School Pest Solutions

Stinging Caterpillars

Many insects display complete metamorphosis—the four life stages of egg, larva, pupa, and adult. A caterpillar is the larva stage of butterflies and moths. Many species have developed various defense mechanisms such as horns, spines, venomous spines, eversible glands, secretions, and body hairs. Some types have good defenses in camouflage to protect themselves from predators, parasites and man. Others display bright colors as a warning for predators to stay back. Still others imitate the colors or actions of poisonous insects while not being poisonous themselves.

Buck Moth caterpillar

Caterpillars can be foliage feeders on shrubs, trees, grass, ornamentals, vegetable plants or weeds or they can bore into plants or trees. Each caterpillar goes through four or six growth stages or molts where they shed their skin to grow and complete development. This focuses on those which have venomous hairs or spines that can cause a burning sensation when touched, producing a red swollen area and for people allergic to insect stings the possibility of anaphylactic shock and death.

Whitemarked Tussock Moth caterpillar

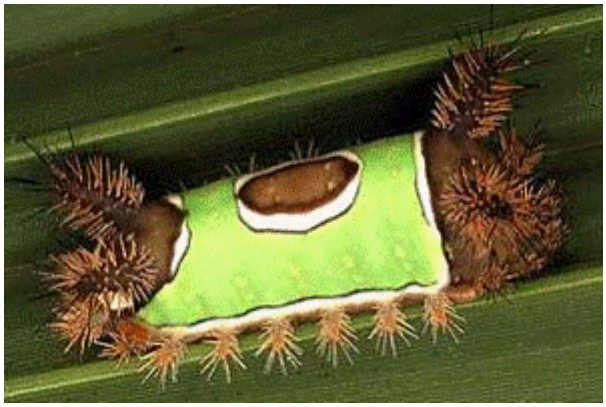
Spiny Oak caterpillar

General Information:

sometimes specific—for example, the buck moth caterpillar pictured above lives on oak trees. Other species develop on many types of hosts. Some species have a single generation each year while others have multiple generations. Thus, species identification is important for making the best management decisions.

"Stinging" caterpillars have a series of hollow glass-like hairs or spines on the body that contain a chemical venom. When a hair comes in contact with skin, the tip of the hair will break off and the venom inside enters the open wound created by the spine. The venom causes burning and stinging sensation, and the reaction of the human cells to the venom causes the reddening and swelling. Some people are very sensitive to the venom and may require medical attention.

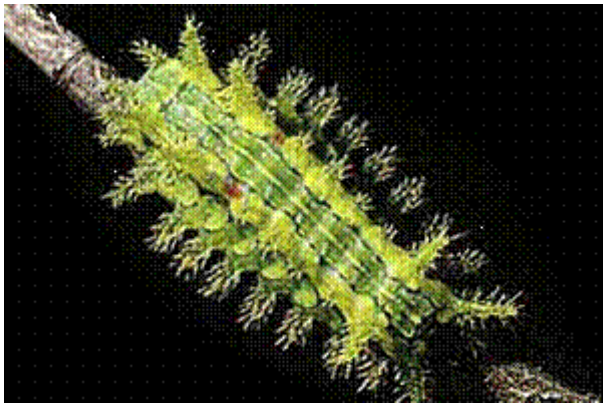
Io Moth caterpillar



Saddleback caterpillar

Effects of the rash produced by these caterpillars can be reduced through the application of over-the-counter insect bite and sting products. Home remedies reportedly include several household materials such as ammonia, Clorox, toothpaste, meat tenderizer in a paste, or baking soda in a paste. These are thought to neutralize the acid venom reducing its affects. If they are not available, one could attempt to remove urticating hairs by pressing a piece of tape down hard on the affected area and then rip it off. This catches some or all of the spines and pulls them out, perhaps closing the wound and preventing more venom from entering.

Many caterpillars have hairs or spines on their bodies but not all of them contain venom. Some species mimic the stinging caterpillars in appearance to prevent predation. Identification is important as touching the wrong caterpillar can be painful.



Slug caterpillar

Puss or Flannel Moth caterpillar

Slug Caterpillar and Puss Caterpillar—two species to avoid touching. The puss caterpillar is sometimes called an "asp".

Locations	Suggested Thresholds	Nonchemical Control Options	Preferred Chemical Treatment	Other Chemical Treatment Options
Infested trees, shrubs or plant beds	One stinging caterpillar	Knock off and mash where possible	Spinosad, Bacillus thuringiensis var. kurstaki, (moderate to slow acting)	Other contact insecticides containing acephate, carbaryl, pyrethroids (permethrin, bifenthrin, cypermethrin, lambda cyhalothrin) or others possibly mixed with an adjuvant or liquid soap can be used populations that need quick knockdown.

Anyone making pesticide applications on school property must be licensed by the Board of Pesticides Control. See "Standards for Pesticide Applications and Public Notifications in Schools".

Information on this page is from Texas A&M's IPM Plan for Stinging Caterpillars.

Photo Credits

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