

Sample pages from “Identifying Natural Enemies in Field Crops”

Convergent lady beetle

Hippodamia convergens

Adults: Oval. Color varies from light to dark red. Six or fewer black spots on each wing cover. Diagnostic feature on the pronotum is two white dashes angled towards the center forming a “V” pattern.

Length: 6-7 mm
 6 mm



Photo: © Martin E. Rice



Photo: © N.A. Schellhorn


Larvae: Dark gray to black. Pairs of orange spots on abdominal segments 1, 4, 6 and 7.

8

Parenthesis lady beetle

Hippodamia parenthesis

Adults: Oval. Yellowish-red elytra. Diagnostic feature is a black parenthesis-shaped spot on each wing cover.

Length: 4-5 mm  4 mm



Thirteen-spotted lady beetle

Hippodamia tredecimpunctata



Photo: © Martin E. Rice

Adults: Oval. Yellowish-red elytra. Six spots on each elytron and one central spot. Length: 4.5-5.5 mm

 5 mm



Photo: © N.A. Schellhorn

Larvae: Black with white markings. Distinguished by solid white strip on abdominal segment 4.

9

Red lady beetle

Cycloneda munda

Adults: Round. Elytra color varies from reddish yellow to bright red. No black spots. Distinctive black and white pronotum.


Length: 4-5.5 mm  5 mm



Photo: © Martin E. Rice



Photo: © N.A. Schellhorn

Larvae: Dark gray to black. Yellow spot in the middle of each body segment, resembling a stripe down the back.

Ground beetles

Carabidae

Adults: Usually dark and shiny with threadlike antennae. Color varies – commonly black, brown or metallic. Abdomen often much wider than the head or pronotum. Elytra may have striations or pits.



11

Ground beetles – continued

Metallic ground beetle.



Length: 3-25 mm

 3 mm 25 mm

Eggs: Deposited singly in or on the soil surface. Small, difficult to see. Number per female varies widely among species.



Black ground beetle with striated elytra.

Larvae: Segmented, tapers from head to tail. Head large with well-developed jaws.

Pupae: Pupate in the soil.

Diet: Eggs and larvae of root maggots, caterpillars, aphids, beetle larvae and weed seeds. 12

Spined soldier bug

Pentatomidae, *Podisus maculiventris*

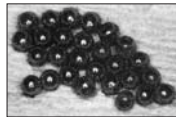
Adults: Shield-shaped with prominent lateral spines on the pronotum. Pale brown to tan. Diagnostic feature is a distinctive dark line on the membranous tip of each forewing.



Photo: © Martin E. Rice

Length: 8-13 mm 

Eggs: Barrel-shaped and shiny. Often ornamented with spines. Laid in clusters.



Nymphs: Young nymphs are red and black. Older nymphs are marked with red, black, yellow-orange and cream bands and patches. Wingless and round rather than shield-shaped.

Photo: © Russ Olferts, U Ga



patches. Wingless and round rather than shield-shaped.

Diet: Immature bugs and caterpillars.

16

Green lacewing

Chrysopidae

Adults: Pale green body. Large, transparent, pale green wings. Long, thin antennae.



Length: 12-20 mm 



Eggs: Several hundred small eggs per female laid on thin stalks.

An egg on a stalk compared with a penny. The egg is to the left of the eyebrow.

 19

Aphelinid wasp – continued

Larvae and pupae:

Occur inside the host and are not visible. Parasite eventually kills the host. Parasitized body of an aphid transforms into a “mummy.”



Aphelinid mummy.

Aphid mummy: Black and somewhat swollen. Still resembles the aphid in shape.

Hosts: Aphids, scales.

Braconid wasp

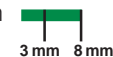
Braconidae

Adults: Stout-bodied. Often black. Slender waist often visible only under magnification.



Photo: Peter Bryant

Eggs: In most cases, wasps insert several eggs in one host. Others lay only a single egg in each host.

Length: 3-8 mm 

 29

Funnel weaver

Agelenidae

Adults: Typically brown or gray with light and dark stripes on the prosoma. Long spinnerets and very bristly legs.

Body length: 12-20 mm

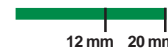




Photo: Leon Higley, Ento. UNeb.

Diet/web: Flat web that narrows like a funnel on one end. Spider spends most of its time in the funnel with its legs outstretched to receive

vibrations from the web. Insects that hit the web are bitten and carried back into the funnel.



Photo: Peter Bryant

Funnel weaver adult and juveniles in their funnel-shaped web.

37