

## Margined Leatherwing Beetle, by Lauren Ragsac

Common Name; Soldier or Leatherwing Beetle

Latin Name: (*Chauliognathus marginata*)

Family: Cantharidae

One of my favorite things to do during spring and summer is to go out into my garden first thing in the morning and poke around not only to see how my plants are growing and my veggies are faring, but to look for insects and see who is visiting my flowers. I've learned to always have my phone with me just in case I come upon something particularly beautiful or interesting, so I can take a photo. Those of you who know me as a Master Gardener may be aware that I am *really* into native plants and wildlife habitat landscaping.

There are lots of motives for landscaping for wildlife, but this morning, learning about this little margined leatherwing beetle, reminded me of one potential benefit: helping local farmers and other gardeners. Read a little further and you'll find out why. While not particularly unusual, the insect featured in this post is in a category of pollinators—beetles—we don't often think about as performing that service. But, it's not so much the pollination help that is notable here, but what the larvae of this beetle do.



Margined leatherwing beetle on New Jersey tea. Photo: Lauren Ragsac

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The margined leatherwing beetle is a member of the insect order Coleoptera, family *Cantharidae* (soldier beetles). Soldier beetles look a lot like fireflies, but don't have a light-producing organ on their abdomen and their head is not concealed from above. Cantharid beetles are generally elongate with soft and flexible elytra. An elytra is a modified, hardened forewing of certain insect orders, notably Coleoptera. The margined leatherwing beetle is active in spring and the adults can be found on the blossoms of a variety of flowers such as New Jersey tea (*Ceanothus americanus*), wild hydrangea (*Hydrangea arborescens*), elderberry (*Sambucus canadensis*), and basswood. I have plenty of elderberry, New Jersey tea, and smooth hydrangeas, the latter two of which are their preferred flowers. These beetles feed and mate on the blossoms and inadvertently cover themselves in pollen, making them great pollinators. Margined leatherwing beetles undergo complete metamorphosis and have one generation per year. Females lay their eggs in clusters in the soil and the larvae hatch in about 10 days. As the larvae develop, their activity increases. Leatherwing larvae are voracious predators that prey on a variety of soft-bodied insects. A single larva can consume several egg masses of Colorado potato beetle, aphids, or small lepidopteran larvae in one day. They are also known to attack corn earworm and corn borer. I grow potatoes every year in my garden and don't often find many Colorado potato beetles. Perhaps I have margined leatherwing beetle larvae to thank for that!

Other interesting facts about margined leatherwing beetles:

- A closely related cousin—the Pennsylvania leatherwing—is active in fall and typically feeds on goldenrod (*Solidago spp.*).
- A soil fungus is known to attack adult leatherwings; the fungus feeds on the internal body parts of the insect, eventually attacking the brain. Dead margined leatherwings have been found attached to leaves by their jaws.



Larva. Photo courtesy of <https://blogs.ext.vt.edu/ag-pest-advisory>

Photos:

Adult margined leatherwing beetle photo by Lauren Ragsac

Larva photo courtesy of Virginia Tech

References:

[blogs.ext.vt.edu](https://blogs.ext.vt.edu) "Virginia Ag Pest and Crop Advisory, Predator Profile"

[www.insectidentification.org](http://www.insectidentification.org)