COOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY—COLLEGE OF AGRICULTURE

CLOTHES MOTHS

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Clothes moths are well-known as pests of stored woolens, but they will eat a wide range of other fibers including hair, fur, silk, felt and feathers. Serious infestations of clothes moths can develope undetected



of clothes moths can $\overline{\text{L. Townsend}}$, Univ of Kentucky Entomology

in a home, causing significant damage to clothing, bedding, floor coverings and other articles.

Identification and Habits

Clothes moths are small (about 1/2-inch), buff-colored moths. Two different species are common in Kentucky, the webbing clothes moth and the casemaking clothes moth. The webbing clothes moth is uniformly buff-colored, whereas the casemaking clothes moth is similar in appearance but has indistinct dark specks on the wings.

Clothes moths are seldom seen because they avoid light. They prefer dark, undisturbed areas such as closets, basements and attics, and tend to live in corners or in folds of fabric. If you do see tiny moths flying about in the kitchen and other open areas, they are probably grain moths

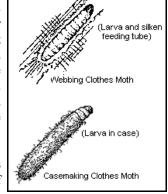


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originating from some infested cereal, flour or stored food item. Clothes moth adults do not feed so they cause no injury to fabrics. However, the adults produce eggs which hatch into the fabric-eating larvae.

The larval stage of clothes moths are creamy-white caterpillars up to 1/2-inch long. Webbing clothes moth larvae spin silken feeding tunnels or patches of webbing as they move about on the surface of fabrics. The casemaking clothes moth encloses itself in a portable case that it drags about wherever it goes.

Damage to articles may consist of irregular surface feeding or holes eaten completely through the fabric. Oftentimes, the larvae leave the material they developed on and can be seen crawling slowly over walls or ceilings. The casemaking clothes moth, in particular, may travel considerable distances from the infested article to spin its cocoon in a protected crack, or along the juncture of a wall and ceiling.



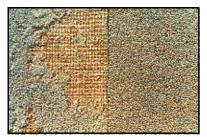
As mentioned earlier, clothes moths feed on a variety of animal-based materials,

including wool, fur, silk, feathers and leather. Items commonly infested include wool sweaters, coats, blankets, carpets, decorative items, down pillows and comforters, toys and animal trophies. Synthetic fabrics such as polyester and rayon are rarely attacked unless blended with wool, or if they are heavily soiled with food stains or body oils. The larvae prefer to feed in dark, undisturbed areas such as closets, attics, and within boxes where woolens and furs are stored for long periods.

Clothing and blankets in constant use are seldom damaged by clothes moths, nor are rugs that get a normal amount of traffic or are routinely vacuumed. Edges of carpeting next to walls or underneath furniture are often attacked.

Clothes moths may also be found infesting upholstered

furniture (both inside and out), and in air ducts where the larvae may be feeding on lint, shed pet hair and other bits of debris. Infestations may also originate from bird or animal nests, or an animal carcass present in an



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attic, chimney or wall void.

Control

The best way to avoid problems with clothes moths is through prevention. Woolens and other susceptible fabrics should be dry cleaned or laundered before being stored for long periods. Cleaning kills any eggs or larvae that may be present and

also removes perspiration odors that are attractive to the pests.

Articles to be stored should then be packed in tight-fitting containers with moth balls or flakes containing paradichlorobenzene (PDB) or napthalene. Neither PDB or napthalene will repel clothes moths or prevent them from laying eggs -- the vapors from these materials are lethal to clothes moths, but only when maintained at sufficient concentrations. In order to achieve these levels, the vapors must be tightly confined with the items you wish to protect. Effective concentrations can best be achieved by first sealing susceptible items (with the manufacturers' recommended dosage of moth crystals) in large plastic bags, and then storing the bagged articles in tight-fitting trunks, boxes or chests. Contrary to popular belief, cedar closets or chests are seldom effective by themselves, because the seal is insufficient to maintain a lethal or repellent concentration of the volatile oil of cedar.

Standard household insecticides should not be used to treat clothing; however, mothproofing solutions may be applied to susceptible clothing by professional dry cleaners. Valuable garments such as furs can also be protected from clothes moths by storing them in cold vaults (a service offered by some furriers and department stores).

Controlling existing infestations of clothes moths requires patience and a thorough inspection to locate all potential sources of infestation. The source may be an old woolen scarf in the back of a closet, a fur hat in a box, or a remnant of wool carpeting up in the attic. Even piano or organ felts may be the source. Infested items should be thrown out, laundered or dry cleaned.

Vacuuming effectively removes larvae which are already present as well as hair and lint which could support future infestations. Be sure to vacuum the edges of carpets, along baseboards, underneath furniture, inside closets and other "quiet" areas where clothes moths prefer to feed.

Insecticide applications directed into infested areas are often useful as a supplement to good housekeeping. Products containing active ingredients such as pyrethrum, allethrin, chlorpyrifos and permethrin are effective. Sprays may be applied to carpets (especially along and beneath the edge adjacent to the baseboard), underneath furniture and other likely areas of infestation where prolonged contact with humans is unlikely. Clothing and bedding should not be sprayed with household insecticides and should be removed before treatment.

Elimination of widespread, serious infestations of clothes moths may require the services of a professional pest control operator.