated pest management (IPM) strategy for SWD. The response team is comprised of entomologists from the MSU Departments of Entomology and Horticulture, MSU Extension staff, staff members from the Michigan Department of Agriculture (MDA) and fruit commodity group leaders. The plan included setting out traps across Michigan for SWD in crops that the pest is known to affect. Implemented in spring 2010, the ED-RR Plan has enabled early detection of SWD.

Further monitoring is underway this fall to determine the distribution of this fly in Michigan. Members of the SWD response team are urging fruit growers in the state to become aware of this pest and to plan for ED-RR through trapping, monitoring and crop-specific control measures as part of their IPM program for 2011. “We have been aware of SWD since it was first discovered in 2008 in California,” says Rufus Isaacs, berry crops entomologist at MSU and the chair of the response team. “This insect is originally from Asia but has already been found to be invasive in Hawaii, California, Oregon, Washington, Utah, Florida, the Carolinas and British Columbia. Our response team set up 300 traps in June in more than 100 fruit-growing sites and checked them regularly. The traps were monitored the entire season with no positive finds of SWD until late September in a few fruit farms. This is probably because harvest was complete in July and August, so growers were no longer actively managing pests in those fields.” Isaacs says that because the pest was found after fruit harvest, there was no threat that the pest was in harvested fruit. He also noted it was found in an area that had minimal insect management.

“Early detection of an exotic pest is vital to our work to safeguard Michigan’s agriculture producers and natural resources,” Ken Rauscher, MDA’s Pesticide and Plant Pest Management Division director, says. “It’s only through collaborative efforts with state, university, and agricultural commodity leaders will we be successful in preserving the vitality of Michigan’s fruit-growing industry.”

“This pest was found only late in the season, so this gives us an opportunity to help growers learn what they need to know to effectively address SWD in 2011,” says Isaacs. “The SWD response team is confident that Michigan growers can control this pest with proper management.” Because SWD has not been previously found in Michigan, it is not known if it will survive the cold Michigan winter. “What we know now is that, unfortunately, this insect is here in Michigan, but MSU has a team of entomologists and MSU Extension educators prepared to address this threat from both research and education angles, and our monitoring program will continue in 2011,” Isaacs says. “If SWD is detected again next year, it is one more insect pest that Michigan fruit growers will need to add to their crop management programs. IPM strategies will be implemented next year to help monitor and control SWD.”

Educational presentations about SWD will be delivered at MSU Extension meetings for fruit growers this winter, including at the Great Lakes Expo meeting in Grand Rapids in early December. For more information, go to www.ipm.msu.edu/swd.htm. Contact information of fruit Extension educators who can answer questions about SWD is also available on the website.

WEBSITES OF INTEREST

Insect and disease predictive information is available at: http://www.enviroweather.msu.edu/home.asp

60 Hour Forecast
http://www.agweather.geo.msu.edu/agwx/forecasts/fcst.asp?fileid=fous46ktvc

Information on cherries is available at the new cherry website: http://www.cherries.msu.edu

Fruit CAT Alert Reports
This issue and past issues of the weekly FruitNet report are posted on our website at:
http://www.maes.msu.edu/nwmihort/faxnet.htm

ACTUAL AND PREDICTED DEGREE-DAY
ACCUMULATIONS SINCE MARCH 1, 2010

Please send any comments or suggestions regarding this site to:
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