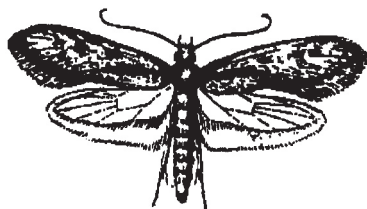


Clothes Moths

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Introduction

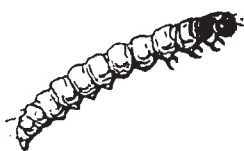
Clothes moths are common pests of woolen clothing, felt, rugs, carpets, blankets, upholstered furniture, furs, and similar organic materials that contain keratin, an animal protein. Clothes moths will damage cotton, linen, silk, synthetic fibers and paper if the items are soiled with sweat, urine, beer, tomato juice, milk, soft drinks, or other substances that provide for their nutritional needs. In fact, newly hatched clothes moth larvae cannot survive on clean wool, but require nutritional supplements found in soilage. Only the larval stage is responsible for damage, because the adults lack functional mouthparts.



Casemaking clothes moth

Description

The webbing clothes moth, *Tineola bisselliella* (Hummel) and the casemaking clothes moth, *Tinea pellionella* (L.) are the two major moths damaging fabrics in Kansas. Adults of both species are similar, except the casemaking clothes moth has three dark spots on each wing. These spots, however, may be rubbed off. Clothes moth adults are small (less than ½-inch wingspan or ¼-inch long when wings are folded), golden or yellowish in color, and have narrow wings fringed with long hairs. Angoumois grain moth and Indian meal moths are frequently mistaken for clothes moths. Clothes moths, however, are



Clothes moth larva

seldom seen because they are secretive and avoid light.

Webbing clothes moth larvae are ½-inch long when mature and are clear to creamy white with light brown heads. They usually can be found in association with patches of silken webbing or in feeding tubes which they spin incorporating pieces of fabric and feces.

Casemaking clothes moth larvae are small with dark heads. Their first thoracic segment also is dark. They build and live within portable silk cases that they carry.

Prevention

Sanitation is the best way to avoid clothes moths. Practice thorough and frequent vacuum sweeping of carpets, rugs, draperies, closets, upholstery, heaters, corners, baseboards and other places where lint and hair accumulate. Before storing woolen clothing in closets or dressers, it is important to make sure they are clean. Washing and ironing or dry cleaning will help remove and destroy eggs and larvae of these pests as well as food deposits that may attract infestations.

Cedar chests may not be totally effective in controlling these pests. Fresh cedar wood does contain an oil that will repel insects, but it quickly loses its effectiveness. Cedar chests are, however, good storage containers if they are tightly constructed. Clothes stored in cedar chests or tight boxes can be protected with moth balls, flakes or crystals containing paradichlorobenzene (PDB) or naphthalene (follow product labels for directions and recommended rates). Occasionally, stored woolens and other susceptible clothing should be taken outdoors, shaken and hung in the sunshine. This practice will help dislodge eggs and larvae.

Some woolens are moth-proofed when manufactured and may resist clothes moths for several years. Check labels to determine if items have been moth

proofed and follow manufacturer's recommendations on cleaning and storage. Commercial storage may be the best preventive measure for expensive furs or other garments.

Many household insecticides containing synthetic pyrethroids (allethrin, cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, permethrin, prallethrin, resmethrin, tetramethrin and tralomethrin) are labeled for treating clothes moths. Applying these materials to surfaces where insects may crawl or hide may prevent infestations from getting into clothes and furniture. Apply a coarse spray along edges of wall-to-wall carpeting, in cracks, along baseboards, molding and other hiding places in closets and rooms containing articles subject to infestation.

Inspection

Adults generally are not seen, but occasionally are observed in darkened rooms or when entering rooms at night. Pheromone traps can be used to detect active clothes moth infestations. Signs include furrows or holes in fabric with frass, silken webbing, or cigar-shaped cases. Use a flashlight and nail file or similar object to check for larvae in woolen lint and hair under baseboards, under furniture, in air ducts, around the edges of carpets, or in stored clothing.

Control

If an infestation is found, destroy or discard badly infested material. Vacuum debris and destroy the bag and its contents to prevent reinfestation or transporting the insects to another location. Light infestations in carpets, rugs, and furniture can be treated with certain formulations of pyrethrins and pyrethroids. Insecticides should be applied after the items to be treated are thoroughly cleaned. Use a fine spray and try for complete coverage, but avoid soaking the material. Test the spray on a

small hidden area to check for staining. Be aware that the use of pesticides may void the anti-stain warranty of some carpets. If the infestation is large, the items are expensive, or you are confused about what methods should be used to control a clothes moth infestation, consider contacting a commercial pest control operator. They have the knowledge and technology to combat clothes moth problems more effectively than the average homeowner.

CAUTION: If an insecticide is chosen as the best means to aid in the control of a clothes moth infestation, check the label of the product chosen and make sure the chemical is labeled for use intended and the site where it is to be applied. Carefully read and follow the label's directions and caution statements.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

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