Invasive Species

Drosophila suzukii, A Revolution for Soft Fruits in Trentino, North of Italy

Alberto Grassi and Marica Pallaoro Edmund Mach Foundation, Technology Transfer Centre, S.Michele all'Adige, Trento, IT

Keywords: Drosophila suzukii, spotted wing drosophila, soft fruits, sweet cherries, monitoring, alternative control methods

Abstract: Drosophila suzukii infestation on soft fruits was reported for the first time in Trentino, North of Italy, in 2009. This was the first record of this pest in Italy and Europe. Two years after, the spotted wing drosophila reached an extraordinary development of population, causing serious damages on soft fruits and cherries. An important infestation was also observed for the first time on wine grape. Conventional insecticides, even if applied many times, were ineffective in reducing fruits damage, due to the very high pressure of the pest. Interesting results were obtained with alternative control methods (anti-insect nets, mass trapping, attract and kill, etc.). A multi-method approach seems to be the best to manage *D. suzukii* infestations in a sustainable way in Trentino.

Distribution and Control of Spotted Wing Drosophila in Michigan Blueberries

Rufus Isaacs, Steve Van Timmeren, Keith Mason, Noel G. Hahn Berry Crops Entomology Laboratory, Michigan State University, East Lansing, MI

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Abstract: During the first full year of investigation of spotted wing drosophila (SWD) in Michigan, we monitored across the blueberry production regions of Michigan finding fly activity in most regions. First detection was in early July, with increased activity coinciding with the later-ripening blueberry cultivars. SWD larvae were also reared from the fruit of many wild hosts growing in natural habitats. Studies to compare insecticide toxicity in the laboratory and field support previously-reported west coast assays highlighting the performance of organophosphate and pyrethroid classes, as well as the activity of the spinosyns. Neonicotinoids were variably active and many organic insecticides had little to no activity. We will discuss the implications of our findings for managing SWD when blueberry maggot and Japanese beetle control is also required during the blueberry ripening period.