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Combat Cabbageworm

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SUMMARY

Cabbageworm is a common pest of cruciferous vegetables, such as broccoli, cabbage, and cauliflower. Combat with row covers to deny the cabbageworm butterfly access to the plants to lay its eggs.

If larvae do appear, you can hand-pick them or try a spray of *Bacillus thuringiensis*, a bacterium that can kill the larvae.

Row covers or biocontrol may be needed.

Q. I found some small green caterpillars crawling on my broccoli. They are chewing holes in the leaves. Where did they come from, and how can I get rid of them?

A. The green caterpillars likely are the larvae of the imported cabbageworm butterfly, a small white creature with one or two tiny black dots on each wing. Usually the butterflies target broccoli, cabbage, cauliflower, Brussels sprouts, collards and kale. Occasionally they lay eggs on radish, turnip and lettuce leaves.

Cabbageworm Life Cycle

The eggs hatch after five to seven days, and small velvety green larvae emerge and begin feeding on the leaves. The larvae can do a great deal of damage, and their dark green fecal droppings contaminate the developing vegetables.

When a larva is 2 or 3 weeks old, it attaches itself to a leaf with a silken thread and forms a pupa. A week or two later, a butterfly emerges, and the life cycle — only four or five weeks in duration — restarts.

Try Row Covers

The use of a floating row cover when the seedlings are planted in the garden can stop butterflies from reaching the plants. Use lightweight row covers that allow good light and water penetration.

To support the covers, purchase wire hoops or make a frame from PVC irrigation pipe or lumber.

Secure the edges of the cover to the ground with wire stakes, or weight them with rocks or bricks.

During cool fall and winter seasons, row covers can be left in place.

Handpicking

If you don't use row covers, check regularly for signs of larvae — ragged holes chewed in leaves and dark green fecal droppings. If those signs are apparent, hunt for and remove the larvae. Be thorough and examine plants often to deal with newly hatched larvae.

You will be aided in your efforts by natural enemies of cabbageworms.



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Spray Alternatives:

If row covers and/or hand-picking don’t control the population, an insecticidal spray of *Bacillus thuringiensis* (commonly called “BT”) and the Entrust formulation of spinosad are organically acceptable management tools. Both are available at nurseries.

When possible, use BT rather than spinosad. It is a naturally occurring bacterium that can kill the larva without harming beneficial insects. It is most effective on recently hatched larvae.

Spray all the leaf surfaces, then respray every few days. The spray’s effects wear off soon after it is applied to kill emerging larvae.

If using spinosad, apply only during late evening, night or early morning to minimize injury to bees.

Additional tips for growing broccoli and preventing pest damage can be found at this University of California website:

ipm.ucanr.edu/PMG/GARDEN/VEGES/broccoli.html .



Photo: Jack Kelly Clark, UCIPM. The caterpillar larvae of the cabbageworm butterfly can be hard to detect, since they match the color of many of the leaves they target.



Photo: KATHY KEATLEY GARVEY/UC DAVIS; Cabbageworm butterflies have larvae that feed on broccoli, cabbage, cauliflower, Brussels sprouts, collards, kale and other plants in the garden.