

Time to Look for the Unwanted Visitor: Overwintering of the Invasive Brown Marmorated Stink Bug

By Dr. Clement Akotsen-Mensah State Extension Specialist – Integrated Pest Management (IPM)

For most folks, the thought of winter brings excitement about snow and more time indoors. Fall is here. This also means that winter is fast approaching. For most animals, particularly insects, it is time to look for places to spend the winter. Although insects have many options, some find it convenient to winter in our homes. One such insect is the invasive brown marmorated stink bug, commonly known as the BMSB.



This insect is among several insect species that are high on the list of invasive species in the U.S. The BMSB is native to northeast Asia. It was first detected in the U.S. in late 1998, in Allentown, Pennsylvania. Since then, it has spread to about 44 states, including Missouri, and four Canadian provinces, according to stopBMSB.org. Several reports have shown that the BMSB is rapidly expanding its range in terms of distribution and damage. Both young (nymphs) and adults cause direct feeding damage on the vegetative, reproductive and fruiting parts of plants. The BMSB can feed on more than 300 host plants in a short period of time. The insect is highly mobile, which means it can change its habitat quickly.

Understanding the invasive brown marmorated stink bug is important because of the damage it causes to fruits, vegetables and field crops. It can cause significant damage. The U.S. Apple Association reported that in 2010, mid-Atlantic apple growers alone lost 18 percent of their crops to the BMSB. This resulted in a loss of \$37 million. Fortunately for farmers and Missourians, no cases of a severe number of BMSBs on food crops have been reported. Thus, there is no need to panic. However, this insect is elusive. It can go undetected in the environment for many years. Then, without warning, it can invade an entire crop field and cause severe damage.

As an adult, this insect can overwinter in homes. More than 20,000 stink bugs have been found in a single home. A home with thousands of stink bugs will smell and may pose a serious health risk to homeowners. For this and many other reasons, everyone needs to be on the lookout for this insect.

How can you identify the BMSB in your home? This insect is easy to find because of its size. As Kathryn Schulz, a writer for *The New Yorker* puts it, the "BMSB is roughly the size of a dime, although thicker, but its head is unusually small, even for an insect, which gives it an appropriately thuggish look. Its six legs prop its shield-shaped body up in the air, as if they were pallbearers at the funeral of a Knight Templar. Its antennae are striped with bands of dark and light, while its eyes, should you get close enough to gaze into them, are the vivid red of an alarm clock at night." This description helps anyone identify a BMSB.

Where can you look for this insect in your home? BMSBs hide easily, especially in any warm place during the winter. They are commonly found near heating systems. The insect also likes to stay in garages and basements.

Because members of Lincoln University's Integrated Pest Management (IPM) Program found the first BMSB in the state of Missouri near Jefferson City and in some urban areas (e.g., Chesterfield and St. Louis), we encourage people living in those areas to pay more attention to possible BMSB activity. There is a higher likelihood of these insects moving into homes in those areas this winter.

This article aims to inform the public, particularly Missourians, to be on the lookout for this insect in their homes as we prepare for winter. If you spot one of these bugs, please inform the appropriate agencies, such as the Missouri Department of Agriculture (MDA) and Lincoln University Integrated Pest Management Program. You can also report any sightings of the BMSB to your local Extension agent or to the address provided below. If possible, take pictures of the insect.

For more information about the BMSB, contact

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For more information on your IPM needs, see https://www.lincolnu.edu/web/programs-and-projects/ipm.