## University of Wyoming

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# **Syrphid Flies**

Order: Family:

Metamorphosis: Mouthparts: Diptera (flies) Syrphidae (syrphid flies, flower flies, or hover flies) Complete (egg-larva-pupa-adult) Sucking in larvae and sponging/lapping in adults



A larva, center of photo, of **SYRPHID FLY**, see color print, Fig. 27A, on publication B-1013.

Many species of syrphid flies are beneficial predators of aphids. They are found in plant production systems where aphids occur. The larval stage, maggot-like in form, is the stage that feeds on aphids.

#### **Body Form**

Eggs: Syrphid eggs are minute white or cream spheres that are laid among aphid colonies.

*Larvae:* Mature larvae are approximately ½ inch in length. Their bodies taper at the anterior end and are broad and blunt at the posterior end. The larvae are generally fleshy and green, brown, or yellow with distinctive white dorsal-ventral markings. The markings are more apparent on older larvae.

**Pupae:** Syrphid pupae are generally tan or brown. They are approximately ½ inch in length and oblong or oval in shape but may be more tapered at one end than the other. Protrusions extending from the main body of the pupal case may occur.

*Adults:* Most syrphid fly adults resemble small bees or wasps. They have distinctive yellow and black or white and black striping on their abdomens. They may be distinguished by a small spurious vein on each wing that does not terminate at the wing margin or a cross vein. The use of a hand lens is necessary to see this character. The flies are able to hover in flight.

### Life History

Syrphid fly adults feed on plant nectar, honey dew, and pollen. They may overwinter as adults or pupae. In late spring to early summer, females will deposit eggs singly within aphid colonies. Larvae will emerge in three to four days. Upon emergence, syrphid larvae will feed on aphids until pupation. Three to seven generations of syrphid flies may occur each year.

#### **Plant Benefit**

Most syrphids are beneficial predators of aphids. They are a component of the naturally occurring insect pest-management system in alfalfa and other crops where aphids occur. Some species have been introduced into the region to control pest insect species like Russian wheat aphid.

*Sources of further information:* Guides on crop production and pest management will often include information on beneficial insects like syrphid flies.



An adult **SYRPHID FLY**, see color print, Fig. 27B, on publication B-1013.

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