



# Stinging Slug and Flannel Moth Caterpillars

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## Description

Slug caterpillars in the family Limacodidae move with a slow gliding motion like a slug. Some slug caterpillars are brightly colored with bumps, protuberances, or appendages (Fig. 1). Most have irritating hairs or spines capable of delivering a painful sting.



Figure 1. Monkey slug caterpillar (Jerry A. Payne, USDA ARS, Bugwood.org)

Larvae of the flannel moths in the family Megalopygidae possess warty growths with stinging hairs. These warts may be completely concealed under a dense covering of fine hairs, or the warts may be exposed but surrounded by tufts of very long hairs (Fig. 2).

Adults of both the Limacodidae and the Megalopygidae are stout, hairy moths that hold their wings in a tented position over their backs (Fig. 3). Limacodid moths also tend to hold the tip of the abdomen elevated over their backs. Adult moths of stinging caterpillars are not known to cause dermatitis and attract far less attention than the rather bizarre-looking larvae.



Figure 2. Hackberry leaf slug caterpillars (Lacy L. Hyche, Auburn University, Bugwood.org).



Figure 3. Adult southern flannel moth (Charles J. Sharp, CC BY-SA 4.0, via Wikimedia Commons).

## Life Cycle

All stinging caterpillars are the larval stage of a moth. Moths have a complete life cycle consisting of egg, larval, pupal, and adult stages. The stinging hairs or spines of the larval stage may be incorporated into the woven silk cocoon to protect the insect during pupation. Depending on the species, there are usually 1-2 generations per year with possibly more generations in warmer southern climates.

## Damage

Stinging caterpillars possess irritating hairs, poison spines, or sometimes both hairs and spines. Irritating

hairs are often simple bristles that easily dislodge upon contact. There may be tiny barbs along the hair shaft that help the hairs embed in a victim's skin. Hairs of this type generally cause a non-venomous, itchy rash. In contrast, poison spines are hollow hairs connected to an underlying poison gland under the insect's skin. These hollow hairs break easily on contact and allow poison to flow out of the broken spine onto the victim's skin. This differs from the sting of a bee or a wasp, which deliberately insert a stinger into a victim's skin and pump venom through it. Both irritating hairs and poison spines can cause a stinging, burning reaction upon contact that can be as painful as a bee sting. Often a person "stung" by a caterpillar will instinctively brush or knock the caterpillar off, which may break more hairs and further spread the irritating hairs or poison. The site of contact may redden, swell, and possibly blister. The irritation can last for 1-2 days and may be accompanied by nausea during the first few hours in sensitive individuals. The injury usually resolves without any complications. The severity of the reaction may vary, and some people may be more sensitive to the hairs or poison that otherwise may not cause dermatitis in another person. However, some species of stinging caterpillars are capable of causing a painful reaction in just about everyone who encounters them.

## Habitat

Slug caterpillars and flannel moth caterpillars are primarily herbivores of woody plants, but are also found on herbaceous annuals. They rarely cause severe injury to their host plant.

## Control

A person "stung" by a poisonous caterpillar should immediately wash the affected area to remove any insect hairs and poison that remain on the skin. Adhesive tape can be applied to the skin and removed quickly to pull out hairs or spines embedded in the skin. Use fresh tape for each application to prevent spreading the hairs to new skin. An ice pack will help reduce swelling; creams and lotions containing steroids will lessen the discomfort and promote healing. Persons known to be sensitive to insect stings should consult a medical professional if there are any concerns. Anyone who may have contacted a stinging caterpillar in or around their eyes should also seek prompt medical attention.

Stinging caterpillars rarely occur in sufficient numbers to be considered plant pests. People who work with ornamental plants or garden vegetables should learn to recognize and avoid stinging caterpillars. Consider wearing long-sleeve shirts and gloves in areas where stinging caterpillars have been seen.

## Slug Caterpillars, Family Limacodidae

### Monkey Slug or Hag Moth (*Phobetron pithecium*)

This larva is a truly bizarre caterpillar, densely furred with gray to brown hairs and numerous paired appendages projecting along the sides of the body (Fig. 1). Some of the "arms" are longer than the others and are often mistaken for the caterpillar's real legs. These appendages are often curled or twisted and they break off easily without apparent harm to the caterpillar. Some larvae may have stunted or missing "arms." This strange appearance may be mimicry of a large hairy spider to scare off potential predators, especially during the pupal stage, which is spent under the cast skin of the caterpillar. Monkey slug caterpillars feed on a wide range of host trees and shrubs, including fruit trees, rose, dogwood, oak, hickory, birch, and willow. Mature larvae measure about 2.5 cm (1") long. The appearance of the adult hag moth varies by sex. Female moths have gray patches on the wings interrupted with many heavily scaled dark brown lines (Fig. 4), while males have transparent patches on the wings. Both sexes measure 10-15 mm (about 0.5") long and have stout, dark, hairy bodies with fat tufts of lighter-colored scales on the legs.



Figure 4. Adult hag moth (Sturgis McKeever, Georgia Southern University, Bugwood.org).

**Saddleback Caterpillar** (*Acharia stimulea* Clemens) Older larvae are brown with a bright green rectangle over much of the back and a brownish,



oval “saddle” centered on the green (Fig. 5). Both the green rectangle and the saddle are outlined in white and brown. There is a pair of large, fleshy tubercles at the anterior and posterior ends. There are additional pairs of smaller tubercles below the large pairs and along the lower sides of the larva as well. All of the tubercles possess formidable stinging spines. Mature larvae measure about 2 cm (0.8”) long. Saddleback caterpillars are found on apple, maple, oak, corn, beans, and ornamental flowering plants. The stout adult moth is chocolate brown with light markings, measuring about 14-22 mm (about 0.6-0.9”) long (Fig. 6).



Figure 5. Saddleback caterpillar (Tom Coleman, USDA Forest Service, Bugwood.org).



Figure 6. Adult saddleback moth (A. Reago & C. McClarren, CC BY 2.0 via Wikimedia Commons).

**Spiny Oak Slug** (*Euclea delphinii* Boisduval) This caterpillar varies in color from greenish-yellow to brown to pink, usually with a darker central stripe down the back and sometimes with other patches of contrasting color (Fig. 7). There are three pairs of fleshy tubercles with poison spines at the head and two pairs towards the tip of the abdomen. Additional smaller tubercles, all bearing poison spines, run in two rows down the back and along the lower sides. Larvae feed on a wide host range, including oak, fruit trees, hickory, maple, sycamore, and many

other hardwoods. The stout adult moths are tan to chocolate brown with green patches on the front wings and measuring 10-15 mm (about 0.5”) long.



Figure 7. Spiny oak slug (Sturgis McKeever, Georgia Southern University, Bugwood.org).



Figure 8. Adult spiny oak slug (Wildreturn, CC BY 2.0 via Wikimedia Commons).

## Flannel Moths, Family Megalopygidae

### Hackberry Leaf Slug or White Flannel Moth

(*Norape ovina*) These handsome larvae have tawny-orange patches at the head and end of the abdomen, and a black rectangle in between with numerous lemon-yellow spots at regular intervals (Fig. 2). Each yellow spot sports tufts of long, fine black hairs with shorter, stout white spines at the base of each tuft. Mature larvae measure about 2.5 cm (1”) long and feed on hackberry, redbud, and black locust. The adult moth is a uniform whitish-gray with long, fine white hairs (Fig. 8).



Figure 8. Adult white flannel moth (Royal Tyler, Pro Pest and Lawn Store, Bugwood.org).

### Puss Caterpillar or Southern Flannel Moth

(*Megalopyge opercularis*) The larva of this species is entirely covered by a thick carpet of long grayish-tan to dark brown hairs with a rusty stripe down the center of the back (Fig. 9). Younger larvae have a thick tuft of hairs extending beyond the tip of the abdomen like a tail. Overall, the caterpillar resembles a tiny mouse about 2.5 cm (1") long. The hairs on older larvae are sparser, unkempt, and do not conceal the stinging spines as well. Larvae feed on fruit and nut trees, oak, birch, and rose.



Figure 9. Puss caterpillar (Gerald J. Lenhard, Louisiana State University, Bugwood.org).

Adult moths are stout and exceptionally furry, measuring about 2.5 cm (1") long (Fig. 3). They are a light tan with darker brown shading on the head, thorax, and forewings. White lines interrupt the darker areas of the forewings. The legs are furry with blackish feet and white on the upper portion of the legs.

**Note** There are many different species of stinging caterpillars found in Virginia and only a few are listed by name in this factsheet. However, treatment

for injury by stinging caterpillars remains the same regardless of the species causing the injury. To avoid being stung, exercise caution in handling any of these or similar-looking caterpillars. Another common stinging caterpillar found in Virginia not discussed here, is the buck moth (*Hemileuca maia*, Family Saturniidae). See [Virginia Cooperative Extension fact sheet ENTO-18NP](#) for more information about the buck moth.

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