

Photo Identification Key for Leafy Spurge Biological Control

You found some insects in the plot. Are they what we are looking for?

IS IT A BEETLE?

Beetles have hardened front wings without veins, which meet in a straight line down the middle of the back. The membranous hindwings are hidden under the front wings until flight. They have mandibles (a pair of appendages that grasp in a horizontal plane) for mouth parts, but no cerci (a pair of forceps-like appendages) at the end of their abdomen. See the Beetle Parts illustration at the bottom of this page.

NOT A BEETLE? Go no further in this guide—we are only looking for beetles in this survey.

YOU HAVE A BEETLE—WHAT IS THE SIZE AND COLOR?

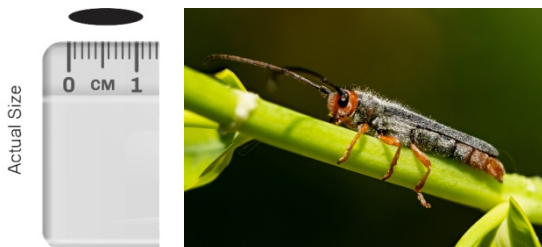
1–2mm, Tannish Beetle



Glyptina genus (native beetle)

These beetles may be found in our monitoring sweeps, and could be confused with the *Aphthona* genus we are looking for. Note the different color and smaller size than our target beetles.

10–12mm, Brown Beetle



Oberea erythrocephala
(leafy spurge stem boring beetle)

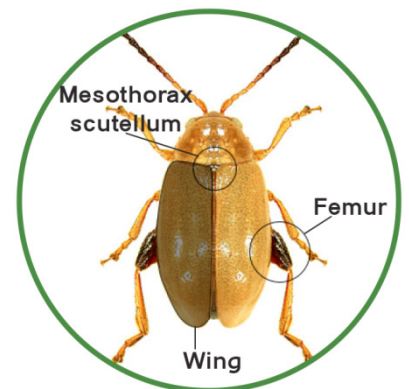
Target Species Adults have a reddish-orange head with black eyes, and a very slender body with grayish-black wings. The antennae extend more than half the length of the body.

CHARACTERISTICS COMMON TO ALL APHTHONA SPECIES

The rest of our target beetles are five separate species of the genus *Aphthona* (leafy spurge flea beetles). All will have these characteristics in common:

- Enlarged femurs (the top section of the rear leg)
- Antennae divided into eleven segments
- Females are larger than the males.

These details will be more visible if you place the beetle on a light-colored surface and use the magnifier found in the monitoring kit.

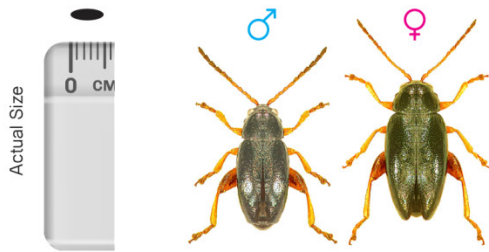


Beetle Parts

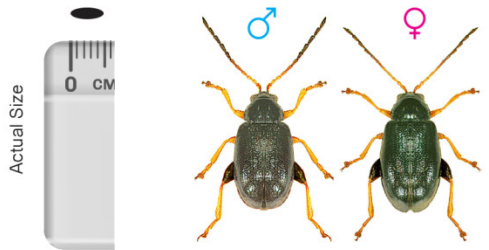


2.5–5mm, Black Beetle

The following two species can be virtually indistinguishable from each other in the field. Adults are typically 3–4mm in length and a shiny, metallic color. The legs are reddish-brown.

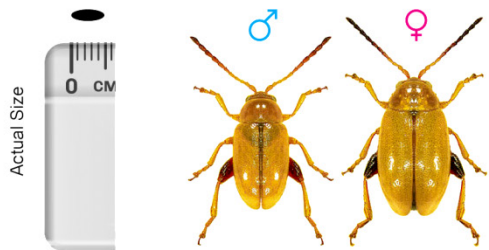


Aphthona lacertosa
Target Species

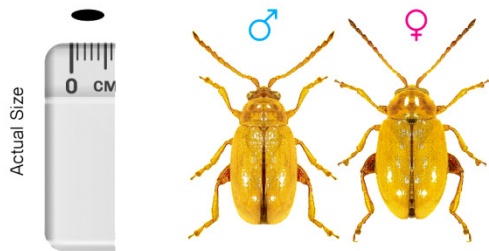


Aphthona czwalinae
Target Species

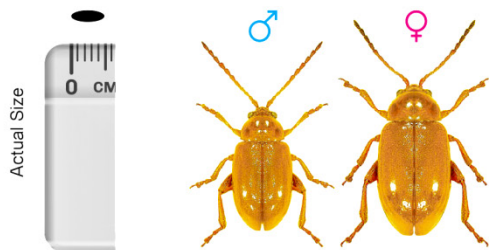
2.5–5mm, Brown to Tannish-Yellow Beetle



Aphthona nigriscutis
Target Species Yellow-rust, monochromatic with black mesothorax scutellum.



Aphthona cyparissiae
Target Species Reddish-yellow, monochromatic with mesothorax scutellum lightly darkened in posterior region. Not as dark as in *A. nigriscutis*, but darker than *A. flava*.



Aphthona flava
Target Species Slightly larger than the others. Rusty-red. Mesothorax scutellum is not darkened.

Aphthona images © Dr. Lech Borowiec, University of Wrocław

These *Aphthona* are all native to Europe. The first releases in our area were probably made in 1991. All five species are now reported in Colorado, but you will most likely find either *A. lacertosa* (a black beetle), or *A. nigriscutis* and *A. flava* (both brown to tannish-yellow beetles). Definitive determination to species requires examining reproductive organs using a microscope.



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