

Providing Leadership in Environmental Entomology

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Controlling Fabric Pests

Many insects feed on a variety of foods. For some insects such as the carpet beetles and clothes moths, their nourishment comes from eating items made of organic materials. The most commonly attacked items include those made from wool, silk, fur, feathers and animal hair. You can protect your fabrics, rugs, and other items from fabric pests by knowing what they look like, where to find them and what to do to prevent or control infestations.

Carpet Beetles

Several types of carpet beetles enter houses from outside locations. Adults are good fliers and are attracted to light. In natural settings most adult carpet beetles feed on flower pollen. The larvae (immature stages) often feed on dead animal material or in the nests of birds, rodents and even old wasp nests.

Description. Some adult carpet beetles are dull black with brown legs. Other adults are mottled with white, brown, yellow or black. Carpet beetle adults are about 1/8 inch long. Carpet beetle larvae often are carrot-shaped with tail bristles and body hairs. They may grow to be 1/4 to 1/2 inch long. Because larvae can shed many times, an infestation may look larger than it really is.

Life Cycle and Habits. Female carpet beetles lay about 100 eggs that hatch in a week or two. They generally have between one and four generations a year. Developmental time may take longer if food is scarce. Larvae begin feeding as soon as they hatch.

Carpet beetle larvae may crawl from place to place and may be found on items on which they do not feed. Unlike the adult beetles, the larvae avoid light and prefer to live in undisturbed places. Larvae are often attracted to soiled fabrics (such as clothing soiled with body oil or perspiration) and cracks and crevices where lint, food crumbs or dead insects accumulate. Besides fabrics, carpet beetle larvae may also feed on other items such as stored cereals.



Black carpet beetle larvae, adult and damage

Clothes Moths

The case-making clothes moth and the webbing clothes moth are the most common pests in the clothes moth group.

Description. Adults of case-making clothes moths and webbing clothes moths are buff-colored and look very much alike. Full-grown larvae are about 1/3 inch long. Larvae of the case-making clothes moths live in silken cases which they drag along with them as they move.

Life Cycle and Habits. Female moths lay from 100 to 150 small, pinhead-sized, white eggs on or near the fabric they infest. Eggs usually hatch in about five days. The length of the larval stage varies greatly, from six weeks to several years depending on the species and conditions where they live. It is the larvae that damage fabrics. Usually, clothes moth larvae don't wander like carpet beetle larvae, however they can occasionally be found off fabrics feeding on dust or other materials of animal origin. Eventually the larvae pupate in a silken case. The adult moth emerges in one to four weeks. Adults do not feed nor are they attracted to lights.



Webbing clothes moth larvae, cocoon, adult and damage.

Nonchemical Control. Generally fabrics that are frequently used or in areas with regular human activity are not attacked by pests. Stored fabrics or organic materials undisturbed for long periods of time are the items most damaged. The best prevention is to inspect materials that contain animal fibers regularly and to store them only after they have been brushed and cleaned appropriately.

Stored items should be kept in tightly sealed chests or storage closets. Many people like to store fabrics in cedar chests, which is fine. However, most types of cedar chests and closets are only marginally effective against fabric pests and that is for fabrics that are initially free from these pests. Over time, the repellent benefits of the oils lessens. If using cedar closets, clutter should be kept to a minimum to allow the volatile cedar oils to be most effective.

If you find fabrics that are “moth-eaten” look in places where carpet beetle and clothes moth are likely to be found. Check corners around rugs, under furniture and in woolen and silk clothes that have not been moved for a long time in closets.

Cleaning is the best option to eliminate an infestation or prevent one and your vacuum often is your best weapon. When cleaning, pay close attention to areas where lint accumulates, around

furniture and in the corners of rooms. If you are cleaning an active infestation, be sure to dispose of the contents of the vacuum cleaner bag outside. Clean or dispose of infested materials. For items that can not be discarded or cleaned well, consider placing the infested item in a freezer for one week. Periodic brushing and sunning of stored fabrics is also helpful in prevention and control.

Chemical Control. Moth crystals and moth balls can provide some protection if used carefully, according to label directions. Some materials including many plastics and furniture finishes can be damaged by direct contact the moth crystals and balls. Inhaling the vapors for extended periods is unhealthy. Moth crystals are usually considered to be more effective than moth balls. Clutter in the closets should be kept to a minimum to allow moth crystals and moth balls to work properly.

There are a number of common household insecticide sprays available for fabric pest control. All should be equally effective if used properly. This means applying the sprays to cracks and crevices in closets and chests where the pests may be hiding. Sprays should only be used if an infestation exists. Sprays will not be effective as a preventative measure and should never be applied directly to fabrics.

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