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Carpet beetles: characteristics and control

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Quick Facts

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

Carpet beetle larvae feed and develop on an extremely wide variety of materials including most stored food products and anything of animal origin (wool, furs, down, stuffed animals, etc.). Many low-level infestations develop in collections of household lint.

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

Prevention and control of carpet beetles include regular cleaning of spilled food and accumulated lint, storage of susceptible items in insect-proof containers and protective insecticide treatments, when necessary.

Appearance

Adult carpet beetles are oval, dark in color, and approximately 1/8 inch in size. 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, the larvae reach a length of about 1/8 inch.

This information provided by:

Various species of carpet beetles, particularly the black carpet beetle, are commonly found in Colorado homes. Low-level carpet beetle infestations are of minor importance but occasionally severe infestations of food products, stuffed animals, woolen fabrics and other items of animal origin occur which require thorough treatment.

1. Whitney S. Cranshaw, Colorado State University Cooperative Extension entomologist and associate professor, entomology. 1/92. ©Colorado State University Cooperative Extension. 1994. For more information, contact your county Cooperative Extension office.

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* spp. reported to be one plant that is particularly favored. Presumably, most household infestations originate from these wild populations of beetles. Carpet beetles may also 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 are 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.

If a food source disappears during the insect's development, the larvae can survive for several weeks without food. Many carpet beetle larvae are also quite mobile and can wander a considerable distance from a primary infestation.

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. Storage of food, woolens, furs and other susceptible items in insect-proof containers can 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 without use for long periods. Also seek out any old animal or bird nests which may be located in the house as possible breeding sites.

When the source of the problem is detected, remove and destroy the infested material if possible. Objects

which cannot be discarded should be treated to kill eggs and larvae. Small items may be stored in a freezer for 48 hours or heat treated by exposure to temperatures in excess of 120 degrees F for several hours. Infested clothing can be dry cleaned. Confining infested non-food materials in a plastic bag along with a "pest-strip" for several weeks should also be effective. 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.

It is sometimes necessary to treat infested areas with insecticides to eliminate residual populations of the insects. In non-food areas, household formulations of Dursban or diazinon are recommended when used according to label instructions. Baygon or malathion can also be used.

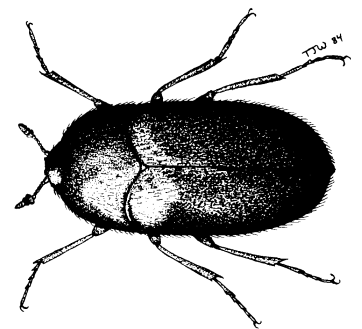
Apply the spray to baseboards, closet corners and carpet edges. If the infestation is heavy, loosen and turn back carpet edges to treat both sides. Use caution when spraying asphalt tiling and some fabrics because certain oil-based insecticide formulations cause discoloration.

In food areas, use insecticides only after a thorough clean-up has been completed and infested items have been temperature treated or discarded. Treat exposed insects in cupboards and food handling areas with aerosol sprays of pyrethrins and piperonyl butoxide. Household cleaners should kill these insects with sufficient contact. Neither of these treatments has residual activity.

Use of residual insecticides in food areas is primarily limited to "crack and crevice" treatments along the edges of storage structures. Dursban products have labelling for this usage.



Larva



Adult