

Green and brown lacewings (*Chrysoperla carnea*, *Chrysopa oculata*, *Hemerobius pacificus*)

Identification

There are three common species of lacewings in British Columbia, two green and one brown.

The adult green lacewing is bright green with a long thin body 10 to 20 mm in length. The eyes are golden or red incandescent, the antennae are long and delicate, and the wings are large, green and lacy. The adult brown lacewing has a brown body with pale brown wings. It is typically smaller and less common than the green lacewing.

The eggs of all species are white and laid singly or in groups. Those of the green lacewing are typically attached by a stem 8 mm long to the underside of a leaf, whereas the eggs of the brown lacewing are not.



Above: Notice the white eggs hanging from fine threads on the underside of leaf.

The larvae have an alligator-shape with distinctive legs and mandibles, and a long, pointed head. When mature, the larvae are 6 to 10 mm in length, and are pinkish brown to cream in colour with darker markings.

Preferred food

Although aphids and mealy bugs are their preferred source of nourishment, both green and brown lacewings will also feed on mites, scale, thrips, leafhoppers, psylla and small caterpillars. When prey is scarce, the adult *Chrysopa* species will feed on honeydew, nectar, and pollen. The lacewing larvae puncture their prey and suck out the internal fluids. Green lacewing larvae are capable of consuming 20 to 100 aphids per day.

Life cycle

Lacewings overwinter as pupae or adults. They are usually seen during the summer months, more often at night around lamps, as they are attracted to light. The females can lay 100 to 200 eggs over a lifespan, with development time from egg to adult being approximately one month. Some lacewing adults can live for many months.

The larvae are sometimes seen as early as April, being one of the first active predators in the spring. However, this insect is more common in August and September.



Above Left: Adult lacewing on prunus.



Above Left: Larvae lacewing eating aphids.

Status in ornamental plants

The adult green lacewing is among the prettiest insects of nature. The delicate, transparent green wings stand up high above the insect's body. Many field workers will recognize their egg clusters hanging on threads on the underside of leaves. This predator is usually found in low numbers and cannot provide a stand-alone control of aphids or mites.

Lacewings are available from insectaries for commercial releases. Cannibalism is a problem, as the larvae are generalist feeders and the first to emerge will happily consume the other larvae in the shipment. Many field experiments indicate that releasing adults is not a practical option as they immediately fly away before depositing eggs.