

Furniture Beetle *Anobium punctatum* (DeGeer)



GENERAL INFORMATION

Anobium punctatum commonly known as the furniture beetle is a wood boring beetle that falls under the larger common name of powderpost beetle or woodworm. Powderpost beetles are so named because they feed on wood and have the potential to reduce wooden objects to a pile of fine powder.

Anobium punctatum is a member of the Anobiidae family, which also includes death watch beetles. The other closely related beetle families that fall under powderpost beetle name are the Lyctidae (true powderpost beetles) and Bostrichidae (false powderpost beetles) families. These three beetle families will damage objects the same way and require the same control measures.

The type of wood boring beetle can be distinguished by the size of the hole they leave in the wood and the texture of their frass. Anobiidae leave a slightly larger hole (1.5mm in diameter) than other powderpost beetles, and have frass with a coarse, gritty feel. In contrast, Lyctidae will have fine, powdery frass and Bostrichidae will have a combination of gritty and fine frass that is cemented into the larva tunnels in the object.

Anobium punctatum are cosmopolitan, distributed around the world. They are rarely found in tropical hardwoods.

SIGNS OF INFESTATION

While the larvae are feeding inside the object, they create frass that will pour out of old exit holes if the object is disturbed. However, the presence of frass does not always indicate an active infestation. Active furniture beetle infestations are



DIAGNOSTIC MORPHOLOGY

Adults:

- 2mm - 9mm long
- Color ranges from reddish brown to almost black
- The prothorax is hood-like and covers the head, so from above the head is not visible
- Antennae are not clubbed
- Body shape can be oval and compact



Immature Stage:

- 2mm - 5mm long
- Grub-like, color is white with brown head
- Larvae are c-shaped
- Three pairs of legs



characterized by their distinctive gritty, coarse frass that is found on and around the infested objects. Fresh frass will indicate a recent or active infestation. It is light colored and fluffier than old frass. Another indication of infestation are plugged holes and/or open, bright, fresh holes 1.5mm-3mm in diameter. Plugged holes mean that the larvae are pupating inside the object, and fresh holes mean that the adults recently emerged. Also, adult beetles may be found on the surface of an infested object.

FOOD SOURCES

Anobium punctatum will target all types of older, seasoned hardwood and softwood, especially the sapwood of softwood trees such as pine and poplar. They only rarely attack the heartwood of trees. Unlike the Lyctidae and Bostrichidae, Anobiidae can also digest cellulose. Also, unlike the Lyctidae who prefer drier wood sources, the Anobiidae prefer wood with higher moisture content, thus they are commonly found in the crawl spaces of homes in North America. Despite their common name, furniture beetles will attack a variety of objects besides furniture. They will also attack structural timbers, lumber, wood framing, flooring, and wooden objects.

LIFE CYCLE

The adult furniture beetle walks along the surface of an object, laying eggs in cracks or old exit holes in the wood. The eggs hatch within 4-5 weeks and the larvae then begin to feed by tunneling in the wood. After the larval feeding is complete, pupation occurs just below the object surface. Larval development takes one year or more, after

which the adult cuts out of the wood through a small, 1.5-3.0 mm, circular exit holes. The adults do not eat but focus on reproducing. Adults mate within a week, and the females deposit their eggs in the object, continuing the cycle. It is possible that several generations can re-infest the same wood source. The average life cycle takes one to three years, depending on how favorable the temperature and condition of the wood is. It could take longer in drier wood.

CONTROL & TREATMENT

Determine first if the infestation is active or not. In case of an infestation, isolate the infested object and vacuum surrounding areas thoroughly, including cracks and crevices. There are a variety of pest management strategies to control infestations depending on the infested object. Different strategies may have to be taken if wood-boring beetles are compromising a building structure with their network of pupal tunnels. For information regarding pest control methods and to choose the treatment most appropriate, refer to the Treatment Fact Sheets under the "Tools" section on the museumpests.net website.

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Fact Sheet: Furniture Beetle

Lower left image: Deml, Miroslav, 2007, Available at Encyclopedia of Life at: http://eol.org/data_objects/2000418

Larval image: M. O'Donnell and A. Cline, California Department of Food and Agriculture, from www.bugwood.org