Viburnum Leaf Beetle

Pyrrhalta viburni (Paykull)

At Risk

Viburnum leaf beetles (VLB) feed only on viburnum species. Four viburnum species are native to Minnesota: *V. edule* (squashberry), *V. lentago* (nannyberry), *V. rafinesquianum* (downy arrowwood), *V. trilobum* (American highbush cranberry). One species, *V. opulus* (European highbush cranberry), is considered naturalized.

Many additional viburnum species are part of the horticultural trade and are present in landscaping throughout Minnesota. Viburnum species vary in their susceptibility to VLB.

Distribution

The viburnum leaf beetle is native to Eurasia and appears to have established itself in North America (Ottawa and Quebec) during the 1970s. It was first discovered in the United States in Maine in 1994. By 2007, it was considered established as far west as Ohio, as well as in British Columbia and Washington State. In 2009, VLB was discovered in Dane County, Wisconsin and Cook County, Illinois. In 2019, VLB was discovered in Hennepin County, Minnesota.

Figure 1. Adult viburnum leaf beetles. Photo by Whitney Cranshaw, Colorado State University, Bugwood.org.

Figure 2. Viburnum leaf beetle larvae. Photo by Bruce Watt, University of Maine, Bugwood.org.

Biology

Adult viburnum leaf beetles appear in midsummer and feed on viburnum leaves. After mating, females chew small pits into twigs and deposit their eggs, covering them with bits of chewed wood. A single female can produce up to 500 eggs.

The eggs overwinter and hatch into larvae in the spring. Like adults, the larvae feed on viburnum leaves. Early defoliation is subtle, with small larvae scraping the outer surface of leaf tissue on the undersides of leaves. As larvae grow, defoliation becomes more noticeable, often leaving a "skeletonized" appearance where only leaf veins remain.

Larvae pupate in the soil before emerging as adults in June or July. Adult beetles create holes in viburnum leaves that may cross leaf veins. One generation occurs per year.

Identification

Identifying viburnum leaf beetles can be challenging because the larvae and adults resemble other leaf beetles. However, skeletonized foliage on viburnum is a strong indicator of the presence of VLB.

No native insects in Minnesota are known to skeletonize viburnum leaves. However, the invasive Japanese beetle (*Popilla japonica*) may skeletonize viburnum as adults. If skeletonizing damage is seen on viburnum leaves, look for the presence of larvae on or under leaves or for egg pits on twigs – particularly new growth. If either is present, the insect is likely VLB.

Figure 3. Feed damage from adult viburnum leaf beetle. Photo by Paul Weston, Cornell University, Bugwood.org.

Figure 4. Viburnum leaf beetle egg masses on twig. Photo by Paul Weston, Cornell University, Bugwood.org.

Management

There are several ways to control the spread of the viburnum leaf beetle. Homeowners and landscapers can choose viburnum varieties that are resistant to the insect. Pruning and destroying infested twigs is also an effective method. In addition, chemical control options are available.

Reporting Viburnum Leaf Beetle

If you suspect you have found viburnum leaf beetle, take a picture or sample of the leaves with feeding damage. Email pictures, your name, and location to reportapest@state.mn.us or report online at www.mda.state.mn.us/reportapest.