

Bug-Wise



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First Issue: This is the first issue of the Bug-Wise Newsletter for 2005. This newsletter focuses on non-commercial entomological issues affecting Mississippi homeowners and consumers. The primary goal of the newsletter is to provide extension clientele with timely information that will aid them in addressing insect related problems that affect their daily lives. We would like to expand the mailing list to include local businesses where employees routinely interact with the public on insect related questions. This would include such business as Co-Ops, nurseries, lawn and garden centers, etc. We would appreciate your assistance in making such businesses aware of the opportunity to receive this newsletter. Anyone who would like to receive Bug-Wise can do so by sending their name and address to: Bug-Wise, Box 9775, Mississippi State, MS 39762. We anticipate publishing approximately 15 issues of the newsletter yearly, on an irregular, as-needed basis.

Clothes Moths and Carpet Beetles: Spring is on its way and folks will soon be putting heavy winter clothing away for the season. A little bit of care and thought now can prevent costly disappointments next fall when these garments are needed again.

Although most folks think of ‘clothes moths’ when they encounter holes in a favorite sweater or wool coat, carpet beetles may also be the cause. Fortunately, many of the precautions taken to prevent or control clothes moths will also work against carpet beetles.

The most commonly encountered species of clothes moths are the webbing clothes moth and the casemaking clothes moth. Both are very small, light-colored moths, approximately $\frac{1}{4}$ inch in length. However, these moths do not eat clothes; it is the small caterpillars that cause the damage. Mature caterpillars are about $\frac{1}{2}$ inch long.

Carpet beetles are so named because they were very common problems back in the days when carpets were made of wool, hair or other animal based products. The two most commonly encountered species are the varied carpet beetle (larvae pictured above) and the black carpet beetle, but there are several other species of carpet beetles. Carpet beetles and clothes moths are still important pests of ‘oriental rugs’ and other types of wool carpets and tapestries, but they do not feed on the synthetic carpets that are so common today. However, these pests will attack fabrics that are blends of wool and synthetics.

Clothes moths and carpet beetles will feed on items containing wool, mohair, fur, hair, silk, feathers, and other keratin based animal products. This includes clothing items such as: wool sweaters, silk ties, felt hats, fur coats, wool suits or skirts, wool or silk tapestries or rugs, and a variety of other items. Some of the key steps that one can take to protect clothing and other items from these pests are discussed below.

- Have clothing cleaned before placing it in storage. Clothing soiled by sweat, oil and flakes of skin is much more attractive, and much more nutritious, to clothes-damaging pests. Valuable furs and other items should be professionally cleaned and stored in cold storage. Thorough ironing will also control pests, as will machine washing of items that are safe to wash.
- When cleaning is not possible, hang clothing items in a bright, sunny location, brush them off thoroughly (inside and out), and leave them there for a few days. Brushing dislodges many eggs and larvae, and these insects are repelled by sunlight and attempt to flee from it.
- Freezing is an effective method of controlling infestations of carpet beetles and clothes moths. Place items inside a plastic bag, force out as much air as possible (in order to minimize condensation), and place in the freezer for four to seven days. Although this will control insects, it obviously does not clean the clothing, and soiled clothing is more prone to reinfestation. However, freezing can be a useful, cost effective, means of assuring that sweaters or other items are bug free before they are placed into storage.
- Store clothing in ‘bug tight containers’. Moths and adult carpet beetles can’t lay eggs in clothing that they can’t reach. Sweaters and other items can be stored in plastic boxes with tight fitting lids. Suits, skirts, and coats can be stored on hangers in specially designed storage bags or even modified garbage bags. To get the maximum protection for long-term storage, be sure that bags are sealed at both ends. However, do not make the mistake of assuming that clothing is immune from problems just because it is stored in this fashion. If clothes moths or carpet beetles do get into storage boxes or bags they thrive.
- Check stored items periodically to be sure that they are not infested, and promptly deal with infestations that are found. In addition to checking for holes in clothing, also be alert for the presence of small, light-colored moths, small oval-shaped beetles, small hairy larvae, or shed larval skins in the bottom of the container. Items that are stored in one place, without being used, for long periods of time are prime candidates for damage.

What about storing items in a cedar chest or cedar lined closet? While cedar certainly smells good, its insect deterring properties can be over rated. Studies show that cedar does not really repel clothes moths, but high concentrations of cedar oils can cause mortality of small caterpillars. So cedar can help, but only when it is very fresh or when it has been rejuvenated by the application of cedar oil. It is also important that the storage chest provides a tight seal so that the cedar volatiles can build to a toxic level. Cedar lined closets do not usually provide a sufficiently tight seal. Many dry cleaners offer to place cleaned clothing in ‘moth proof’ bags, which are usually impregnated with cedar oil.

What about moth balls or moth crystals? Neither naphthalene nor paradichlorobenzene (PDB) will repel clothes moths or carpet beetles, but like cedar volatiles, these products will also cause mortality of young larvae when concentrations are high enough. However, achieving high enough concentrations requires that the clothing items be stored in airtight containers. Because these chemicals can react with plastic items, it is important to take precautions to prevent them from directly contacting the items being stored or the container. Of course, both of these products smell bad, and items must be aired out before use.

What about ‘pest strips’? Some companies market ‘pest strips’, which contain vapona (DDVP). Prozap Insect Guard is one example. These are labeled for use in closets, wardrobes, and other storage spaces to protect against moths and other insects. Because vapona is odorless, these are generally preferred over moth balls or moth crystals. These strips are sold in various sizes, depending on the volume of the storage area to be treated. Be sure to read and follow the label carefully. Use of strips should not be viewed as a substitute to the good housekeeping practices listed above, but can provide additional protection for properly cleaned and stored items.

What about using insecticides? Insecticides should never be sprayed directly on clothing. Pest control companies have access to several insecticides and growth regulators that can be used to protect wool carpets. Some of these products are also available to homeowners.