

Lady Bugs & Lady Beetles



Asian lady beetle feeding on aphids. Photo courtesy of Kathy Garvey.

Ladybugs or lady beetles are brightly colored beetles that feed on aphids. However, the name is used for a number of different species of coccinellid beetles (see below). The five shown below are mostly distinguished by the extent of white markings on the prothorax and the number of black spots on the wing covers (elytra).

These beetles have become a cultural icon of sorts because of their appearance and their beneficial habits. Both adults and larvae feed on aphids and other small, soft-bodied insects. Adults will also feed on pollen and nectar when their prey is scarce. The larvae are multicolored in reds, blacks and grays. They are ferocious predators on small insects.

The most abundant species is the convergent lady beetle, which is found throughout North and Central America. It overwinters in large aggregations. In California these overwintering aggregations can be found in the foothills of the Sierra Nevada Mountains and Coastal Range. These lady

beetles are collected from overwintering aggregations and sold in nurseries for biological control of garden pests.

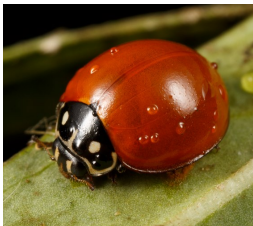
The Asian lady beetle was introduced to California to control walnut aphids and into other regions in the U.S. to control aphids and scale insects. This beetle is quite variable in coloration, ranging from yellowish brown to bright red, with small to very large black spots. It overwinters in aggregations as well, but these aggregations are generally in homes and other structures, rather than in wildlands.

All of these lady beetles display warning coloration aimed at vertebrate predators. To other insects lady beetles are black, with white markings on the prothorax and head. They defend themselves with the toxic chemical, isopropyl methoxy pyrazine, in their blood in addition to other species specific defensive compounds. They also “reflex bleed” by releasing this toxic blood from their leg joints, when disturbed.

Lady beetles will occasionally bite humans. However, they apparently bite to collect salt rather than to defend themselves or to behave aggressively.



Convergent lady beetle larvae. Photo courtesy of Kathy Keatley Garvey.



Spotless lady beetle, *Cycloneda sanguinea*. Joyce Gross, CalPhotos.



Asian lady beetle, *Harmonia axyridis*. Andreas Trepede, Wikipedia.



7 spot lady beetle, *Coccinella septempunctata*. Dominik Stodulski Wikipedia.



Two spot lady beetle, *Adalia bipunctata*. Entomart, Wikipedia.



Convergent lady beetle, *Hippodamia convergens*. Wikipedia.