



Viburnum Leaf Beetle

In the last few years this little beetle has increasingly devastated Northwest viburnums, skeletonizing the leaves and ultimately destroying susceptible plants. It may seem like the insect does its damage overnight, but usually by the time the larvae are noticed, they have been feeding since spring. Both larvae and adults feed (only) on viburnum leaves.

Life Cycle

Adult females lay eggs on viburnum twigs in late summer to fall, chewing small pits on the twigs then covering the eggs with a cap made of chewed bark and excrement. The following spring the tiny (1/16") yellowish larvae hatch and feed on the viburnum foliage, ultimately growing to about 1/2" long. In the summer, they crawl down the branches to pupate in the soil. After a few weeks, 1/4" adult beetles emerge to feed on the foliage again, mate, and start a new cycle.

The following list shows the susceptibility of different types of viburnum. (Just because a species is listed as resistant doesn't mean that it won't be infested.)

Highly susceptible

V. opulus, European Cranberry Bush aka Common or European Snowball

V. opulus var. *americana* (formerly *V. trilobum*), American Cranberry Bush

Moderately susceptible

V. tinus, Laurustinus

Most resistant

V. carlesii, Korean Spice Viburnum

*V. davidii**, David Viburnum

V. plicatum, Snowflake Viburnum

V. plicatum var. *tomentosum*, Doublefile Viburnum

V. rhytidophyllum, Leatherleaf Viburnum

Management of Viburnum leaf beetle

Mechanical control

Monitor viburnum twigs in late fall or winter for egg caps (bumps on the twig.) Prune out infested twigs in the winter (after the first frost).

Monitor viburnum leaves from when they begin to expand; pick off and destroy larvae.

Affix collars of Gonzo Goop Banding Wrap or cardboard around your viburnum trunk, covered in sticky material (Gonzo Goop) to capture the larvae heading to ground to pupate.

Pick off adults from summer through early fall; drop in soapy water.

Biological controls

Use spinosad spray at the larval stage. Multiple applications may be needed. Note: Spraying adults is ineffective. Follow all label instructions and do not spray when bees are active!

Apply nematodes to the soil in early summer before larvae move to soil to pupate. Nematodes need a soil temperature of at least 55 degrees F to be effective.

Chemical Control

A dormant oil spray in winter will smother 80% of the laid eggs.

Use pyrethrin or permethrin spray at the larval stage. Repeat applications may be needed. Note: Spraying adults is ineffective. Follow all label instructions and do not spray when bees are active!

Products and pesticides for management

Organic

Spinosad extract from the fermentation broth of naturally occurring bacteria. We sell **Captain Jack's Dead Bug**, containing Spinosad. Follow all label instructions and do not spray when bees are active.

Predatory nematodes are microscopic worms that prey on the larvae in the soil, can be found at the front of the store with the cashiers. Timing and soil temperature is important, Read the label included with the nematodes.

Gonzo® Goop™- a non-drying, sticky compound to trap insects.

Gonzo® Goop™ Banding Wrap - Crepe Paper Tree Wrap

Chemical

Bonide® Pyrethrin- Pyrethrin naturally occurs in chrysanthemum flowers and is one of the best biodegradable insecticides. It kills insects by targeting their nervous systems. The formulation is not certified organic. Reapply after rain. Follow all label instructions and do not spray when bees are active.

Bonide® Eight- Permethrin is related chemically to pyrethrin. Reapply after rain. Follow all label instructions and do not spray when bees are active.