



# FLOWER FLIES: MASTERS OF DISGUISE

Flower flies, also known as syrphid flies (family Syrphidae) or hover flies, because of the amazing way they can hover in one spot like a helicopter, are **powerhouse pollinators** and **pest control heroes**.

Flower flies come in many different forms, with **more than 6,000 identified species**. They can be found on every continent except Antarctica.

Some look like fuzzy bumble bees and others like solitary bees or colorful wasps. Because many flower fly species mimic other types of insects, they are often overlooked. These masters of disguise are some of our most important flower pollinators in natural areas and for many crops like canola, cotton, strawberries, and melons!

**Read on to see how you can invite these colorful and helpful insects to your yard.**

## POWERHOUSE POLLINATORS

Flower flies are thought to be the **second most important pollinating group after bees**. This is because they visit flowers more frequently and transfer more pollen than many other flower visitors like butterflies. They visit at least **72% of global food crops and about 70% of wildflowers**. Flower flies prefer flowers that are open and have easily accessible pollen and nectar like those in the daisy family. Many are migratory or able to travel long distances, which helps them move plant genes to new places, an act that **supports plant reproduction and ecosystem stability**.

## PEST CONTROL HEROES

Not only are flower flies great pollinators, but many species help control pests in agricultural and in home gardens. **These larvae have a voracious appetite, each consuming up to 400 aphids during its development!** Studies show that aphids released in greenhouses or in agricultural fields can nearly eliminate the present aphid populations without the use of pesticides.



*Flower flies may look scary, but none are capable of stinging!*

Healthy Yards via iNaturalist

## INVITE FLOWER FLIES TO YOUR GARDEN!

It's easy to support flower flies in your garden! They thrive in areas that contain flowers that bloom from spring to fall. Native plants attract a wide range of pollinating and pest control insects. Many crops are also highly attractive to flower flies. Flower flies prefer open flowers where the nectar is easily accessible. White and yellow flowers are often their favorites, but they also can be seen on purple, blue, pink, and orange flowers. Use the [Find Your Roots Tool](#) to create a customized native plant list at [pollinator.org/find-your-roots](http://pollinator.org/find-your-roots).



### Native Plants

- Strawberry
- Yarrow
- Woolly sunflower
- Phlox
- Blackberry
- Farewell to spring
- Beeplant
- Buckwheat
- Biscuitroot

### Others Plants

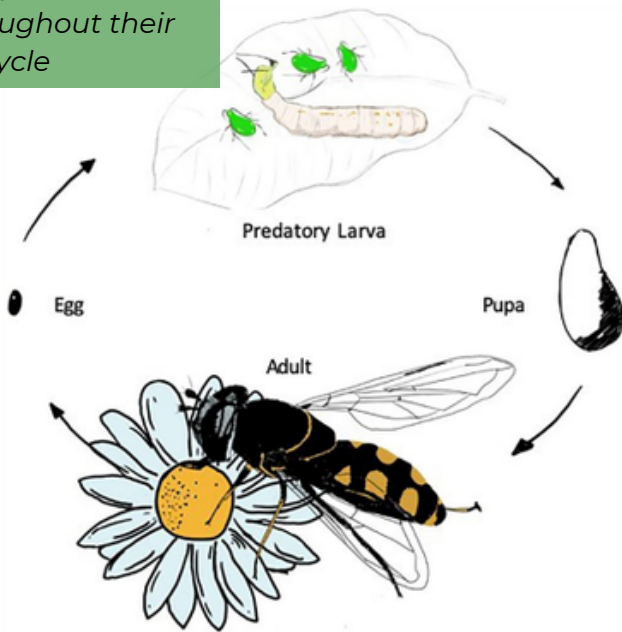
- Broccoli
- Kale
- Lettuce
- Mustards
- Daisies
- Dandelion
- Plums & cherries

## HOW THEY LIVE

The flower flies we see hovering or zipping around are adults— their egg and larval stages are less noticeable. They lay eggs near the food sources their young will eat once they hatch in a few days. Many feed on pests like aphids, leafhoppers, mealy bugs, and thrips. Other types of larvae eat live plants or scavenge on decaying organisms. After 1-3 weeks of feasting, the larva creates a hardened cocoon that conceals and protects the pupa. A few weeks later, the adult flower fly emerges from its cocoon and starts the cycle again.

They can have between 5-7 generations per year! Most adult flower flies eat pollen and nectar -- this helps them produce eggs and power their flight, making them great pollinators. The diverse feeding behaviors of the larvae also means that they also are very important for pest control, improved water quality, recycling waste, and aiding the flow of energy through ecosystems.

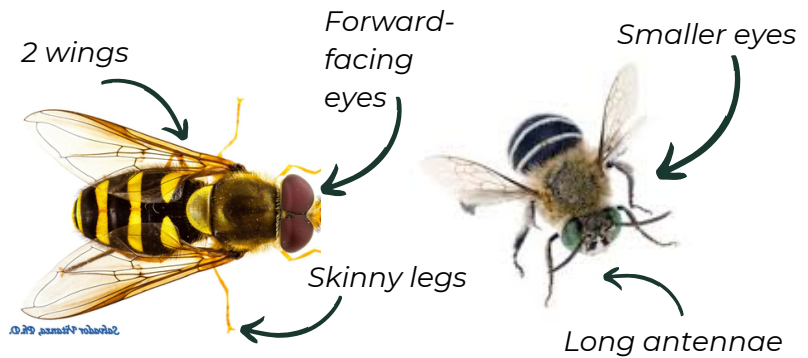
*Flower flies provide ecosystem services throughout their lifecycle*



[doi.org/10.1002/ps.5807](https://doi.org/10.1002/ps.5807)

## MASTERS OF DISGUISE

Flower flies try to look scary, but they're harmless! They do this to help **protect them from predators like birds, dragonflies, and spiders**. This is a special type of mimicry in the animal world—**known as Batesian mimicry**—where a harmless organism copies the bright colors or patterns of a harmful organism that warn would-be predators to stay away. A good way to tell these mimics from stinging insects is to look for their big fly eyes that cover most of their head, their stubby antennae, 2 wings instead of 4, and usually—skinny little legs!



Flower Fly vs. Bee

## WHAT YOU CAN DO

In addition to planting flowers, avoiding insecticides (the type of pesticides that target insect pests) can go a long way to supporting these beneficial insects. Chemical pesticides not only kill off the flower fly's larval food, but the chemicals can also kill the flower flies themselves. Tolerating some level of aphids and other pests in your garden allows flower fly larvae to have the food they need as they grow into adults. Thriving and dynamic garden ecosystems have a healthy balance of pests, pollinators, and pest control insects.

**Next time you see one of these masters of disguise, thank them for the wonderful pollination and pest control work they do for you and the earth.**

pollinator.org

For more information go to [pollinator.org](https://pollinator.org)  
Find plants to support flower flies and other pollinators, visit [pollinator.org/find-your-roots](https://pollinator.org/find-your-roots)  
Also available in [French](#) and Spanish (coming soon!)