Lady beetles (Coleoptera: Coccinellidae)

Lady beetles (ladybird beetles or ladybugs) are one of the most common beneficials in the orchard. Both adult and larval lady beetles (LB) are effective predators. Of the 50 species of LB found in Minnesota, only a few are frequently encountered in the orchard ecosystem. Most orchard LB feed on aphids, scale, and mites.

The most common species of LB in Minnesota orchards are: *Coccinella septempunctata* (sevenspotted lady beetle), *Hippodamia convergens* (convergent lady beetle), *Cycloneda munda*, and *Harmonia axyridis* (multicolored Asian lady beetle).

Sevenspotted lady beetle and multicolored Asian lady beetle were introduced in the United States, and now appear to be more common than the native species. In a small scale survey carried out in 2000, the introduced multicolored Asian lady beetle was the most common ladybeetle in Minnesota orchards accounting for about 88% of all LB captured.

Adult LB are generally convex-shaped, brightly-colored or dark with or without spots, and range in size from 1 mm to 10 mm.



Adult sevenspotted LB



Cyclonenda munda

LB overwinter as adults in sheltered places and resume activity in the spring. Most LB species have one or two generations per year in Minnesota.

Adult multicolored Asian lady beetle occurs in many forms with different spots and color. The common form is orange with or without spots. Body length is about 8 mm.



Multicolored Asian LB (spotless form)



Multicolored Asian LB (spotted form)







LB egg mass



LB larva



LB pupa

Female LB lay numerous **eggs** in clusters on the underside of leaves. **Larvae** are elongate, usually dark with brightly-colored markings, and have well-developed legs. Mature larvae have a body length of about 6 mm. **Pupae** are enclosed in a case attached to a leaf or tree branch.

LB can be distinguished from leaf beetles and other look-alikes by their short and clubbed antennae, and oval to round shape.



Sevenspotted lady beetle with clubbed antennae (circled)



Labidomera sp. (leaf beetle)



Spotted cucumber beetle