

Pest Profile



Photo credit: Aiwok, Wikimedia

Common Name: Webbing Clothes Moth or Common Clothes Moth

Scientific Name: *Tineola bisselliella*

Order and Family: Lepidoptera: Tineidae

Size and Appearance:

	Length (mm)	Appearance
Egg	0.5 - 0.3 mm	<ul style="list-style-type: none">• Eggs are white and about the size of a pinhead.
Larva/Nymph	7 - 9 mm	<ul style="list-style-type: none">• Brown head capsule with a milky yellowish-white body.• The larvae construct silken tubes, incorporating substrate.
Adult	5 - 8 mm	<ul style="list-style-type: none">• Yellowish to grayish-yellow fringed, lanceolate (oval shape tapering at end) wings. Wingspan of 9 to 16 mm.
Pupa (if applicable)	4 - 7 mm	<ul style="list-style-type: none">• Early in development, the pupa is creamy white to yellow. Later in development, the head is yellowish brown with black eyes and the abdomen is tan. The abdomen is mobile.

Type of feeder (Chewing, sucking, etc.): Larvae have chewing mouthparts. Adults do not feed.

Host/s: *Tineola bisselliella* are capable of digesting keratin, allowing them to exploit furs, hides, wool, hair, feathers, and items constructed with these materials. In some cases, *T. bisselliella* have been found feeding on mummified corpses as well as other dried protein-rich meals and cereals. Larvae require Vitamin B in order to develop and are not typically successful on thoroughly cleaned materials.

Description of Damage (larvae and adults): Larvae are solely responsible for damage and even limited feeding can ruin the material. Damage is characterized by various sizes and shapes of holes in material and the clearing of the base of hairs, feathers, and fibers, resulting in them falling out. Fecal staining and webbing can further damage the material. Since larvae acquire some nutrients from soiled areas of the materials, such as within folds and creases. Materials that are left undisturbed for long periods of time are usually attacked by the larvae.

References:

- Cox, P., & Pinniger, D. (2007). Biology, behaviour and environmentally sustainable control of *Tineola bisselliella* (Hummel) (Lepidoptera: Tineidae). *Journal of Stored Products Research*, 43(1), 2-32. doi:10.1016/j.jspr.2005.08.004
- Plarre, R., & Krüger-Carstensen, B. (2011). An attempt to reconstruct the natural and cultural history of the webbing clothes moth *Tineola bisselliella* Hummel (Lepidoptera: Tineidae). *Journal of Entomological and Acarological Research*, 43(2), 83. doi:10.4081/jear.2011.83