Syrphid flies (Syrphidae species)

Identification

Adult syrphid flies, also called "hover flies", resemble bees or wasps in their color pattern but are usually smaller and have only one set of wings. The surname "hover fly" comes from their distinguished ability to hover in flight. The body length ranges from 8.0 to 15.0 mm. Hundreds of species have been identified in North America.

The white elongated eggs are normally laid singly among aphid colonies. The larvae are legless, have a tapered flattened body 10 to 15 mm in length, and exhibit varying colors of yellow, green and brown. These maggots sway their pointed heads from side to side to search for prey or when disturbed.





Above Left: Syrphidae egg along leaf vein Above Right: Syrphidae larvae near aphid.

The pupae stage is a smooth cigar-shape, light to dark brown in color.

Preferred food

Syrphid adults feed strictly on flower pollen and nectar but the larvae are voracious aphid feeders. Despite being legless, the larva is very efficient at finding its prey and can consume 200 to 800 aphids in a 10-day period. When aphids are in short supply, some species can survive on flower pollen.

The syrphid larvae can also feed on caterpillars, thrips and sawfly larvae.

Life cycle

Syrphid flies overwinter as mature larvae, pupae or adults. The adults can be seen as early as April and both adults and larvae are found in large numbers in May.

The females require pollen to produce their eggs, laying 400 to 1000 single eggs amid aphid colonies over a lifespan. The eggs require only a few days to hatch, and the larval stage last seven to ten days. Pupation occurs in a dark place such as a rolled leaf or in the soil litter and takes approximately one week.

The total duration from egg to adult is two to four weeks with two to four generations occurring per year.

Status in ornamental plants

Syrphid flies are one of the most effective aphid predators on ornamental plants, both in nurseries and in landscape settings. They can be found in large numbers throughout British Columbia at all times between April and October. When they are present on a plant, they can provide control of an aphid problem within a few days.

Older larvae can be mistaken for caterpillars. However, they are legless, usually in the middle of an aphid colony, and have a characteristic tapered body shape.

Having plants in bloom is a good method to increase the resident population of this predator, as the adult females feed on the flower pollen before laying eggs. Plants such as yarrow, flowering buckwheat, and members of the carrot and dill family have shallow nectaries that provide accessible food sources for the adults.



Above: Adult syrphid on a flower stamen