HOME & GARDEN

Carpet Beetles

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by W.S. Cranshaw [1] (Revised 1/09)

Quick Facts...

Carpet beetles are one of the most common insects found in Colorado homes.

Carpet beetle larvae feed and develop on a variety of materials including most stored food products and anything of animal origin.

Many infestations originate from wild populations of beetles that move into homes during warm months.

Prevent and control carpet beetles by cleaning up spilled food and accumulated lint, storing susceptible items in insect-proof containers, and insecticides when necessary.

Various species of carpet beetles, particularly the black carpet beetle, are commonly found in Colorado homes. Low-level infestations are of minor importance. Occasionally, severe infestations occur in food products, stuffed animals, woolen fabrics, feathers and other items of animal origin. These require thorough treatment. The name “carpet beetle” comes from their former importance as a pest of woolen carpeting. They do not feed on carpet made from synthetic fibers.

Appearance

Adult carpet beetles are oval and approximately 1/8 inch long. The black carpet beetle is uniformly dark brown-black and shiny. Other common carpet beetles (varied carpet beetle, furniture carpet beetle, common carpet beetle) are covered with colored scales of various patterns.

Carpet beetle larvae are elongate, reddish or light brown, and covered with short hairs. Some species have distinct tufts of hairs extending from the posterior. Larvae repeatedly shed their skins and these old larval skins are often confused with the living insects. Full grown, larvae are about 1/8 inch long. They bear a superficial resemblance to duff millipedes, discussed in fact sheet 5.552, *Millipedes, Centipedes and Sowbugs.*

Figure 1: Adult and larva of a Trogroderma species dermestid beetle

Life History

Most carpet beetles occur as wild populations in Colorado. The larvae feed on various materials of animal origin and commonly occur in bird nests. Adult beetles feed on the pollen of plants, with *Spirea* reported to be one plant that is particularly favored. Presumably, most household infestations originate from these wild populations. Carpet beetles also may be carried about by moving infested items.

Inside the home, the female beetles lay eggs over a period of two to three weeks. Common egg laying sites include areas where dead insects occur, in accumulations of lint in air ducts, along edges of carpeting, underneath baseboards, and similar locations.

The eggs hatch in 10 to 20 days and the newly emerged larvae search for food. Depending on the quality of the food source and the temperature, the larvae become full grown in two to 11 months.

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Figure 2: Black Carpet beetle adult and larva.

Figure 3: Furniture Carpet beetle adult and larva.

Figure 5: Larvae of carpet beetles.

If a food source disappears during the insect's development, the larvae can survive for several weeks without food. Many carpet beetle larvae are quite mobile and can wander a considerable distance from a primary infestation. The most common carpet beetles in homes have a one-year life cycle. Adults and wandering larvae are most commonly encountered in late winter and early spring.

Prevention and Control

Several steps can help limit the occurrence of carpet beetle infestations. Regular cleaning of spilled food and accumulated lint eliminates primary breeding sites. Store food, woolens, furs and other susceptible items in insect-proof containers to prevent access by the larvae. During warm months, the adult beetles can be largely excluded by using screens and sealing other openings.

When a carpet beetle infestation is suspected, closely examine preserved animals or hides for live larvae or cast skins, as carpet beetles frequently infest these objects. Check all areas where lint, especially dog or cat hair, tends to accumulate: areas under carpets and along carpet edges; under seldom-moved furniture; in floor cracks, registers and ducts; and in folds of upholstered furniture. Check stored woolen clothing, flannel and woolen yarn in attics, basements and closets. Look through food products stored for long periods without use. Other possible breeding sites are old animal or bird nests that may be in the house, and collections of dead insects around windows.

Figure 4: Old skins of varied Carpet beetle larvae.

When you find the source of the problem, remove and destroy the infested material if possible. Objects which cannot be discarded should be treated to kill eggs and larvae. Store small items in a freezer for 48 hours or heat-treat them at temperatures above 120 degrees F for several hours. Dry-clean infested clothing. Put infested nonfood materials in a plastic bag with a "pest-strip" for several weeks. Elimination of carpet beetles from large objects, such as furniture, may require the services of a professional pest control operator.

Thoroughly clean the house when carpet beetles are detected. Pay particular attention to areas where lint accumulates and move furniture occasionally to expose possible hidden breeding areas.

Chemical Controls

It is sometimes useful to treat infested areas with insecticides to eliminate residual populations of carpet beetles. In nonfood areas household formulation of various pyrethroid insecticides can be used. Numerous products allow such use and contain as the active ingredient permethrin, bifenthrin, deltamethrin, tralomethrin and realted compounds. Use according to label directions and pay particular attention to treating baseboards, corners, edges of carpeting and other areas where lint and other debris accumulates that is fed on by carpet beetles.

Insecticides should only be used in addition to a thorough cleanout of potential breeding sites. Most household insecticides will provide some residual effect for control but carpet beetles may reinfest from outdoor sources during the warm season.

[1]Colorado State University Extension entomologist and professor, bioagricultural sciences and pest management.