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Casemaking Clothes Moth *Tinea pellionella* (Linnaeus)



GENERAL INFORMATION

Tinea pellionella is worldwide in distribution. Its common name of casemaking clothes moth comes from the fact that the larvae will carry a silken case with it throughout the entire larval stage until it finally uses the same case to pupate in. The case consists of silken material produced by the larva intertwined with fibers from the material it is feeding on. As the larva grows, it will enlarge the case by making a slit on both sides of the case and inserting triangular sections of new material. In this same fashion it will increase the length of the case by adding new material to either end. If the case is removed from the larva when it is near pupation it will die. The larva will drag the case with it as it feeds. It will thrust out its head and thoracic legs and pull the case along with it. Immediately prior to pupation, the larva will often seek a protected site such as a crevice, wall or often the ceiling of the room of the infestation.

SIGNS OF INFESTATION

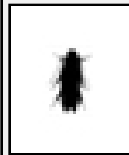
Unlike the webbing clothes moth, the Casemaking clothes moth larva will rarely spin a web on the material on which it is feeding. The larva of the *Tinea pellionella* will feed in a random pattern over its food source, pulling its case behind it. The amount of damage done to the material is based directly on how much time it spends in any one location. Fecal pellets from the feeding larvae will drop beneath the material or fall into folds and creases in the textiles, rugs and furs. The cases for the pupating moths will often be attached to the wall or ceiling around the infested material. Sometimes the pupal cases will be attached to the material itself, attached only by a silk thread produced by the larva. Where webbing clothes moths (*Tineola bisselliella*) will often integrate their pupal cases into the fabric or fur that it feeds upon, the case for the casemaking clothes moth is



DIAGNOSTIC MORPHOLOGY

Adults:

- Body and wings are colored buff to golden with a brownish tinge
- Three dark spots on each fore wing
- Wings are long and narrow
- Hind wings are fringed with long hairs
- 10 - 14 mm wingspan (3/8 - 1/2 in.)



Immature Stage:

- Pale yellow in color when hatched
- As it ages it turns more white with brownish head
- Larva will always drag its silken case around with it
- The thoracic segment immediately behind the head is first brown then

distinctly separate if attached at all.

FOOD SOURCES

The food sources for this pest are wide. Potential foods could be any feather material, woolens, rugs, felts, hair and furs (This includes animal mounts and fur garments). It is reported that it will also feed on spices, tobacco, hemp and skins.

LIFE CYCLE

The gravid female moth will lay 37 - 48 eggs randomly over potential food sources. The eggs will hatch in 4 - 7 days. The larval stage builds a case of silk which it enlarges as it grows. The larval stage will last from 68 - 87 days. Prior to pupation, the larva will often migrate to a protected area to pupate. The whole pupation period will last 9 - 19 days. The adult moths will only live 4- 6 days. The males will be active fliers searching out the females, which generally remain stationary. A typical population will have 3 - 4 generations per year.

CONTROL & TREATMENT

Standard control and treatment methods for museum pests will generally control this pest.