Carpet Beetles

Phillip E. Sloderbeck
Entomologist
Southwest Area Office

Introduction
Carpet beetles are common pests of woolens, rugs, carpets, upholstered furniture, silk, museum specimens, furs, hair, feathers, hides, horns and similar organic materials. They may also infest certain stored food products, such as, cereals, cake mixes, and flour. Linen and rayon may also be damaged when stained with food or animal excreta. The larval stage is responsible for damage. Adults often do not feed or feed only on pollen and nectar.

Description
Four species of carpet beetles are commonly found in Kansas homes: the black carpet beetle, *Attagenus megaloma* (F.), the varied carpet beetle, *Anthrenus verbasci* (L.), the furniture carpet beetle, *Anthrenus flavipes* LeConte, and the common carpet beetle, *Anthrenus scrophulariae* (L.).

Adults of the black carpet beetle are shiny black with brown legs and are ⅛ to ¼-inch long.

Black carpet beetle larvae are distinctly carrot-shaped and have tufts of long hairs at the end of their bodies. They may be up to ½-inch long and are light brown to black.

The varied, furniture, and common carpet beetles all look alike and have similar habits. The adults of these species are slightly smaller and rounder than the black carpet beetle. They may be up to ⅛-inch long and are mottled with brown, yellow and white. Larvae of these beetles may be up to ¼-inch long and light to dark brown. They are hairy, but lack the carrot shape of black carpet beetle larvae.

Prevention
Sanitation is the best way to avoid carpet beetles. Practice thorough and frequent vacuum sweeping of carpets, rugs, draperies, closets, drawers, upholstery, air ducts, corners, baseboards and other places where lint and hair accumulate. Animal mounts, insect collections, stored woolens, spices, cereals and seeds may all harbor carpet beetles and should be inspected periodically.

Food storage cabinets should be cleaned regularly. Discard old, half-used bags or boxes of foodstuffs or store in tightly closed, glass, plastic or metal containers. Clean pantry and cupboard shelves, particularly cracks, crevices and spaces under shelves with a vacuum cleaner. Seal cracks and crevices with wood putty or caulking to help eliminate food collecting sites and hiding spaces for insect pests. Certain insecticides may be used to spray inside empty and cleaned cabinets to help prevent infestations. (See section on control and check labels.) Allow the insecticide to dry thoroughly, then cover shelves with shelving paper and replace properly packaged food.

Before storing clothes in closets or dressers, it is important to be sure they are thoroughly 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 future 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 can be good storage containers if they are tightly constructed.

Clothes stored in cedar chests or tight boxes can be protected with mothballs, flakes or crystals containing para-dichlorobenzene (PDB). Follow product labels for directions and recommended rates. Mothballs also can be used to protect specimens in museum cases.

Stored woolens and other susceptible clothing should be removed from time to time, inspected for infestations, brushed, ironed and repacked for storage. This practice will reduce the chance of damage becoming severe before it is noticed and prevent problems by destroying or dislodging tiny eggs and larvae.

Commercial storage may be the best prevention for expensive furs or other garments.

Inspection
Adult beetles flying around windows or cast skins found in window sills, cabinets, closets or under furniture may indicate active infestations, but finding the source of the infestation is crucial to controlling carpet beetles. Larvae prefer to feed in dark protected places.

Use a flashlight and nail file or similar object to check for larvae or cast skins in lint under baseboards, at the bottom of door casings, edges of carpeting, in and under furniture and in air ducts. Other
sources of infestations include insect collections, stored food products, clothes closets, furs, bird and wasp nests in attics and under eaves, dead animals in attics and fireplace flues, and accumulations of dead insects in attics, window sills, or wall voids. Begin checking in room where adults, cast skins or damage was first found, but continue until all active infestations are found. Keep in mind that carpet beetle adults feed on pollen and can be brought into the house on cut flowers.

Control

If an infestation is found, destroy or discard badly infested material. Vacuum debris and destroy the bag and its contents to prevent reinfection or transporting the insects to another location.

Small items, including infested food products, can be treated by placing them in a freezer at 0 degrees F for several days. For a more complete description of other control options in food items, see publication AF-34, Stored-Food Insect Pests.

Many household insecticides containing pyrethrins or synthetic pyrethroids (allethrin, bifenthrin, cyfluthrin, cypermethrin, d-phenothrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, prallethrin, resmethrin, tetramethrin and tralomethrin) are labeled for treating carpet beetles. Many of these are labelled for application to surfaces where insects may crawl or hide and may help prevent infestations of 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. Certain products including some with S-Methoprene are labeled to treat light infestations in carpets, rugs and furniture. In these cases 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. Be sure to 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, items are expensive, or you are confused about what methods should be used to control a carpet beetle infestation, consider contacting a commercial pest control operator. They have the knowledge and technology to combat carpet beetle problems much 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 label directions and caution statements.