

# Prevent Cabbage Worm Injury

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Cabbage, turnips, brussels sprouts, kohlrabi, mustard, and related crops are important in the home garden, as well as in the large commercial truck gardens. And all of these crops are subject to serious damage by caterpillars commonly spoken of as cabbage worms. To get the most from such crops, therefore, growers should be prepared to control these ravenous little pests. This will not be difficult now that supplies of our former non-toxic garden insecticides such as pyrethrum and derris are again available as well as DDT, methoxychlor, butoxide and others.

**Kinds of Cabbage Worms.**—There are four different species or kinds of so-called cabbage worms which attack Missouri gardens. Two of these are the worm stage of white or mottled butterflies, and two are the worm stage of night-flying moths. The most troublesome one is the so-called imported cabbage worm. This is the common green caterpillar, which is about an inch long and very destructive on cabbage and similar crops from early spring until fall. It is the worm stage of the common white butterfly or miller with small, round, black spots on its wings and a dark blotch on the tip of the front wings seen flying about the garden all summer. It hovers over cabbage plants, laying eggs or sipping nectar from mustard and other blossoms, and may be seen flying aimlessly over field and waste areas throughout the summer. If not controlled it may completely destroy plantings of cabbage and related crops. It breeds continuously and has several generations each year.

The second most injurious cabbage worm is the cabbage looper. This caterpillar travels with a looping motion and when full-grown is about one and one-half inches long. It is slender, and greenish in color with light stripes along the sides and down the back. Some years the caterpillar is much more abundant than others, but it causes damage every summer in most gardens. When full-grown, it spins a loose cocoon on the lower leaves of the crop, where it pupates. This caterpillar has three or more broods

each year and usually becomes more numerous toward fall. It seems to prefer cabbage, brussels sprouts, mustard and turnips. Frequently, late in the fall, a wilt disease attacks and destroys this caterpillar.

The third most common cabbage worm in Missouri is the very small, so-called diamondback moth. This small, greyish moth and its green caterpillar are about a third of an inch long, and when abundant the ravenous little caterpillars feed heavily, doing considerable damage especially to young plants. It is now generally distributed over the state, though many gardeners are not familiar with it due to its small size. Some mistake it for the very young stages of the imported cabbage worm.

The fourth and usually least numerous cabbage worm is the so-called native cabbage worm or cabbage butterfly. This is a close relative of the imported species though less prolific and hardy. The adult is a white and black mottled butterfly of the same size as the imported species, and the caterpillar has a darker purplish color. It is likely to be found more often attacking turnips and mustards, but it also feeds on cabbage and other cole crops.

**How They Can Be Controlled.**—Birds, spiders, and parasitic and predacious insects help considerably with the control of cabbage worms. However, the grower must depend largely on his own efforts. All of these caterpillars are chewing insects, and swallow foliage. Any of the recommended insecticides sprayed or dusted on the crop will be eaten and will promptly kill the pest.

For such crops as cabbage, brussels sprouts, kohlrabi, and turnips, make a light dusting with derris, pyrethrum, DDT or methoxychlor. Or, if more convenient, use a dust consisting of 1 part lead arsenate and 5 parts lime or flour.

A small hand duster is best for applying the mixture where only a small planting is to be treated, but a larger outfit is needed for larger plantings.

It is perfectly safe to use either of these materials on cabbage up until heads begin to form, also on related cole crops before they approach maturity, but care must be taken not to have any of the toxic insecticides on the edible portion of a crop when eaten. But, if such crops are kept free of worms early in the season, it is seldom necessary to apply poison insecticides after the crops begin to mature. For these crops, a dust application of insecticide works much better than a liquid spray which fails to stick to the foliage unless soap or other sticker is added to the solution.

**Special and Precautionary Suggestions.**—*On mustard, turnip tops, and other leafy cole crops used as greens, it is not safe to use lead arsenate, DDT, methoxychlor or other poisonous insecticide of that type. For such crops, the grower can safely use the so-called non-poisonous insecticides containing pyrethrum or derris, where available. There are also on the market newer synthetic non-poisonous dusts and sprays which may be used on leafy vegetables. Be careful, however, not to use a poison to control cabbage worms on lettuce, greens, or other leafy vegetables.*