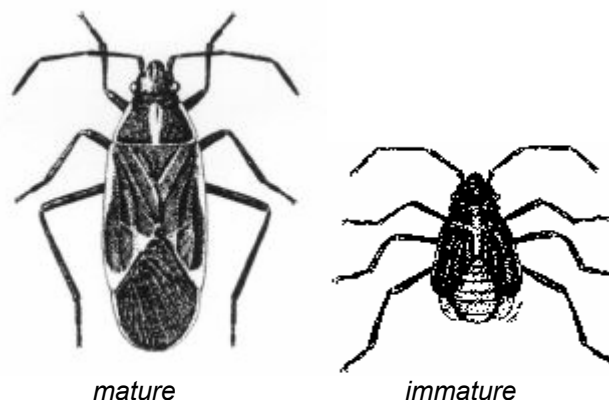


Boxelder Bug: *Boisea trivittata* (Say)

by the Vermont Master Gardener Program

Boxelder bugs are primarily nuisance pests, especially during the warm days of autumn when they often invade buildings to seek sheltered sites for overwintering. During warm winter and spring days, they may become active, moving from their hiding places into living spaces, where they create a nuisance by their presence, produce a foul odor when crushed, and may stain curtains with fecal matter. They do not cause damage to buildings, clothing, food, or humans. Outdoors, they can be found in large numbers on the sides of trees, buildings, and other structures. Large populations often coincide with long, hot, dry summers.



Description

Adult boxelder bugs are flat-backed, about 1/2 inch long, 1/3 inch wide, and dark brownish-black with three lengthwise, red stripes on the thorax (area behind the head). The head is black with a reddish-orange "beak" or proboscis, and long, thin, four-segmented antennae half as long as the body. Wings are thick and leathery at the base and membranous at the tip. Wings have red veins and the abdomen is bright red under the wings. The nymphs, or immatures, resemble the adults in shape except they are smaller, more rounded, wingless, and bright red. Eggs are dark reddish-brown.

Life Cycle

During the autumn months (around the beginning of October), adults and large nymphs congregate in large numbers, primarily on the bark of boxelder trees, and then begin migrating to a place conducive to overwintering. Only full-grown adults overwinter, moving to hibernation sites either by crawling or flying. They may crawl from a nearby tree or fly as many as two miles to find shelter. These bugs hide in cracks and crevices in walls, in door and window casings, around foundations, in stone piles, in tree holes, and in other protected places. On warm days during winter and early spring, they sometimes reappear on light-painted surfaces outdoors on the south and west sides of buildings, resting in the sun.

Overwintering adults leave their hibernating quarters with the coming of warm weather, and females begin laying eggs in crevices of tree bark, stones, leaves, and grasses and on other objects near host plants. Eggs hatch in 11 to 19 days, with bright-red nymphs appearing about the same time new tree leaves develop. The nymphs feed primarily on the seed-bearing (female) boxelder trees by sucking sap from the leaves, tender twigs, and developing seeds. They continue feeding until they mature into adults. They have occasionally been observed feeding on ash, maple, plum, cherry, apple, peach, grape, and strawberries, causing some scarring or dimpling of fruits. However, they seldom develop in large enough

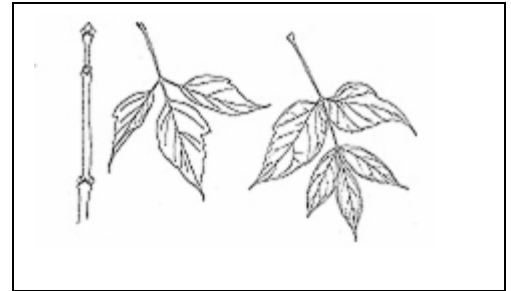
numbers to become a nuisance, unless unable to feed on seed-bearing boxelder trees. There may be one to two generations per year.

Control

Since boxelder bugs feed and reproduce primarily on female boxelder trees, removal of these trees, especially around the house, would eliminate nuisance populations. Some towns have outlawed female trees. However, adults are capable of flying 2 or more miles for suitable hibernation quarters. If boxelder trees are desirable for shade, ornamental beauty, or other purposes, plant only male trees. Eliminate potential hiding places such as piles of boards, rocks, leaves, grass, and other debris close to the house. Rake leaves and grass away from the foundation in a 6- to 10-foot-wide strip, especially on the south and west sides of the structure. Be sure to caulk and close openings where the adults can enter the house, such as around light fixtures, doors and windows, unscreened vents, holes in walls and foundations, around utility pipes or conduits, air conditioners, etc. Screen all windows, doors, crawl spaces, exhaust and roof vents, and louvers. Chemical controls are largely ineffective and unwarranted for this nuisance pest.

The Host Tree: *Acer negundo* - Boxelder, Ash-leaved Maple

The boxelder tree has opposite compound leaves with 3 to 5 leaflets that are bright green above and lighter green beneath. The bud is 1/4 inch long, with greenish or reddish scales covered with silky hairs. The stem is green to reddish brown and (especially on new growth) is often covered with a waxy whitish bloom that can be rubbed off. It has a rounded to broad-rounded or sometimes uneven, ragged looking habit, and reaches 30 to 50 feet in height and about the same in spread. Seedlings and young trees can often be found in hedgerows, neglected lots, and even sidewalk cracks! It is a fast grower, which makes for weak wood that is prone to breakage in ice and wind. The female tree produces generous amounts of seeds in clusters of winged samaras which mature in September or October.



Text adapted from University of Rhode Island, Ohio State University Extension, Michigan State University Extension, and University of Connecticut. Photos from Colorado State University Extension.

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Contact the Vermont Master Gardener Program at 1-800-639-2230 or www.uvm.edu/mastergardener

Visit University of Vermont Extension on the Web at www.uvm.edu/extension

Warning! All pesticides are poisons. Use them only as a last resort!

Before using any insecticide, herbicide or fungicide: 1) Know your problem. Positively identify the insect or disease. 2) Monitor the problem. Is treatment necessary? 3) Use non-chemical cultural controls first. 4) If you must use a chemical control, *carefully follow all directions and safety precautions on the label!*

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