



Natural Enemies of Crop Pests in Hawai'i



Braconid Wasps (parasitoids)

What to look for

These small to medium-sized (~⁵/₁₆ inch) wasps insert their eggs into insect hosts. The maggot-like wasp larvae emerge from the eggs and eat the host. Often the larvae spin silken cocoons on or near the host's body



Braconid wasp larvae have emerged from a tomato hornworm and formed cocoons, from which adult wasps will soon emerge; having "hosted" the wasp larvae, this caterpillar will never reach adulthood.

Appearance

small to medium-sized
dark wasps

Host types attacked

caterpillars
moth larvae
beetles
fly larvae
various insect pupae
and adults

Crops protected

tomatoes
cabbage
corn
beets
and many others

Pests attacked

aphids
tomato hornworm
fruit flies
leafminers
diamondback moth
armyworms

Natural Enemies of Crop Pests in Hawai'i



Braconid Wasps

Braconid wasps are attracted to plants with flat, small florets such as parsley, dill (at left) and fennel, and to plants with composite flowers such as daisies, chamomile, and marigolds; they are also found on sun hemp. Intercrop these plants with vegetables, or plant them nearby as hedges, border strips or in adjacent plots.



This braconid wasp is laying its eggs into a fruit fly it has detected beneath the skin of a guava.

Parasitoids

Parasitoids are insects that prey on other insects and thus can be of benefit to vegetable growers. Their eggs or larvae are usually found in or on a single insect host. The immature parasitoid develops within or on its host, ultimately killing the pest. Most parasitoids are wasps or flies.



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