

Lacewings by Lloyd Eighme, retired entomologist

Biological control of insect pests helps reduce the problems in our gardens, so we do not need to use as many chemical pesticides. In order to use biological control we must learn to recognize the beneficial insects and do whatever we can to encourage them.

Lacewings are not as common as lady beetles, but the adult lacewings are easily recognized after you see their picture. However, it is the larvae that are the most beneficial and they are not as easily recognized. Like other predaceous larvae they are not easily seen, especially when small, and are fierce looking creatures when seen close up. You might think they need to be killed!

The lacewing larva has been called the aphid lion because of its voracious actions in a colony of aphids. It has sharp curved jaws on the front of its head that it uses to stab a soft aphid and lift it into the air. While the helpless aphid is waving its legs in the air, the lacewing larva is using its hollow needle-like jaws to suck the body juices out of the aphid. The lacewing larvae are so voracious and ready to attack anything edible they will even devour their own siblings as they hatch from the eggs. The adult female takes special measures to prevent that. She has a silk gland in the tip of her abdomen and before laying an egg she touches her abdomen to the leaf and by raising it up she spins a stiff silk thread on which to glue the egg a half inch up in the air. When the larvae hatch from the egg, they drop to the leaf and wander off not recognizing the presence of succulent eggs at the top of the silk stalks. They soon find aphids or other small insects to eat including caterpillars, leafhoppers, mealybugs and whiteflies. They also eat insect eggs and mites if they find them.

The adult lacewings prefer to eat pollen, nectar and honeydew, but they will eat some insects if they are hungry. The green lacewings are common and widespread and may be purchased from catalogs for release in the garden. They will not eliminate all aphids from your garden, but they are a good part of biological control of insect pests. If you see them in your garden, try not to disturb them for two reasons. They are helping you reduce pests and they give off a foul odor for protection that will be difficult to remove from your fingers or clothing. The green lacewing adults are about 3/4 inch in length. We have a smaller lacewing in our area, the brown lacewing, that is about 3/8 inch in length. Its food habits are similar, but the female does not place her eggs on stalks, they are glued to the leaf surface. The brown lacewings are more active in cooler temperatures and may be better suited to our climate. I see them frequently in my garden and orchard. Watch for the larvae, they will help you the most.

You will find additional information about lacewings in PNW 343, PLS 84 and EM 3706.

The Brown Lacewing
3/8 inch long

