

# Hungry Caterpillars

## Enemies of the Spring and Fall Garden



*Photos by David Cappaert, Bugwood.org*



*Photo by David Riley, University of Georgia, Bugwood.org*

***How do you keep these pests out of your garden?***

***A presentation by***  
 ***New Jersey***  
**Agriculture in the Classroom**

# No One Wants Holey Leaves!

What's wrong with this picture? These kale leaves have holes! If the leaves of your cabbage or kale plants look like this, your problem most likely is caterpillars of three types of moths: cabbage moths, or cabbage loopers, or diamondback moths.



*Photo by Whitney Cranshaw, Colorado State University, Bugwood.org*



*Photo by Alton N. Sparks, Jr., University of Georgia, Bugwood.org*

# I Want to Eat Your Garden!

Caterpillars like to eat the vegetables in your spring and fall garden that come from what is called the *brassica* family. These vegetables include: cabbage, kale, bok choy, Brussel sprouts, broccoli, cauliflower, collards, turnips, radishes, Swiss chard, and arugula.

Left alone in your garden, caterpillars will eat the leaves of the plants until there is nothing left but the stems.



# *Garden Destroyers*

## The Small Cabbage White Butterfly

This is the small cabbage white butterfly. It's the butterfly you are most likely to see in your garden, and the one that will do the most damage. It is the only one of the three pests that you will see flying around your plants in the daytime. The small cabbage white butterfly is an invasive species that came from Europe.



*Photo by Russ Ottens, University of Georgia, Bugwood.org*



The butterfly will lay a single yellow egg on top of or underneath a leaf.

*Photo by David Cappaert, Bugwood.org*

Small cabbage white caterpillars are green with faint yellow stripes running down the back and sides. Full grown, they are about one inch long. They move slowly if you touch them. They are also called cabbage worms.

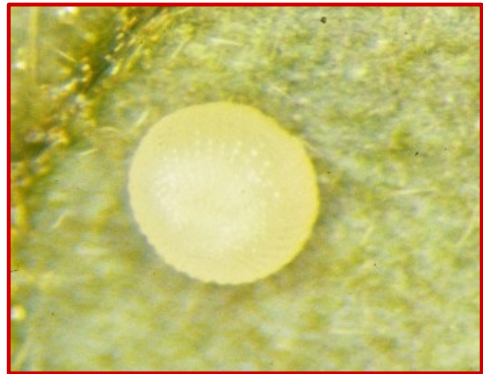


*Photo by David Cappaert, Bugwood.org*

# ***Garden Destroyers***

## **The Cabbage Looper**

**This brown moth is the cabbage looper. You probably won't see it in your garden because it flies at night. It is native to North America.**



*Photo by Whitney Cranshaw, Colorado State University, Bugwood.org*

**Cabbage looper eggs are creamy white, round, and about the size of a pin head. You usually find these eggs on the underside of leaves.**

**Cabbage looper caterpillars are pale green with narrow white lines running down each side. Notice how it has no legs in the middle so it makes a 'loop' when it moves. Full grown, the caterpillars are about 1½ inches long.**



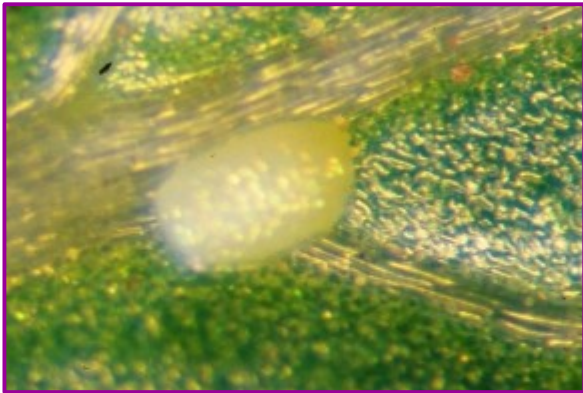
*Keith Naylor, Bugwood.org*



# *Garden Destroyers*

## **The Diamondback Moth**

Diamondback moths are also nocturnal, which means they fly at night. The moths are light brown and thin. When the moths are at rest, their folded wings show a pattern of three white diamonds. This moth is also an invasive species that came from Europe



*Photo by Whitney Cranshaw, Colorado State University, Bugwood.org*

Diamondback moth eggs are creamy white and tiny. They are laid on the top or bottom of leaves near the leaf veins.

Diamondback caterpillars are much smaller than both cabbage worms and cabbage loopers. Mature caterpillars are only about 1/3-inch long. They are light green, with narrow ends, and they wiggle quickly when touched.



*Photo by Russ Ottens, University of Georgia, Bugwood.org*



*Photo by David Riley, University of Georgia, Bugwood.org*

# Be a Garden Detective!

## Look for these signs of pests

If you see white moths flying around your vegetable plants, you will know to look for cabbage worm eggs. If you don't remove the eggs, they will eventually hatch into caterpillars. Be sure to look on the top and bottom of the leaves. Eggs are often laid on the *underside* of the leaf – not on top where they can easily be seen. If your plants were attacked by cabbage moths last year, pay close attention to them this year. The cabbage worms can spend the winter hibernating in the dead plants in your garden.



These black spots are caterpillar poop – otherwise known as frass. If you see frass on your vegetable leaves, you know caterpillars have been there. Look closely until you find them.

*Photo courtesy of Lynette Elliott, BugGuide.net*

# What if you find eggs or caterpillars?

If you find eggs on your vegetable leaves, remove them! Wrap some packing tape around your fingers with the sticky side facing out. Then rub the tape against the eggs until they stick. Place the tape with the eggs in a plastic bag and throw it in the trash.

If you find caterpillars on your plants, pick them off and drop them into a bucket of soapy water. If you don't like how the caterpillars feel – wear gloves!





# How to Stop A Caterpillar Invasion

If there are just too many caterpillars to pick off, an adult can spray the leaves of your vegetables with a natural bacteria called *Bacillus thuringiensis* or Bt. This is a bacteria that makes caterpillars sick when they eat it. Bt is an organic caterpillar killer because it is found naturally in the soil, and it won't hurt other insects, animals, or people. After the caterpillars eat the Bt, it can take a few days for them to die.



# A Different Kind of Protection

Some gardeners stretch a light cloth over their garden beds. This is called a floating row cover. It lets in water and sunlight, but keeps out the pests that want to eat your vegetables.



*Photo courtesy Gardeners Supply*



# Be on the Lookout for Garden Pests!

Protect your cabbage, kale, and broccoli plants so that *you* can eat them – not the caterpillars! Check the leaves of your vegetables for the signs of caterpillars, and stop them before they turn your spring or fall crops into a holey mess!

