

Imported Cabbageworms (*Pieris rapae*)



Figure 1 Imported cabbageworm caterpillar



Figure 2 Cabbageworm Adult

Adults, white butterflies with black spots on the forewings, are commonly seen flying around susceptible plants. The eggs hatch into green caterpillars, or cabbageworms, marked with faint yellow stripes running lengthwise down the back and sides. Full grown cabbageworms are about 1 inch long.

Damage

The caterpillars feed between the midribs and large veins of cole crop leaves. Young caterpillars produce small leaf holes that usually don't break through to the upper leaf surface. Mature caterpillars chew sizable, ragged holes in the leaves, leaving large leaf veins intact. Caterpillars often crawl to the center of cabbage, broccoli, or cauliflower to feed as they mature, leaving fecal matter, or frass, where they have been feeding.



Figure 3 feeding damage on older plant



Figure 4 Cabbageworm frass

When Are They Active

Adults start appearing in early-May and begin laying their eggs which hatch within one week. Early in the season the larvae develop on *Brassicaceae* weeds and early planted cole crops. The second generation emerges mid-July and causes the most damage as the larval development occurs almost entirely on cole crop cultivars. There are 3-5 overlapping generations a year. The cabbageworm caterpillars feed continuously after hatching, until maturing into the adult butterfly.

Susceptible Plants

Cole crops, including cabbage, cauliflower, broccoli, kale, rutabaga, radish, turnip, and collard. They also feed on weeds from the *Brassicaceae* family such as wild mustard, peppergrass, and shepherd's purse.

Prevention

Start checking for caterpillars on cole crops immediately after planting and inspect at least once a week, more often as the season progresses. Check both sides of leaves for caterpillars, frass and damage. Destroy crop residue immediately after harvest to eliminate potential overwintering sites for cabbageworms. Eliminate alternate host weeds such as wild mustard, peppergrass, shepherd's purse.

Treatment Methods

Handpick caterpillars and drop them into soapy water. Use floating row covers throughout the season. Paper wasps and parasitic wasps are natural enemies. Bt (*Bacillus thuringiensis*) applied early in the season with good plant coverage is an organic control.

Additional Information/Resources

- UW Extension Garden Fact Sheet [A3724-E Caterpillar Pests of Cole Crops](#)
- University of Minnesota Extension [Caterpillar pests of cole crops in home gardens](#)
- Dane County UW Extension Horticulture Hotline 608-224-3721 (M-F, 9 am-12 noon, April 15 – October 31) or horticulture@countyofdane.com