# A Product of the Integrated Pest Management Working Group

**Odd Beetle** *Thylodrias contractus* 



### GENERAL INFORMATION

What makes the odd beetle so odd is its sexual dimorphism; the male and female of the species look nothing alike. Though the adult female is larviform in appearance it is characteristically different from the larvae as well. Larvae themselves do not appear sexually dimorphic. Though similar in appearance to other carpet beetle larvae the odd beetle is distinctive in that they lack long hairs at the tip of the abdomen and the upper body is not covered with short hairs. Rows of hairs exist at each segment as noted in the Diagnostic Morphology section. When disturbed the larvae curl into a "C" or crescent shape.

Native to Central Asia they must be introduced in order to disperse. This is largely due to the female's inability to fly. Now widely found throughout cultural institutions and other areas, they are described as a cosmopolitan species. It is likely that the species is dependant upon humans and building environments in North America.

### SIGNS OF INFESTATION

Signs of odd beetle infestation will most likely be in the form of damage to specimens, frass and the cast skins from larval insects. As the males can fly, in some rare instances flying adults may be observed.

#### FOOD SOURCES

In the past the odd beetle was often referred to as



## **DIAGNOSTIC MORPHOLOGY**

Adults:

- Adult Male: Resting elytra meet at along top third of length, then diverge to reveal abdomen Long narrow body with thin appendages
- · Adult Female: Wingless and larviform shaped body
- Both: 2-3mm in length Thinly covered with short, pale hairs- clubbed, 9 segmented antennae uniform in thickness along length. - Median ocellus between compound eyes

Immature Stage:

- Full size ~ 3mm
  - Single transverse row of hairs across the dorsum at each segment

the "tissue paper beetle" because of early literature describing an outbreak in tissue paper erroneously identifying the paper as the food source. It is now thought that the beetles were feeding on whatever was in the paper. Their primary dietary preference is dried animal matter. This makes natural history collections particularly susceptible to odd beetle infestations. This includes skins, hides, fur, feathers, insect collections, and natural fiber fabrics such as silk and wool. Infestations have been observed in collections of birds nests. Odd beetles have also been observed burrowing into bone where it is thought they are attracted to the marrow or dried tissue.

## LIFE CYCLE

The life cycle of the odd beetle lasts for approximately one year or slightly longer. The eggs are elliptical and a translucent white in color. They are .7mm long. After 23 - 30 days the larvae emerge. They will live the majority of their life as larvae (242-388 days), entering a short pupae stage (7-14 days) just before adulthood. The life expectancy of the adult itself is varied, living as short as nine days or surviving as much as fifty days.

### **CONTROL & TREATMENT**

Due to the fact that females are flightless and must be introduced into a collection, prevention is the first line of defense against the odd beetle. However, once an infestation has been found thoroughly inspect and identify the scope of the infestation. This includes all storage cabinets, drawers and/or display cases. When treating an infestation be sure to include nearby cracks and fissures where pupae may be deposited.



Information current as of 16 April, 2007 For more information visit www.museumpests.net

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## Fact Sheet: Odd Beetle

Photo credits:

Lower Left of Fact Sheet: Image of adult male on left on adult female on right by Patrick Kelley, Insects Limited, Inc.

Upper Right of Fact Sheet: image of larva by Patrick Kelley, Insects Limited, Inc.