

SAFESTORE: Fact Sheet

COMMON CLOTHES MOTH

Tineola bisselliella

DISTRIBUTION & HABITAT:

Extensive distribution covering most of the globe, with the exception of the tropics. The clothes moth is relatively tolerant of low temperature, although it is considered to be an indoor insect. Associated with natural and animal products such as fiber, fur, fertilizers, feathers etc. Contrary to the obvious inferences from this information, *T. Bisselliella* is not often associated with birds nests.

BIOLOGY:

Females actively search for suitable sites for oviposition such as natural fibre, cloth etc.

Larvae will generally emerge at temperatures above 10°C. Very soon after hatch, larvae will begin construction of a tunnel from silk, faecal, and other materials found in the immediate area. These tunnels act as shelter during the day, offering the larvae good camouflage, from which they will emerge at night in order to feed. Larvae will pass through approximately five instars, although under adverse conditions there may be as many as 40 moults. Pupation occurs within the tunnel and shortly after eclosion, the adult form emerges. Adult females tend to move less than males, both sexes crawling rather than flying, with a characteristic “scuttling” in and around larval food material. Adults are unable to feed, due to atrophied mouthparts.

T. Bisselliella is able to breed at temperatures from 10°C to 33°C. Optimum relative humidity is 70%.

Development of eggs may take from 6 to 38 days, larvae from 60 to 200 days and puparia 10 to 50 days.

T. Bisselliella may be identified from its fringed wings (both hind and forewings) which are straw coloured with no pattern. Antennae are long and thin. Adults reach between 4 and 7mm in length with a wingspan of 12 - 17mm.

SIGNIFICANCE AND PEST STATUS:

Often perceived as purely a household pest, the clothes moth has been responsible for losses of industrial revenue exceeding 12m in 1 year, although this has become less severe with a move away from natural fibres to synthetic fabrics. Other species have however filled this vacancy, most notably fur and carpet beetles. *T. bisselliella* has also been noted to have infested dried vegetable material.