

Invasive Species

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.