Helpline Happenings

Issue 2 By Karen Bennett October 2023

Brown Marmorated Stink Bug

***Halyomorpha halys*, Brown marmorated stink bug (BMSB)**
Order: Hemiptera (true bugs)
Family: Pentatomidae (stink bugs)



Adult BMSB

Don't let them in!

My children were home from university for the summer happy to see their bathroom remodeled but they remarked before leaving that there were a few stinkbugs on the new sky light window. Fast forward to spring, and the first warm day. I walk into this room, not much used since the kids are away, to be greeted by hundreds of stink bugs crawling up the window trying to get out, their excrement dripping down the newly tiled walls. Gross! Much shop vacuuming later they were gone for a day, but this scene greeted me several times over the course of the next month or two. Why were there so many in my house? Then I threw in the trash several packages of cilantro bought in the supermarket, convinced there had been stink bugs on them as they smelled of that noxious smell to me. *Am I crazy?*

Brown marmorated stinkbugs (BMSB) were discovered in the US in Allentown PA in 1998. In 2002 BMSB became established in the northern and central parts of NJ, later spreading through most of the state. They have since spread throughout most of eastern and western north America and will likely be found continent-wide within a few years. **The Rutgers Master Gardeners of Mercer County observed their arrival into Mercer County through tracking the logging of questions received from the public over many months.**

Identification

- Eggs are elliptical and light green to light yellow in color.
- Adults are approximately 17 mm long (males larger than females), brown in color with speckled appearance, white stripes on antennae, banding on the abdomen.
- Possess membranous wings that fold flat along the back when at rest creating an X pattern.

Life Cycle

- Eggs are deposited in a cluster of 20 to 30 eggs on the under - side of leaves.
- Immatures go through five nymphal stages (instars) and range in size from 2.4 mm to 12 mm.
- Adults can live up to 119 days.

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Eggs **1st Instar** **4th Instar**

Concerns

- Feed on a wide range of fruits, vegetables, and other host plants beginning in late May/early June, including peaches, apples, green beans, cherries, raspberries, and pears.
- Damage to plants is typically small necrotic areas but also includes leaf stippling, cat facing on tree fruit, seed loss, and transmission of plant pathogens.
- **Nuisance to homeowners due to the noxious odor produced as a defense mechanism.**
- During summer produces offspring that **survive the winter as adults (diapause) by entering houses** via gaps, therefore may be seen in large numbers during Sept. and Oct.
- **Plant feeder and will not bite humans or pets.**
- **Will not cause structural damage or reproduce in homes, feeding is minimal in winter.**

Prevention – Don't let them in!

- **Caulk** windows inside and out, fill gaps around exposed plumbing pipes and foundation.
- **Replace** weather strips on entry doors and/or install door sweeps if daylight is visible around the perimeter of the door.
- **Rake** away debris and vegetation from home's foundation to prevent attracting pests
- **Cap** or screen the top of the chimney to keep out pests.

Removal

- Dead and alive brown marmorated stink bugs can be removed using a vacuum cleaner; however, the vacuum may smell of stink bugs for some time.
- Traps made of a metal pan filled with soapy water and a light source are attractive to BMSB

Commonly Mis-identified as Brown Marmorated Stink Bugs

Box Elder Bug or Western Conifer Seed Bug – also maybe found indoors during winter.

Other Stink Bugs – BMSB can be identified from other stink bugs by their size (17mm), speckled appearance, white stripe on antennae, and banding on the abdomen.



Box Elder Bug



Western Conifer Seedbug

Fun (and not so fun) Facts

- Two main chemicals responsible for noxious smell are trans-2-octenal and trans-2-decenal (the latter gives cilantro its characteristic smell! I wasn't crazy!)
- Stink bugs can crawl through any space larger than 7mm despite their size.
- Stink bugs like opossums can "play dead" (thanatosis); other insects use this defense strategy.
- One study found more than 26,000 of them living in a Maryland home.

Sources

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