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Deathwatch Beetle Xestobium rufovillosum (De



GENERAL INFORMATION

The death watch beetle (family Anobiidae) a wood-boring beetle is often mistaken for the common furniture beetle, but there are no longitudinal rows of pits on the wing cases like those on the furniture beetle. Death watch beetles produce a tapping or ticking sound to attract mates by bumping its head or jaws against the tunnel walls. Heard in the quiet night, the death watch beetle is named for the nightlong vigil kept beside the dying or dead, and by extension has earned the superstition that hearing or seeing the beetle forecasts death.

SIGNS OF INFESTATION

The larvae of the death watch beetle are xylophagous, and as they consume wood they produce small bun-like pellets of frass, which distinguishes them from other wood borers - no other boring beetle produce pelletized frass. The holes and tunnels are circular and around 3mm in diameter.

FOOD SOURCES

Death watch beetles prefer old, moist (greater than 14% moisture content), and partially decayed wood usually with fungal growth. Books stored on beetle infested wooden shelves may have eggs laid on them, and subsequent damage from tunneling larva.



information current as of 8, March 2010 For more information visit www.museumpests.net

DIAGNOSTIC MORPHOLOGY

Adults:

- Dark grayish-brown to shiny- reddish brown
- Cylindrical body, pulls in legs and plays dead when disturbed
- 4 6 mm long



Immature Stage:

- Strongly hook-shaped larva
- Creamy white color with golden hairs
- Actively mobile until premium food source is found

LIFE CYCLE

Adults lay small clusters of 3 - 4 eggs in crevices, small openings, or pores in unfinished wood. Larvae are creamy-white, hook-shaped, have six legs, and are actively mobile as they search for the best food source. The larval stage varies from one to 12 years or more if the conditions are favorable. Once mature, the larvae burrow just underneath the wood surface and enlarge a hole for a pupal chamber. The adult beetle gnaws through the wood as it emerges, and have yellowish scale-like hairs in small patches that rub off to reveal a more reddish color.

CONTROL & TREATMENT

Prevention includes avoiding the introduction of decaying and contaminated wood. Wood moisture content below 14% is unlikely to be suitable for active infestation. Spray and dust pesticides may be ineffective as the majority of the insect activity (egg-laying, larval, and pupal stages) occurs below the wood surface. Freezing may be applicable to small items. For infestations within a building, contact a professional pest control operator to discuss fumigation options.

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Fact Sheet: Deathwatch Beetle

References:

Ridout, Brian, <u>Timber Decay in Buildings: The Conservation Approach to Treatment</u>, Taylor & Francis, 1999, 37-54

Ridout, Brian (Ed.), "Timber: The EC Woodcare Project: Studies of the behavior, interrelationships and management of deathwatch beetles in historic buildings," *English Heritage Research Transactions, Vol. 4*, Maney Publishing, 2001

Ridout, Brian, "Understanding and controlling Anobiid beetles with special reference to the deathwatch beetle Xestobium rufovillosum," <u>Integrated pest management for collections: proceedings of 2001, a</u> <u>Pest Odyssey</u>. Kingsley, Helen et al Ed., Earthscan Ltd. 2001, pp. 14-20

Rivers, Shayne, Umney, N., The Conservation of Furniture, Butterworth Heinemann, 2003, 299-300

Simmonds, M., "Wood Care Project," Kew Scientist, 12, October, 1997

Wood, Chris, "Death-watch beetle and its treatment," *Structural Survey*, Vol. 17, No. 3, 1999 pp 131-137, MCB University Press

Pinniger, David "Pest Fact Sheet No. 3, Death watch Beetle" 2009

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