

# Caterpillars

By Susan Jones

Caterpillars, the immature stages of moths and butterflies, can do significant damage to orchid plants. One of the common garden pests referred to as chewing insects, which includes caterpillars, beetles and some worms, caterpillars are voracious feeders and can do a great deal of damage to the flowers and foliage of an orchid in a short amount of time.

All caterpillars have chewing mouthparts, usually three pairs of true legs on the front of the body, and usually four pairs of unjointed soft fleshy projections called prolegs on the abdomen with a fifth pair, the anal prolegs, at the posterior end. The body is usually cylindrical in shape and varies from slender to robust.



Caterpillars can destroy not only flowers, but soft leaved orchids as well

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## Life Cycles

The life cycle of moths and butterflies is divided into four stages: egg, destructive caterpillar or larva, pupa or resting stage, and adult butterfly or moth. Adult females usually lay their eggs on the host plants, and may choose a nice orchid for that purpose. The caterpillars begin feeding immediately upon hatching, and continue until the pupal stage is reached and they are rendered harmless to your plants. During the pupal stage, transformation to the adult moth or butterfly takes place.

## Controls

The first line of defense against caterpillars is prevention. Keeping the growing area clean and free of fallen leaves and debris minimizes the places for insect pests and their eggs and larvae to hide. Maintain a healthy collection by attending to the basic cultural needs of your orchids. Orchidists are an acquisitive bunch, but overcrowded plants allow pests and disease to spread through a collection much more quickly than those given adequate growing space. Regular checks of the undersides of leaves, especially during the spring and summer, may turn up moth or butterfly eggs that will develop into caterpillars. Simply pick off the eggs and dispose of them.

Once caterpillars have found their way into your collection, they must be eradicated as soon as possible, because they can cause considerable damage in a matter of days or even hours. For a smaller number of the pests, the pick-

them-and-squash-them method is effective. If you cannot bear to crush them, they can be dropped into a small bucket of water and drowned.

Beneficial or predator insects, those that prey on or parasitize insect pests, are another option for control. Braconid, Chalcid and Ichneumonid wasps parasitize caterpillars; they lay their eggs inside the body of various caterpillars, and their larvae hatch inside of and then feed on the caterpillar. Assassin bugs (Reduviidae) prey on caterpillars. Beneficial insects can be purchased from suppliers such as Integrated Pest Management of Alaska, PO Box 875006, Wasilla, Alaska 99687-5006 (telephone/fax 907-745-SAFE; cellular 232-6280; e-mail [ipmofalaska@mtaonline.net](mailto:ipmofalaska@mtaonline.net); Web site [www.ipmofalaska.com](http://www.ipmofalaska.com)).

According to the Gardener's Supply Company of Vermont, some quick and easy homemade repellents to keep caterpillars from eating your orchids include solutions of water with one of the following plants added: onion, garlic, chives, hot peppers such as jalapeno and cayenne, and herbs - basil, coriander, wormwood or peppermint. Steep the leaves in hot water or mix in a blender and strain before spraying. These sprays can successfully repel a wide range of insects, including the many varieties of caterpillars. Flour and salt can also be used as a dust to suffocate or dehydrate many types of caterpillars.

If an infestation is severe or beyond the capacity of home-made remedies, the use of Orthene (acephate), in strict accordance with the manufacturer's instructions, is also an option. Avoid getting the insecticide on flower buds, as they may be damaged by contact. This is not an option to be combined with the use of predator insects, because the pesticide makes no distinctions between the harmful and beneficial bugs. Remember, Orthene is toxic to humans and pets as well - always use appropriate safety precautions when handling insecticides.

## References

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