



drugstore beetle



cigarette beetle

Bug-Wise

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Drugstore Beetles and Cigarette Beetles: Drugstore and cigarette beetles are common household pests that occur worldwide, attacking a wide range of dried stored food products as well as many non-food products. These two beetles are very similar in superficial appearance and feeding habits. The adults are oval-shaped, light to medium brown and about 1/10 to 1/8 of an inch long. The head projects downward and is not visible from above. Their oval body shape and downward projecting head help distinguish them from most other store product pests, such as rice weevils, confused flour beetles, and sawtoothed grain beetles. Because they are highly mobile, the adults may be encountered anywhere in the house, and infestations are often initially detected because of the presence of large numbers of adult beetles. However, the larvae, which are small white-colored grubs, and pupae will only be found in infested products, and the discovery of infested food products is another way in which infestations are first noted.

Both of these beetles belong to the beetle family anobiidae, which also contains some of the wood-infesting powderpost beetles. Thus, although it is not really necessary to know whether one has an infestation of drugstore beetles or cigarette beetles in order to effectively deal with a household infestation, it is important to determine whether the insects in question are one of the two stored product infesting species or are a wood-infesting species. Obviously, if one actually finds the insects infesting a stored food product, then it is reasonably safe to assume that they are one of the stored product species. However, if one encounters the insects flying about the house, accumulating in windowsills, and other such locations, it is a good idea to submit samples for identification.

Drugstore beetles, *Stegobium paniceum*: This insect received its name because it was such a common pest in old apothecary-type drugstores, where it fed on the many dried plant products and plant-based drugs that were stored in such establishments. Drugstore beetles are important pests of a wide variety of stored products, including stored grains, flour and cereal products, spices, dried herbs, dried plant parts, dry pet food, bird seed, tobacco products, and the list goes on and on. They can also be found attacking old books and the stuffing of antique furniture. In addition, they will occur in hordes of grain, nuts or other food that has been stashed by rats or squirrels, and they will also breed in packets of rat/mouse bait. Dried dog food is one of the most common sources of drugstore beetle infestations, but this insect is also commonly encountered in food pantries, where it will infest dried herbs and spices, as well as flour, cereals and other grain products.

Cigarette beetles, *Lasioderma serricorne*: As their name suggests, cigarette beetles are important pests of stored tobacco products, however, household infestations of cigarette beetles are more common in other types of stored products. The list of products and objects that are susceptible to attack by this beetle is

similar to that for drugstore beetle. This insect may occur in any type of dried plant product, including whole plants, such as dried flowers, and ground plants, such as herbs and spices. It also commonly attacks books and plant-based furniture upholstery, as well as processed grain and cereal products.

The key to dealing with an infestation of drugstore or cigarette beetles, or any other stored product pest, is to find and eliminate the infested product(s). Because both of these insects fly readily, infestations quickly spread from the original source to other suitable items in the house. Therefore, the search and clean effort should not be discontinued after finding the first source of infestation. It is important to check any other potential food sources in the house and take steps to ensure that they are properly stored or protected. All infested products must be identified and discarded and all susceptible products must be stored in bug-proof containers. Glass, metal, or heavy plastic containers with tight-fitting lids are needed because these beetles can readily chew through most plastic food packaging, plastic bags, even foil containers.

The food pantry is one of the first places that should be checked. The best approach is to remove all items from the pantry, checking each one as it is removed. Discard any infested items by placing them in a plastic garbage bag. Do not allow insects to escape to other parts of the house and be sure to immediately remove the bag from the house and dispose in a manner that will not allow re-infestation. After all items are removed from the pantry, use a vacuum cleaner to thoroughly clean up any spilled food products and any insects that may be present in the pantry. Once the clean up process is complete be sure to discard the vacuum bag in order to prevent any insects from escaping and causing a re-infestation.

After finishing with the food pantry and kitchen areas, the next step, and this is an important part of the control effort, is to carefully consider where other susceptible items may be located in the house and check these. Be sure to check bathroom storage areas. Other items to consider are: dog food and other types of pet food, bird seed, dried flower arrangements, ornamental corn and other types of dried seed, stuffed toys or pillows, bean bags or pin cushions, upholstery of antique furniture, etc. **The key to lasting success in controlling these pests is to be very thorough in the search and clean effort.**

One important point to keep in mind regarding these pests is that heavy infestations are rarely encountered in products that are only stored for a short period of time before being used. Products that are used infrequently or that are forgotten in some out-of-the-way corner are most likely to develop heavy infestations. Thus good product rotation practices play a key role in avoiding problems with these insects. Products that are intended for immediate use and thus will only be stored for a short period of time (a few weeks or less) do not necessarily need to be stored in bug-proof containers. Products that are likely to be stored for more than a month should be stored in bug-proof containers.

Insecticides are a relatively minor component of the control for this type of pest. However, in situations where infestations occur in wall voids and other areas that are not accessible to thorough cleaning/vacuuming, insecticides can be helpful. Be sure to choose a product that is specifically and clearly labeled for this type of use and follow the label carefully. Be especially cautious when selecting and using products in food storage areas. Some products are labeled for this type of use, but the label usually requires that all food products be removed before the area is treated and that the spray be allowed to dry before food products are returned to the shelves. Read and follow the label!

There are many different products on the market labeled for indoor pest control. Products containing active ingredients such as cyfluthrin, cypermethrin, deltamethrin, or permethrin are good choices for this use. These are available as pre-mixed, "ready-to-use" sprays that come in a trigger pump type spray bottle and as concentrates that must be diluted with water and applied through a pump-up hand sprayer. There are also dust formulations that can be useful for treating, cracks and crevices and inaccessible wall voids.

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