BUG BIZ
Pest Management and Insect Identification Series
LSU AgCenter Research · Extension · Teaching

Genus Anthrenus: Carpet Beetle, Bow Bug, Museum Bug

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Description

Anthrenus is a genus of beetles within the family *Dermestidae*. Members of the genus are common, with 18 species documented within North America. *Anthrenus verbasci* is the most common species. Adults typically measure from 1/16th of an inch to 5/32 of an inch (0.15-0.4 centimeters) in length. Adults possess clubbed antennae and are covered in colorful scales of various brown, tan, red, whitish and gray hues. These scales rub off easily, and older individuals are often devoid of them. Adults are usually harmless and typically feed on pollen. Larvae vary in size with age. Mature larvae may be larger than adults and are hairy, tan to black in color and appear striped. Larvae are pests and feed on a wide range of dead animals or plant matter. Some species infest stored goods and biological specimens in museum collections. Other members of the genus can cause similar damage to organic materials and fabrics. Various species within the genus may cause similar damage, but control is the same regardless of species.

Life Cycle

Adults lay eggs on a larval food source, such as woolen fabric carpets or furs. Eggs hatch in about two weeks, and the larvae feed for varying periods, depending on the species and environmental conditions. Larvae prefer dark, secluded places. When ready to pupate, the larvae might burrow further into food or wander and pupate elsewhere. Larvae shed their skins and fecal pellets, making it obvious where they have been feeding. Carpet beetle adults don't feed on fabrics but seek out pollen and nectar. However, adults can accidentally be brought inside on various outdoor items, such as flowers and fabrics.

LEFT: Adult. RIGHT: Larval Anthrenus sp. Photos by Daniel R. Suiter, University of Georgia, Bugwood.org.

Damage

Damage caused by *Anthrenus* is done by larvae and results in the consumption of unprotected fabrics and biological materials not preserved in alcohol. They gained the nickname "bow bug" because of their notorious destruction of violin and fiddle cases and violin and fiddle bows. They typically consume bow hair near the tip or the frog (end), causing damage to the bow. Another nickname is the museum bug as it may damage museum specimens. Infestations in museums can result in irrecoverable damage to specimens. Severe damage from *Anthrenus* can result in extremely expensive damage or complete destruction of property.

Control

Storing objects in airtight containers will help prevent infestations. Nonchemical methods for controlling and treating infestations include heating the infested objects in an oven for at least 30 minutes at 120 degrees Fahrenheit or higher. If objects cannot be placed in an oven, freezing the objects overnight, allowing them to thaw in sunlight and then refreezing will kill adults, larvae and eggs.

Chemical methods for controlling carpet beetles include inserting resin strips containing insecticides. The vapors build up to the required concentration only in an airtight container. If the items aren't in an airtight container, the chemicals will repel only the adults. Larvae already on the items will continue to feed. Before using either of these methods, consider if cold or heat will damage the object. Also, consider if insecticides are safe for fabrics or specimens and always follow label directions. Contact the LSU AgCenter for any further control questions.

For information regarding insect identification and control options, please contact your local LSU AgCenter parish office. To find your local LSU AgCenter parish office, visit www.lsuagcenter.com.

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