

### Quick Facts...

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

Carpet beetle larvae feed and develop on a wide variety of materials including most stored food products and anything of animal origin. Low-level infestations develop in collections of household lint.

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.



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# N S E C T 🌺 S E R I E S

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# **Carpet Beetles**

by W.S. Cranshaw 1

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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.

#### Appearance

Adult carpet beetles are oval, dark 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, the larvae are about 1/8 inch long.

#### 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.

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-



Figure 1: Carpet beetle adult.



Figure 2: Carpet beetle larva.

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.

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 necessary to treat infested areas with insecticides to eliminate residual populations of the insects. In nonfood areas, household formulations of chlorpyrifos (Dursban), diazinon and propoxur (Baygon) are registered for carpet beetle control when used according to label directions.

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. Be careful when spraying asphalt tiling and some fabrics, because certain oil-based insecticide formulations cause discoloration.

In food areas, use insecticides only after a thorough cleanup 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.

Residual insecticides in food areas are primarily limited to "crack and crevice" treatments along the edges of storage structures. Dursban products are labeled for this use.

<sup>1</sup>Colorado State University Cooperative Extension entomologist and professor, bioagricultural sciences and pest management. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Milan A. Rewerts, Director of Cooperative Extension, Colorado State University, Fort Collins, Colorado. Cooperative Extension programs are available to all without discrimination. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.