

## Bug of the week: Flowerflies

Flowerflies are the hummingbirds of the insect world, as they hover above flowers, randomly darting from one flower to the next whilst inspecting the food resources. Due to this behaviour these insects are also known as hoverflies. Cook Islands doesn't have hummingbirds, but we do have at least six hoverfly species including: the dark-face flowerfly (*Allograpta amphotera*), pale-face flowerfly (*Ischiodon scutellaris*), the green slender flowerfly (*Melanostoma apicale*), *Syritta aenigmatopatria* and the greenbottle flowerfly (*Ornidia obesa*).

Pale-face flowerfly	Slender green flowerfly	Dark-face flowerfly	
Ischiodon scutellaris	Melanostoma anicale	Allograpta amphotera	Syritta aenigmatopatria

The flowerfly adults are known as efficient pollinators, while their larvae, called a syrphids, in most cases eat aphids, mealybugs and young caterpillars of pests including diamond-back moth. The syrphid larvae have no legs, moving with a seal-like gait they hunt down their prey which they suck dry using their piercing mouthparts. Flowerfly adults feed on pollen and nectar from a large variety of species. Hoverflies usually have yellow/orange and black stripes (warning colours) and is an example of defensive mimicry. By looking like wasp that could sting, even though hoverflies do not sting, they fool potential predators to avoid them, thereby gaining an advantage.





The green jewel fly (Ornidia obesa)

Hoverfly larva like this one has big appetites

The green jewel fly (*Ornidia obesa*) unlike the other flowerflies in Cook Islands is not displaying defensive mimicry but rather gains camouflage through being a green colour.

The significance of these flowerfly species as pollinators may well be even more important in the future if honeybee populations collapse, as has happened in other parts of the world. The larvae of flowerflies also contribute to ecosystem services through their biocontrol of aphids and young caterpillars. Landowners should be aware of these beneficial predators and only use organic oils (e.g. Neem oil or DC Tron oil – available at MOA) that will help to control pests but retain the beneficial biocontrol agents.