



Don't get thrown for a loop by loopers

Cabbage loopers feed on the leaves and fruits of many vegetable crops. Develop a plan to protect your edibles.

By Steven D. Frank

The suspect

Cabbage loopers, *Trichoplusia ni*, are green caterpillars with a white stripe down each side. They hatch from white or cream-colored eggs and reach about 1½ inches long. They move in classic inchworm fashion by bringing the back of their body forward — forming a loop — then stretching the front of their body forward. Adult cabbage loopers are mottled brown moths with a silver or white spot in the center of each forewing.



Prevent loopers by screening your vents and other openings.

The suspect

Doing their damage

Cabbage loopers feed on the leaves and fruits of many greenhouse vegetable crops. They prefer cole crops, including cabbage, broccoli, Brussels sprouts and cauliflower. However, they are relatively generalist and will feed on other crops including tomatoes, spinach, beans, peppers and lettuce.

Cabbage loopers cause damage by feeding and by contaminating vegetable products. New larva feed on lower leaf surfaces but do not chew all the way through leaves. This damage, called “window paning,” leaves a thin translucent membrane of leaf tissue that eventually turns brown. Larger larvae cause ragged holes in leaves

and often feed between larger leaf veins. Feeding damage of course makes produce unappealing to consumers and reduces plant growth. Large larvae will also bore into the heads of cabbage, broccoli, cauliflower and related crops. Cabbage loopers also produce lots of green or brown frass pellets that contaminate produce.

Adult cabbage looper moths overwinter in southern states and migrate north in early summer. They reach Mid-Atlantic states like Maryland around May and far northern states in July. In greenhouses, they can occur year-round if their host plants (or weeds) are continuously present.



Monitoring

You can monitor for adult moths around lights at night, but growers are more likely to notice eggs or damage by young larvae. Inspect outer leaves for white or cream-colored eggs that are laid individually or in small groups. They are hemispherical, about 2 millimeters wide with longitudinal ridges. However, they are relatively easy to notice during scouting. Also look for translucent “window panes” in the leaf where young larvae are feeding below. Frass pellets are a clear sign that caterpillars are feeding.



Loopers leave residue on vegetative plants that will turn leaves brown.

Prevention

As with all pests, the best prevention is to keep them out of the greenhouse. Screening on greenhouse vents and other openings will reduce the number of moths that find their way in. This is especially important for lights used in the greenhouse at night.

Sanitation is also important since larvae can sustain themselves on many weed species. Remove culled plants and leaves from in and around the greenhouse. They could contain eggs or larvae that will mature into egg-laying adults.

Treatment

Several other generalist caterpillars can infest greenhouse vegetable and ornamental crops including beet armyworm (*Spodoptera exigua*), diamondback moth (*Plutella xylostella*), European corn borer (*Ostrinia nubilalis*) and several species of cutworms. These cause similar damage and are treated with the same insecticides.

Many insecticides are available for managing loopers and other caterpillars. One of the most common is the microbial insecticide *Bacillus thuringiensis kurstaki*. Products containing spinosad or a pyrethroid as the active ingredient are also common. However, insecticide selection and labels change by state and crop, so check with your extension agent.

Adults can breed throughout the year in greenhouses and do not feed on crop plants so they may not be killed by insecticide applications. Thus, you may need multiple applications throughout the season to keep caterpillars under control. **PG**



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