

Identification, Biology and Control of Cloth Moth

Ent-307



Clothes moths

- Clothes moths are pests that can destroy fabric and other materials
- They feed exclusively on animal fibers, especially wool, fur, silk, feathers and leather
- These materials contain keratin, a fibrous protein that the worm-like larvae of the clothes moth can digest



Don't confuse

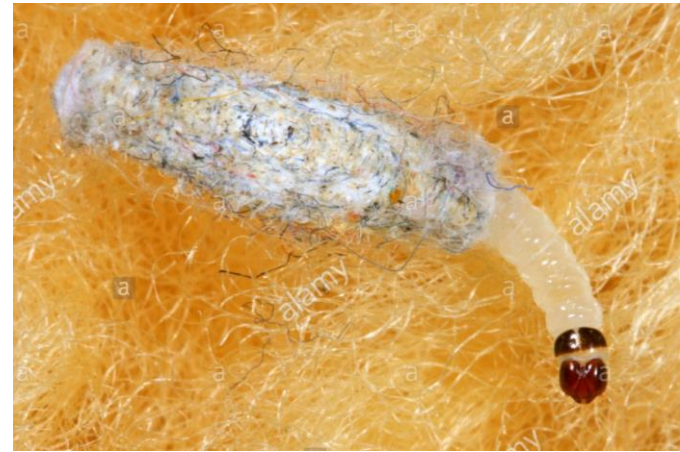
- Don't confuse the clothes moth with common food- and grain-infesting moths, which frequently fly around the house.
- At rest, clothes moths are only about 1/4 inch long, while most food-infesting moths are about double that length
- Clothes moths usually fly around only the immediate area of the house where the infestation has occurred, and their flight pattern is distinctive—they tend to flutter about rather than fly in a direct, steady manner as do food-infesting moths
- Food-infesting moths also don't have the little tufts of hair on their head.
- To confirm you have a clothes moth, catch one and examine its head with a magnifying glass or hand lens

- Two different types of clothes moths are common
- Webbing clothes moth (*Tineola bisselliella*)
- Casemaking clothes moth (*Tinea pellionella*)
- Adult webbing clothes moths are gold colored with a small tuft of reddish hairs on top of the head
- Casemaking clothes moths are similar in appearance, but have dark spots on the wings
- Clothes moth adults do not feed so they cause no injury to fabrics
- However, the adults lay about 40-50 pinhead-sized eggs which in turn, hatch into the fabric-eating larvae



Family: Tineidae
Order: Lepidoptera

- The larval stage of clothes moths are creamy-white caterpillars up to 1/2-inch long
- Development time before transforming into a moth varies greatly (from one month to as much as two years), depending on temperature, food availability, and other factors
- Webbing clothes moth larvae spin silken tubes or patches of webbing as they move about on the surface of infested materials
- Casemaking clothes moth encloses itself in an open-ended silken case, which it drags about wherever it goes
- Silken case are fibers from materials the larva have fed on.



Life Cycle

- Females of both species lay an average of 40 to 50 eggs during a 2- to 3-week period
- An adhesive secretion attaches the eggs to the fabric threads.
- Eggs hatch in 4 to 10 days during warm weather
- Larvae molt 5 to 45 times, depending on indoor temperatures and the type of food available
- Larval period lasts 35 days to 2.5 years
- When larvae of the casemaking clothes moth are ready to pupate, they wander away from their food source to find crevices.
- With the webbing clothes moth, pupation takes place inside a silken cocoon, usually on the fabric
- Pupation lasts 8 to 10 days in summer and 3 to 4 weeks in winter.
- Two generations a year

Damage

- Larvae of both species feed on such animal-derived materials as wool, fur, silk, feathers and leather
- Articles commonly infested include sweaters, scarves, coats, blankets, pillows and comforters, upholstery, toys, decorative items
- The larvae prefer to feed in dark, undisturbed areas such as closets and boxes where woolens and furs are stored for long periods
- Clothing and blankets in regular use are seldom infested, that are routinely vacuumed
- Edges and undersides of rugs, or sections beneath furniture are more likely to be attacked

- Clothes moths may also be found infesting upholstered furniture (both inside and out)
- Infestations may also originate from bird nests or animal carcasses present in chimneys or wall cavities



Controlling Current Infestations

- Controlling clothes moths requires a thorough **INSPECTION** to locate all infested items
- The primary source may be a wool scarf or fur at the back of a closet, an old rug stored in the basement, or bird nest up
- Larvae prefer to feed in dark, undisturbed areas where woolens and other susceptible items are stored for long periods
- Infested items and susceptible articles nearby should be laundered, dry-cleaned or discarded
- Bagging heavily infested items before disposal can help prevent further spread of the moths
- Dry-cleaning or hot laundering kills any eggs or larvae that may be present
- Heat generated by a clothes dryer is effective as well

- Vacuuming floors, carpets effectively removes larvae as well as hair and lint, which could support future infestations
- Be sure to vacuum along and beneath edges of carpets, along baseboards, underneath furniture and stored items, and inside closets where clothes moths prefer to feed
- Insecticides applied to infested rugs and carpets may be helpful as a supplement to good housekeeping
 - Permethrin
 - Imidacloprid,
 - Dinotefuran
 - Methoprene
 - Pyriproxyfen
- When treating, pay particular attention to carpet edges, floor/wall junctions, beneath furniture, and bottoms of closets
- Infested clothing or bedding should not be treated with insecticides

Preventing Future Infestations

- Woolens and other susceptible items should be dry-cleaned or laundered before being stored for long periods
- Cleaning kills any eggs or larvae that may be present
- Articles to be stored should then be packed in tight-fitting plastic bags or containers
- Householders intending to use moth-deterring balls should carefully read and follow label directions
- Products containing naphthalene or paradichlorobenzene can be hazardous if used incorrectly. Never scatter them in open closets or other areas where children or pets can reach them
- Valuable garments such as furs can also be protected from clothes moths by storing them in cold vaults, a service offered by some department stores

Glue traps

- Glue traps provisioned with a pheromone lure are also useful for detecting infestations
- The lure mimics the sex pheromone of the female clothes moth and is highly attractive to the males
- The traps are particularly effective at revealing infestations in the early stages when the pests are hard to find by inspection alone
- Pheromone ‘baited’ traps may be placed on shelves, inside closets, or wherever susceptible items occur

