

PURDUE EXTENSION

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HOT NEWS

Brown Marmorated Stink Bug Reported in Indiana for the First Time

Rick Foster, Extension Entomologist, by Keith Robinson, Purdue News

A bug named for its stench and marbled, streaky appearance has made its way to Indiana, potentially becoming a serious pest for homeowners and fruit growers.

An insect the Purdue Plant & Pest Diagnostic Laboratory received from a homeowner in Elkhart County in northern Indiana on Tuesday (Oct. 19) was confirmed to be the brown marmorated stink bug, Halyomorpha halys. It is the first record of the bug in Indiana, but it has been found in Ohio and Kentucky.

The bug is a native of Japan, Korea and China and was first reported in the United States in Pennsylvania in 1998. It also has been found in other eastern states, including Virginia, Maryland and New Jersey.

"This insect is another example of exotic plant pests that are introduced through international trade and impacts our agriculture, natural resources and the public," said Phil Marshall, state entomologist with the Indiana Department of Natural Resources, Division of Entomology and Plant Pathology.

Quarantine similar to what has been used to manage the emerald ash borer and other exotic pests is not an effective option for the stink bug. "Thus, a state quarantine will not be issued," Marshall said.

The stink bug gets its name because it releases a pungent chemical as a defensive mechanism when threatened.

The insect can invade houses in the fall, much like the multicolored Asian lady beetle.

The bugs will not cause damage while in a home but will be annoying and smell bad when disturbed, said Ricky Foster, a Purdue University professor and Extension entomologist who specializes in pest management. The more important concern for farmers, Foster said, is that the bug can become a serious crop pest. It uses its sucking mouthparts to feed on a variety



Brown marmorated stink bug (Photo Credit: John Obermeyer)

of plants, including most fruit crops, some vegetables, corn, soybeans and various ornamental plants.

The bug in its adult stage has the shape of a shield common to most stink bugs. It grows to 5/8 of an inch long and 3/8 inch wide. The upper body is mottled brown and gray with alternating light and dark bands on the edges of the abdomen. Its antennae have two light bands on the last two segments. It lays barrel-shaped, green eggs in clusters. Nymphs are oval with yellow, brown, black and red colors.

Experiences in other parts of the country indicate that the brown marmorated stink bug first will be a pest in homes for a few years before it becomes a crop pest, Foster said. As with the Asian lady beetle, he said homeowners should take steps that include caulking around windows and repairing screens to prevent invasion.

"Once the stink bugs are inside, they can be vacuumed up and disposed of," he said. "Homeowners should discard their vacuum cleaner bag immediately after use because the stink bugs will indeed stink when collected by the vacuum cleaner."

If homeowners use insecticides to keep the bug out, Foster advised using them on the exterior of homes, not indoors.

The bug feeding on fruit crops causes small spots of dead tissue that can result in misshapen fruit. Its feeding on apples can result in pithy tissue underneath the feeding wound that may turn brown. Feeding later in the season can result in water-soaked lesions on the fruit.

The pest also can feed on fruiting vegetables such as tomatoes and peppers, beans pods and corn kernels.

The most effective insecticides are the pyrethroids such as bifenthrin, cyhalothrin, cyfluthrin and cypermethrin, Foster said. Most fruit crop growers prefer to avoid using these insecticides because they kill natural enemies that keep pests such as mites under control.

Foster said one concern is that if the brown marmorated stink bug becomes a serious pest problem, relying on the pyrethroid insecticides for control will lead to additional pest problems, requiring more pesticide applications. That is because the insecticides will kill some natural enemies but not pest mites, which then will multiply rapidly.

"They kill the good guys but not the bad guys," Foster said.

Homeowners or growers who find insects and think they are brown marmorated stink bugs can contact their local county Extension educator.