



IMPORTED CABBAGEWORM IN HOME GARDENS

Eric Day and Thomas Kuhar, Department of Entomology, Virginia Tech

Description: The caterpillar stage is velvety green with faint yellow longitudinal stripes and many fine hairs; up to 1 and 1/4 inches long. Adult is a white butterfly with black spots on the wings. The pale eggs are attached to underside of leaves.

Common Host Plant(s): Cabbage, cauliflower, collards, Brussels sprouts, mustard, turnip and kale.

Damage: Feeds on underside of leaves, producing ragged holes; bores into heads. Cabbage can recover in some cases after caterpillars are removed.

Distribution: Throughout Virginia.



Fig. 1: Adult and larva of Cabbageworm, with leaf damage. Left photo: David Cappaert, Michigan State University, Bugwood.org, right photo: Clemson University - USDA Cooperative Extension Slide Series, Bugwood.org

Lifecycle: Imported cabbageworms overwinter in plant debris as pupae. The time span from egg to adult moth is about four to five weeks. Multiple generations occur annually in Virginia.

Control: All controls work best if applied before the caterpillars grow longer than 1/2 inch long.

Cultural Control: Handpick caterpillars where found. Conduct thorough postharvest cleanup in gardens where the imported cabbageworm has been a problem in the previous year.

Organic/Biological Control: *Bacillus thuringiensis*, or Bt, (Bactur, Dipel, SOK BT, Thuricide) 2.0 to 3.0 tbsp. in 1 gallon water. It is not necessary to wait before harvesting after an application of Bt. A parasitic wasp, *Trichogramma* sp., attacks imported cabbageworm eggs; mass releases of *Trichogramma* sp. may be successful in reducing pest populations. Several other parasites attack pupae and larvae of the imported cabbageworm. The braconid wasp *Apanteles glomeratus* is most effective. The imported cabbageworm is also susceptible to attacked predatory stinkbugs and Paper wasps. Natural control by viruses and bacterial diseases occurs as well.

Chemical Control: Treat with a registered insecticide every 4 days after first true leaves appear until harvest if worms are still present. Direct insecticides to the undersides of leaves.