West Virginia University Extension Service

Carpet Beetles

8001 **Extension Specialist – Pesticide Impact**

You just got out your best wool coat now that cold weather is here. You had planned to send it to the dry cleaners before wearing it, but you discover that it's full of holes. Carpet beetles have been at work.

Identification

Carpet beetles are the most frequently encountered fabric pests in West Virginia. Several species are known to be pests in homes. One of the most common is the black carpet beetle, Attagenus megatoma. The black carpet beetle is oval-shaped, 3/16-inch long, and solid black with

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brown legs. Black carpet beetle larvae are 1/2-inch long when fully grown. They can be either brown or yellow in color and are carrot-shaped, with a "ponytail" of brown hair protruding from the end of the body.

Another common pest species is the varied carpet beetle, Anthrenus verbasci. The varied carpet beetle has a more rounded shape and is 1/8inch long and covered with a mottled pattern of vellow, brown, and white scales. Varied carpet beetle larvae are 3/16-inch to 1/4-inch long. They are wedge-shaped, covered with transverse bands of hair, and have several short tufts of bristles at the end of their bodies.

Black carpet beetle

Biology and Habits

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Although they don't bite, sting, carry disease, or eat wood, carpet beetles can cause a lot of damage if left unchecked. Like many other pests of stored items, it is the larval stage of carpet beetles that does the damage. Adults do not feed on fabrics, eating instead the pollen of plants outdoors. Adults usually appear in May and June. They enter houses by flying in through doors and windows, squeezing in through cracks, or coming in on flowers or clothes. Since carpet beetle larvae tend to be secretive, it is usually the adult stage that is first noticed in houses.

Each female carpet beetle can lay from 30 to 100 eggs. Eggs are usually laid on clothing, on lint in cracks, in dusty heating ducts, or on dead insects that have accumulated inside light fixtures. The eggs hatch in one to two weeks. Larvae normally feed for nine months, with one generation a year. The length of the larval stage can be up to three years if the food supply is of poor quality.

Carpet beetle larvae feed on many types of natural fibers. Most often damaged are wool and wool felt, even piano felt. Anything made of fur, feathers, or hair can be attacked, including animal trophies, hides, and fur coats. Certain types of soil and stains, such as perspiration, urine, grease, and

food stains, make fabric more





attractive to them. Larvae prefer to feed in dark, undisturbed locations. Areas under heavy furniture or pianos, where there is no foot traffic, and wool or fur clothing that hasn't been worn for a while are particularly attractive.

Other sources of infestation include stored food products, particularly cereals and dry cat and dog food, and decorations made of seeds or bread dough. One homeowner having a carpet beetle infestation that was very hard to track down finally discovered its origin in some mouse bait that she had placed around her house. Nests of birds, wasps, and rodents also can be sources of carpet beetle infestations, where the beetles feed on feathers, hair, and insect remains.

Prevention Methods

Although having carpet beetles is not necessarily a sign of poor housekeeping, the most important prevention method for them is good housekeeping. Don't allow lint, dust, and hair to accumulate in cracks and crevices or in other out-of-the-way spots. Vacuum often, especially under and behind furniture, in closets, draperies, baseboards, moldings, and inside drawers. "Traffic pattern vacuuming" is of limited value in preventing carpet beetle infestations. Other housekeeping steps include cleaning dead insects out of light fixtures and removing any wasp or bird nests you find attached to your house.

Keeping fabrics clean is another important prevention tactic. To prevent damage to your clothes, wash or dry-clean wool sweaters and suits in the spring before you put them in storage, not in the fall when you are ready to wear them. Carpet beetles, like most insects, are more active in warm weather. Storing soiled woolens will make the fabrics more attractive to the beetles, which will have all summer to feast on your clothes. Before storing them, dry-clean or launder clothes and seal them in plastic zipper bags. Air out wool clothing and rugs by hanging them in the sun. It is often best to have expensive furs placed in cold storage at a professional dry cleaning establishment.

Control Strategies

Control of carpet beetles involves three basic steps-identifying the insects, locating their food

source, and eliminating the larvae at the source. After you've identified the insects, inspect all potential food sources throughout your home. The presence of larvae or the shed skins of larvae on any of the food sources is a sign of infestation.

After you locate infested materials, you should take appropriate steps to eliminate larvae. Infested food items and badly damaged clothing should be destroyed. Clothing that doesn't show visible signs of damage should be dry-cleaned, washed, or at the very least, hung out in the sun and thoroughly brushed. After cleaning, clothing should be sealed in plastic bags before being replaced in closets or drawers.

Cedar closet liners and cedar coat hangers are sold to help repel fabric pests. These items may be of some value when the wood is fresh and gives off potent vapors. After they age and the aromatic oils have dried out, they lose their insect-repelling qualities. Many people use mothballs in containers with stored woolens. Mothball vapors, however, are toxic, especially to children.

An alternative control option is an integrated pest management approach combining less toxic chemicals with nonchemical tactics. Less toxic chemicals available for carpet beetle control include pyrethrins and pyrethroids. Precede their application with a thorough vacuuming of carpeting, closets, and drawers. While you should not apply the insecticide directly to clothing, you can apply it to carpet, to upholstered furniture, and to cracks and crevices around baseboards, moldings, closets, and drawers. Remove clothing from drawers during application and don't replace it until the spray has dried. Follow the insecticide application with storage of **clean** garments in tightly sealed plastic bags.

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Rachel B. Tompkins, Director, Cooperative Extension Service, West Virginia University.

Preparation of this document was financially aided by a grant administered by the Environmental Stewardship Initiative Team, West Virginia University Extension Service.