

Cloths Moths

Phil Pellitteri/UW Insect Diagnostic Lab

Casemaking (*Tinea pellionella*) and webbing clothes moth (*Tineola bisselliella*) numbers have increased in recent years. Part of the problem may be due to the increase in imported woolens and carpets. Adults are small 1/3 inch yellowish tan to buff colored moths that are weak fliers, prefer darkness and rarely come to lights. If large numbers of small moths are seen flying indoors it is more likely you have a problem with food infesting grain moths. The damaging stage for cloths moths are small white worm-like caterpillars with dark heads. Larvae feed on wool clothing, wall hangings, feathers, silk garments, felt, furs, hair (including taxidermy mounts), wool rugs and carpeting. They prefer fabric that has been stained with oils, blood, urine, food, or beverages. Feeding damage appears as small irregular holes. Damage will be most likely on undersides of wall hangings, beneath furniture, along baseboards, in non-vacuumed closets, and clothing stored on the floor.



**Casemaking
Cloths moth
and larval
cases**



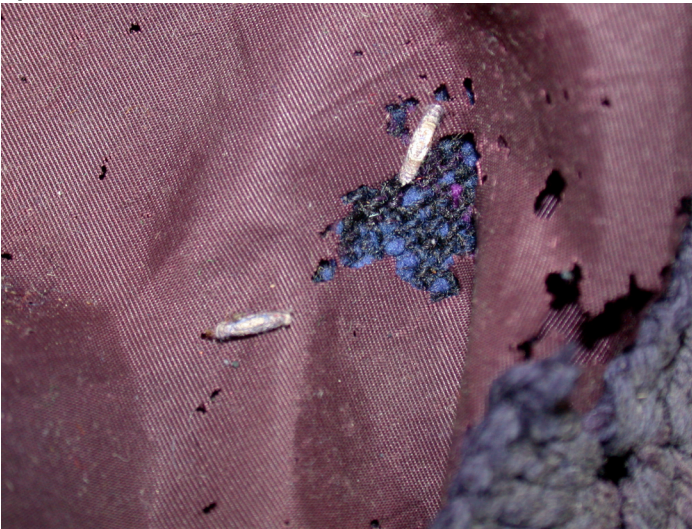
Webbing cloths moth adult



Case madding cloths moth

Damage

Look for small holes chewed in fabric, hairs falling out from animal mounts and skins, webbing or small tubular cases and small waste pellets (frass) .



Casemaking cloth moths damage and larvae

Lifecycle

Adult females lay between 50-300 eggs that will hatch within 3-21 days. Eggs and larvae are quite fragile. Life cycles can be

completed in as little as 6 - 8 weeks but can take a year or more.

The casemaking clothes moth caterpillar spins a protective cigar shaped case from silk and material fibers. These casings take on the color of the damaged fabric. They pupate inside and you will find old empty cases near damaged areas.



Casemaking clothes moth and frass

Webbing clothes moth larvae are small white worms (under ½ inch) that construct silken feeding tunnels but will feed outside these retreats. Cocoons (4–8mm) are covered with

debris and waste. They prefer dark secretive areas under furniture or in clothing folds. Life cycle takes up to a year in most situations.



Webbing clothes moth larvae

CONTROL

If woolen damage is found make sure to try to identify if it is cloth moth or carpet beetle related. Look for

larvae, cast skins or cocoons. Sources other than wool rugs and clothing include old furniture with horse-hair padding, and homes built during the 1920 and 30's that commonly used animal hair mixed with plaster.

Prevention is easy when storing articles in tight fitting garment bags or plastic storage containers. All garments should be cleaned before storage. Consider using plastic or zip lock bags to store sweaters in dressers. Storage cartons can be sealed with good quality tape, All seams and joints should be taped over as eggs can be laid on the outside and small larvae can crawl through small openings. Vacuum closet floors, shelves and dresser drawers before putting clothing away for the summer. Furs can be professionally cleaned and place in cold storage for protection.

Good housekeeping will remove, lint, dust, or hair, which is a food source. Be sure to move and vacuum under furniture if you have wool rugs, and the 1/2 inch space along baseboards that is missed by many vacuums. Areas that are frequently vacuumed do not become damaged.

Cedar oil, cedar chips and cedar closets have generally been overrated as a control of wool pests. Very young larvae of clothes moths that are exposed to high concentrations of cedar oil vapor are killed, but older larvae, adults are not affected . Cedar wood in closets or chests will lose oils over time and become useless in killing any fabric pest. The advantage of tight fitting, well constructed cedar chest is that it make it difficult for insects to get to the clothing.

If you have found a problem, vacuum or brush the insects off the infested item. Larvae and cocoons are quite fragile. Washing or dry cleaning will kill all life stages. Freezing is an option if the article has been kept at room temperature before the treatment. Place articles in plastic bags, (with air removed and loosely packed,) and expose articles in the freezer for 72 hrs. Clothes moths and carpet beetles can survive in unheated attics, bird nests, wall voids and other sites if they have a chance to acclimate to slowly falling temperatures. The shock of going from 70 to near 0 is what kills the insects. Heating articles above 130° F for 1 hrs will also kill all life stages. Temps around 106°F will kill eggs in 4 hrs.

Direct spaying of fabric with insecticides or moth proofing agents is always a risk because of staining, discoloration, shrinkage weakening fabrics , and other reactions caused by water, solvents or the chemical themselves. These chemicals are also difficult to find in a form that can be used on clothing. Make sure the product

is labeled for use on fabric or rugs. There are clothing sprays that contain pyrethrum, permethrin, allethrin or resmethrin. A wider selection of insecticides are registered for carpet treatment but the same care is needed. Professional rug cleaning should be considered for very valuable rugs.

Moth balls (naphthalene) and PDB (paradiclorobenzene) change into gases and work as fumigants, but are ineffective as repellents . To be effective, they must be confined in a closed system with little air movement such as a sealed plastic box. Hanging these products in a closet will usually not build up to toxic levels, or if they do there is concern if people are breathing the vapors.

The University of California has a treatment using dry ice. To fumigate an object with dry ice, place the item and the dry ice in a thick (4 mils) plastic bag. (Do not handle dry ice with your bare hands to prevent burning of skin.) A 1/2- to 1-lb piece of dry ice should be adequate. Seal the bag loosely at the top until all the dry ice has vaporized; this will allow the air to escape and keep the bag from bursting. When the dry ice is gone, tighten the seal and let the bag sit for 3 or 4 days. Proper fumigation gives quick, satisfactory control, and kills all stages of clothes moths, although it does not prevent re-infestation.

Phil Pellitteri
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