Parasitoids: Encyrtid Wasps

Hymenoptera: Encyrtidae

WHAT TO LOOK FOR
Most species of Encyrtid wasps lay polyembryonic eggs inside the host that subdivide to form many larvae. Hundreds to thousands of wasps may emerge from a single parasitized pest. Look for host pests that are deformed in shape.

HOSTS
• Mealy bugs (pineapple, papaya) and caterpillar larvae

KEY CHARACTER
• parasitized caterpillars are swollen and misshapen

APPEARANCE
• adults are gray to black, and very small (usually less than 2mm)

VEGETABLE CROPS
Found near a wide variety including:
• cabbage
• leafy greens
• broccoli

Swollen, S-curved body of a parasitized caterpillar

Natural Enemies of Vegetable Insect Pests in Hawaii
Encyrtid wasps can be found near plants that attract their hosts:

- composite flowers: sunflowers, daisies, chamomile
- sunn hemp
- mint family plants: sage, peppermint, catnip
- parsley, dill, fennel

Allow these plants to grow between crops.

**WHAT THEY ARE**

Parasitoids are beneficial insects that prey on vegetable pests. Their eggs or larvae are usually found in or on a single insect host. The immature parasitoid develops on or within the host, ultimately killing the pest when it emerges as an adult. Most parasitoids are wasps or flies.

**PESTS ATTACKED**

Various insect eggs, larvae, or pupae, including:

- beetles, true bugs, moths, mealy bugs, psyllids, cabbage loopers, and scales
- caterpillars and ticks

**WHAT THEY CAN DO FOR YOU**

Encyrtid larvae pupating inside host: newly emerged adults on outside