

MuseumPests.net

A Product of the Integrated Pest Management Working Group

Black Carpet Beetle *Attagenus unicolor*



GENERAL INFORMATION

Black carpet beetles are one of several species of dermestid beetles that can cause considerable damage in a museum setting. In the spring and early summer, black carpet beetle adults are common outdoors in the sunshine, feeding on flowering plants. They will often feed on the pollen of Spirea, Ceanothus and other flowering plant species. These good fliers can enter structures through windows or broken screens. They are light attracted until after mating and can be found indoors on window sills or around bright fluorescent lights. Adults are rarely found inside buildings

SIGNS OF INFESTATION

The late stages of the larvae can be more than twice the size of the adult. The cast skins from the larvae have the distinct carrot or cigar shape with long hairs extending from the tail end.

FOOD SOURCES

Black carpet beetles will eat a wide range of food materials including: seeds, grains, dried milk and cereals. It also can commonly be found feeding on many natural products such as: woolen rugs, clothing, silk, carpeting, felt, fur, skins, yarn, velvet, feathers, insect specimens, hair filled mattresses and upholstery, animal mounts and carcasses. Infestations have been found in bird and rodent nests where the larvae feed on the shed feathers and hair,

LIFE CYCLE



DIAGNOSTIC MORPHOLOGY

Adults:

- Adult: 3-5 mm long
- Adults have a color of dark brown to black. The terminal antennal segment in males is twice as long as females



Immature Stage:

- Brown to tan carrot shaped larvae with long tufts of hairs extending from the abdomen
- Can reach 1/2 inch (13 mm) in length

Adult beetles go outside to feed on pollen and mate. The mated females become negatively phototrophic and can travel indoors to lay their eggs on potential food sources. Females lay approximately 50 eggs. The eggs will hatch in 6 - 10 days. The larvae is also negatively phototrophic and can stay in this stage for nearly 2 years if the conditions are not conducive for growth. Under good conditions, they will pupate after 258 days and many instars. The pupal stage can last from 6 - 24 days and the adults can remain in the pupal skin for 2 - 20 days before emerging and aggregating on flowering plants like Spirea. The adults can live for 36 - 38 days

CONTROL & TREATMENT

control can involve monitoring with sticky traps, pheromone lures and larval food monitors. Other IPM methods can include; Exclusion, Discarding infested items, Vacuuming and Brushing.

Fact Sheet: Black Carpet Beetle

Photo of Adult Male Black Carpet Beetle by Patrick Kelley, Insects Limited, Inc. on lower left of page

Photo of Adult female and larva by Jim Kalisch, UNL Entomology on upper right of page

Information from: Mallis, A., et al. (2011), Handbook of Pest Control - Tenth Edition, Mallis Handbook LLC, 701-703