

Natural Enemies of Crop Pests in Hawai'i



What to look for

Trichogramma wasps are used worldwide as highly effective biocontrol agents. Female wasps lay their eggs inside the eggs of a host insect, usually eggs the pest lays on plants; adult wasps emerge 7-10 days later. Pest eggs parasitized by trichogramma wasps turn black. No pest larvae will emerge.



Trichogramma parasitizing host moth eggs

Trichogramma Wasps (parasitoids)

Appearance

Adults are very small, less than 1/32 inch long; they have a yellowblack, compact body, red eyes, and short antennae.

Host types attacked moth and butterfly eggs

Crops protected

Many, including: avocado tomatoes sweet corn cole crops

Pests attacked

Eggs of caterpillar (worm) pests including: cabbageworm corn earworm diamondback moth tomato hornworm

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Trichogramma wasps are attracted to sunn hemp, plants with composite flowers (e.g., daisies, chamomile), and mint family plants (e.g., sage, peppermint, catnip). Plant these among your crops.

Trichogramma Wasps





parasitized eggs turn black

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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