CLOTHES MOTH
*Tinea pellionella*, casemaking clothes moth
*Tineola bisselliella*, webbing clothes moth

Both the webbing clothes moth and the casemaking clothes moth are worldwide in distribution, feed on animal by-products such as furs, wool carpets, and tapestries, and can cause damage to stored woolen clothing. Although the webbing clothes moth is more common in Pennsylvania and other northern states, both can be found in Pennsylvania.

DESCRIPTION

The webbing clothes moth adults (Fig. 1) are about 7–8 mm in length when the wings are folded back over the body. The wings are a golden buff color with a fringe of long hairs on the margins. The head has a tuft of reddish hairs. Mature larvae are 12–13 mm long and feed on woolens beneath a constructed blanket of silk, feces, and pieces of the food source. The bodies are white or cream with a brown head capsule. The larvae have no ocelli (eyes). It is common to find the larvae feeding under cuffs, collars, and other hidden parts of clothing.

![Figure 1. Webbing clothes moth and larva](image1)

The casemaking clothes moth adults (Fig. 2) are similar in size and shape to the webbing clothes moth although the top of the head has no tuft of reddish hairs. The wings (at least in fresh specimens) exhibit three dark spots, but on older moths, the spots are frequently rubbed off. The larvae are 10–12 mm long and are colored similarly to the webbing clothes moth larvae. However, they have one ocellus (eye) on each side of the head. Unlike the webbing clothes moth larvae, the casemaking clothes moths construct a tube or bag that they occupy and carry with them. This tube, made of silk and pieces of wool, may be very difficult to see because it is the same color as the item being eaten.

![Figure 2. Case-making clothes moth and larva](image2)

Larva of the casemaking clothes moth

LIFE HISTORY

Clothes moths mate and deposit their eggs usually within 1–2 days of emergence from the pupae. The females do not live long (3–16 days) after egg deposition although the males of the webbing clothes moth can survive for about one month. The eggs hatch in 4–10 days in the summer, but may take up to three or more weeks in the winter. Depending on temperature and humidity, total developmental time (from egg to adult) varies from one to three months and can extend up to three or more years in some situations.

Males and females from both species shun light and are frequently overlooked by homeowners. When discovered, the adults are more likely to try to escape by running rapidly than by flying.
MANAGEMENT

Proper diagnosis of the pest is the first step in gaining control. Woolens damaged by the clothes moth exhibit furrows in the surface, which is caused by the larva’s habit of “grazing.” Occasionally, and during heavy infestations, the woolens will have holes. When larvae infest furs or hairbrushes, they clip off the individual hairs close to the surface. Larvae can infest cast pet hairs that are trapped under baseboards or in the air return vents of heating systems. They also have been found in vacant wasp nests and feed on insects that have died in wall voids or attics. Because of this, it is important to practice thorough cleaning of the home using a good vacuum cleaner. In many instances clothes moths can be prevented and/or controlled solely by vacuuming. Be sure to dispose of the vacuum bag when finished.

The webbing clothes moth will feed on hair, wool, fur, feathers, and similar animal products. Synthetics, cottons, and other plant materials are not attacked by the webbing clothes moth larvae unless these items are stained with food or body oils. The casemaking clothes moths will attack any of the following: felts; dried carcasses or taxidermy mounts; wool clothing, carpets, or tapestries; feathers; furs; and plant-derived materials such as dried herbs, tobacco, tea, hemp, pharmaceuticals, and seeds and seed products.

If infested, clothing, blankets, and tapestries should be laundered or dry cleaned, and stored in an airtight container or bag. Small carpets and throw rugs can be beaten and brushed while hanging from an outside line to remove most, if not all, eggs and larvae. Large area rugs and carpets should be treated by professional pest management companies (pest control companies). Never apply pesticides to clothing or bedding. Before using any pesticide, thoroughly read the label and do not apply to any carpet, upholstery, or other site unless it is specifically listed in the directions for use.

WARNING

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

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