Boxelder Bugs

Boxelder bugs (*Boisea trivittata*) get their common name from their primary plant hosts, boxelder trees (*Acer negundo*). They have piercing-sucking mouthparts and feed mainly on seeds produced by female boxelders. They also feed on other maples (*Acer* species) as well as numerous other species, including buckeye, ash, spirea, strawberry, honeysuckle, plum, cherry, peach, grape, and apple. Their feeding habits rarely cause significant damage to host plants and as such, are not considered economically important plant pests. For homeowners, they are mainly nuisance pests because of their occasional invasions of homes, typically in the fall, when they are searching for a place to survive the winter.

Identification

An adult boxelder bug is charcoal gray to black in color with three reddish lines on the dorsal (top) surface of the thorax (chest) region directly behind the head. It has red eyes and a somewhat flattened and elongated-oval body that is about ½ inch long and ⅓ inch wide. There is a reddish marking along the outer edge of each forewing.

Eggs are straw-colored when laid, but turn more reddish as the insect within it develops. Nymphs (immature stages) hatch from the eggs and are similar in shape to the adults, but are red. Younger nymphs have no wings. As nymphs develop further, dark-colored wing pads (structures that develop into wings) become visible.

**Habits**

As the weather cools in the fall, boxelder bugs congregate in large numbers on the south sides of trees, rocks, and from a nuisance standpoint, buildings and homes. They search for locations where they can overwinter. They enter homes through small openings around windows, doors, etc. In the spring, they emerge from their overwintering sites to lay eggs which hatch about 2 weeks later. By July, nymphs have matured to adults which are ready to lay eggs for a second generation before weather cools for autumn.
While primarily a nuisance when they enter a home, their feces can leave red stains on fabric, wallpaper and other surfaces. If crushed, they release a foul odor. If handled, they occasionally “bite”, which has been known to irritate the skin and in some cases, cause the formation of a small ulcer-like lesion.

Control

If the sight of boxelder bugs congregating on the outside of a home is a concern, homeowners can remove them with a hard spray of water from a hose. They can be killed by spraying with water that is between 165 and 180 °F. Caution – in addition to being careful that the hot water does not kill grass and plants, homeowners should be careful not to burn themselves. Congregating boxelder bugs can also be removed by using a shop vacuum. An indoor vacuum is not recommended as the bugs release a very unpleasant odor that is difficult to get out of a vacuum hose. If using a wet-dry shop vacuum, you can add water and a few drops of dish detergent to the tank to drown the insects. Be sure to empty the water and insects as soon as possible to prevent further odor problems.

If female boxelder trees are present in the landscape and boxelder bugs are a problem, the homeowner may want to consider having the trees removed to reduce the population of boxelder bugs. However, if neighbors also have these trees, the problem may remain. Elimination of yard debris such as piles of wood, rocks, and leaves will reduce their hiding places and therefore, their population numbers.

One of the best means of controlling boxelder bugs indoors is to prevent them from getting inside in the first place. Repair holes in screens. Seal openings around windows, doors, fascia boards, and areas where cables or pipes run into a building. Make sure that vent openings into a crawl space, attic, etc. are covered with at least 16-mesh screening. If boxelder bugs are still getting into a home, they can be vacuumed up and immediately taken outside for disposal. If necessary, insecticidal sprays can be applied on the outside of the home around windows, doors and other suspected areas of entrance. Always be sure to read the label before using any pesticide.

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