

In This Issue:

Brown marmorated stink bug caught in apple orchard page 1

First spotted wing drosophila of the season trapped page 2

This week we caught our first spotted wing drosophila of the season, and the first brown marmorated stink bug in an apple orchard of the season.

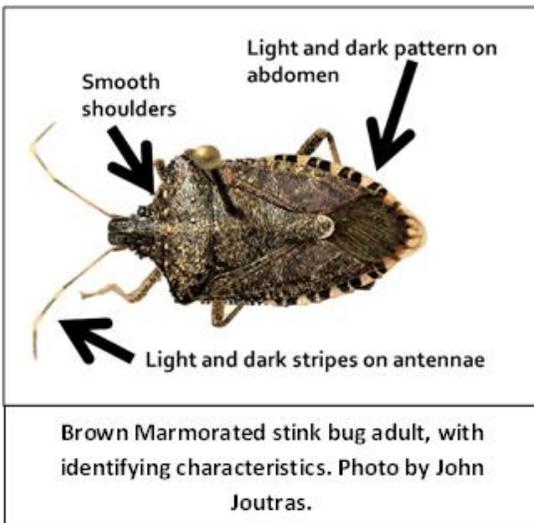
Please be on the lookout for these invasive pests in your crops!

Brown marmorated stink bug

Brown marmorated stink bug caught in apple orchard

By: Christelle Guédot, UW-Madison Fruit Crop Entomologist

Following our article in the last issue of this newsletter, we have now detected brown marmorated stink bug (BMSB) in an apple orchard in Dane county. We only caught one male on a sticky trap placed at the edge of the orchard between the apple trees and the surrounding woodland. This is our first report of BMSB this season in an agricultural crop.



Growers are strongly advised to monitor, either with commercial traps and lures, or by visual inspection for BMSB adults, nymphs, or egg clusters on the underside of leaves. At this stage, the insects should still be overwintering adults, which are looking for food and egg-laying sites. Immatures (called nymphs) will also feed on plants and fruits with their sucking mouthparts, and thus may cause damage. Damage from BMSB cannot be distinguished from the damage from other stink bugs.

Research in apple orchards has shown a provisional economic threshold of a cumulative trap catch of 10 BMSB adults per trap per week from border (edge) rows. BMSB are likely flying into orchards from the surrounding landscape, and so will arrive earlier and be more abundant on the edges of the orchard. No specific economic threshold has yet been set for other fruit crops.

If chemical controls need to be applied (if you reach the provisional threshold mentioned above), some insecticide classes known to provide good control of BMSB include pyrethroids (IRAC code 3A), carbamates (IRAC code 1A), and neonicotinoids (IRAC code 4A). In general, the choice of which insecticide to use should take into account the pre-harvest interval and re-entry restrictions, other pests present, and effects on beneficial insects and the environment. Once you reach the threshold, spraying an effective insecticide two times at a seven day interval has shown high efficacy against BMSB. Because BMSB tend to prefer the outer edges of a crop field, spraying just the outer rows can provide up to 85% effectiveness.

Please refer to the [2017 Midwest Fruit Pest Management Guide](#) for current chemical control recommendations for BMSB. Because this pest is relatively new to Wisconsin, insecticides may not yet be registered specifically for BMSB use in this state; however, as long as the insecticide is registered in Wisconsin for a specific crop, it can legally be used against BMSB, and should be applied at labeled rates recommended by other states for optimal efficacy against BMSB.

Please, stay tuned for more info as the season progresses and send suspected specimens to the UW-Insect Diagnostic Lab or send a picture of the suspect stink bug to guedot@wisc.edu.

Happy growing season!



Monitoring for BMSB with a black pyramid trap. Photo by Matt Kamiyama.

Spotted wing drosophila

First spotted wing drosophila of the season trapped

By: Christelle Guédot, UW-Madison Fruit Crop Entomologist

Similarly the previous years, we continue to monitor for spotted wing drosophila (SWD) in Dane County throughout different landscapes and have now caught our first SWD female in a woodland trap on June 5th. The traps were setup on May 22nd and this fly could have been caught anytime between May 22nd and June 5th; unfortunately, there is no way of knowing when exactly. This is a summer morph female and we have yet to catch a winter morph in spring or early summer traps. Door County also reported their first SWD on June 12th in a Northern cherry orchard.

Berry growers (including strawberry growers) and cherry growers are advised to monitor for SWD either with monitoring traps (homemade or commercial) or by inspecting fruit for the presence of larvae inside compromised fruit (particularly for grape growers). A salt water solution test (1:8) can be used to assess the presence of larvae within fruit. Collect 100g of suspect fruit from throughout the planting, place in salt water solution, crush the fruit slightly, and let fruit sit for ~1hr. Then, check for the presence of floating larvae.

Several insecticides provide good efficacy against SWD and should be applied from first detection (adults in traps or larvae in fruit) until harvest on a 5-7 day spray intervals. Insecticides include, but are not restricted to, Brigade, Danitol, Mustang Maxx (not registered on strawberry), Delegate, Malathion, Sevin, Entrust (OMRI approved), and Grandevo (OMRI approved). Please, check the label to see if the product is registered on your specific crop and for more information and please follow the label rates and directions.

Other management practices include sanitation, prompt harvest, and exclusion netting. For more information about monitoring for and managing spotted wing drosophila, please see our new publication, "[Spotted wing drosophila: A detrimental invasive pest of soft-skinned fruit](#)".

Happy growing season!