



Purple Loosestrife Beetle ID

Background

There are two loosestrife beetles that have persisted in Minnesota. This includes *Neogalerucella californiensis* and *Neogalerucella pusilla*. The older genus name was *Galerucella*.

It is not necessary to distinguish between them. *N. californiensis* tends to have darker stripes on its sides compared to *N. pusilla*. There are also some developmental/emergence timing differences between the two—but nothing critical to note for successful biocontrol.



Adult loosestrife beetle
Photo by Tom Murray

Life Cycle

Both species of loosestrife beetle have near identical life cycles.

- Adults overwinter in dead plant residue and wake up in May. Damage adults do to loosestrife plants often look like round “shot holes”.
- Eggs are laid by the adults until they die in late June/early July. These eggs are usually covered in frass (insect poop) for protection from predators.
- Larvae start to feed on younger shoots and flower buds then move onto leaves. Larvae munch on the upper layers of the leaf, causing almost see through type damage.
- After munching on enough loosestrife, larvae pupate near the area around the plant. Once they turn into adults, they can disperse onto other plants before overwintering.



Loosestrife beetle larvae
Photo by Joe MacIndewar



Loosestrife beetle eggs
Photo by Agri-Food Canada



Loosestrife Beetle Lookalikes

Viburnum Leaf Beetle

- Invasive species which **only feed on *Viburnum*** species
- Larvae skeletonize leaves---NO windowpane-like damage
- Larger than loosestrife beetles, but otherwise **VERY similar**
- **Focus on host plant ID**, viburnums look very different!



Viburnum leaf beetle adults (left) and larva (right) Photos by Whitney Cranshaw and Paul Weston

Western/Northern Corn Rootworms

- Feeds on several types of plants---both enjoy corn and pollen
- Larvae not seen aboveground---only feed on roots
- Western corn rootworms have three black stripes (can sometimes merge)
- Northern rootworm beetles are green (younger ones can be much paler)



*Western corn rootworm beetle
Photo by molanic*



*Northern corn rootworm beetle
Photo by Victor W Fazio III*