

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. bissellella* has also been noted to have infested dried vegetable material.

SAFESTORE: Instructions

COMMON CLOTHES MOTH- *Tineola bisselliella*

With Diamond Traps

Tineola bisselliella population monitoring kit contains ten “Diamond Trap” units, 10 individually packaged pheromone vials, and instructions. A chart for record keeping can be printed from our website, www.jfoakes.com. Note: pheromone is not visible inside the vials.

Best results can be obtained by using the SAFESTORE system to set up a monitoring program. When in place, such a program can help you to identify when and where infestation problems will arise.

RECOMENDED: that a thorough inspection of the area involved be carried out, and potential infestation “hotspots” are identified and marked on a site plan or map. The position of the traps can be marked on this map when they are placed, to facilitate the reading of catch levels.

PREPARATION: hold the diamond trap at the top (hole punch is located at the top of the trap) and grab the underside fold and pull down. The diamond trap is now open and ready for placement of the pheromone. Simply open the foil packet and insert vial into the center of the glue area inside the trap. (Note- the pheromone inside the vial will escape through the vial, **DO NOT open the vial.**) Trap is now ready to hang in place (wire hanger provided).

PLACEMENT: can affect the amount of insects that will be caught, so for an effective program, it is important that the traps are placed in the best position available, and when they are replaced, the positioning is altered as little as possible so that information from different times of the year can be compared. Traps should be placed when temperatures reach 55°F or higher.

BEST POSITIONING: varies from site to site, so there is a certain amount of choice available in the placing of the traps, however good results can be obtained by following a few guidelines:

- Wherever possible, place units where moths are likely to fly or have been observed.
- If possible, positions should be chosen that offer shelter for the trap (fire hoses or fire extinguishers).
- Ensure that sanitation staff is informed of the program to prevent trap removal.
- Mark the position of the traps on the site plan, and assign them a number.
- Never store monitoring equipment with insecticides.
- Wash hands before placing or inspecting trap units.
- Avoid placing traps in areas where large volumes of air are moving out of the building.
- Place traps in a grid pattern (30 – 50 feet), or shorter intervals to pin-point infestations.

REGULAR CHECKING: once per week is recommended, however it may be necessary to inspect more often if you have a zero insect tolerance policy.

The sensitivity of the area to be monitored dictates how often they should be inspected, but whatever frequency they are checked should be kept constant so that the records you keep can be compared to each other. Click here to see our Record Charts for monitoring of specific and non-target pests. These tables can be printed, photocopied, completed and filed for future reference.

Trap units should be replaced every 8 –10 weeks. Care should be taken during inspections to check the condition of the glue areas in the units, especially in dusty conditions or high insect catch situations, which may cause the glue surface to deteriorate. Should this occur, the trap should be replaced.

Store un-used lures/pheromones in a cool place, avoid direct sunlight. Lures/pheromones can be refrigerated for long life.

The information given in this instruction sheet is provided as a general guide, and is by no means extensive. The biology of pests is the subject of a great many texts and although every effort has been made to provide factually correct information, Russell Fine Chemicals nor J.F.Oakes Sales & Marketing will in no circumstance be liable in respect of any omission or error.