

Pest Profile



Photo credit: Jim Kalisch, University of Nebraska

Common Name: Mediterranean flour moth

Scientific Name: *Anagasta kuehniella*

Order and Family: Lepidoptera: Pyralidae

Size and Appearance:

The Mediterranean flour moth is a small greyish moth, with long front wings that are rounded at the tips. At rest, the adult will often raise its forelegs, elevating the front of its body.

	Length (mm)	Appearance
Egg	Average 0.57 mm	Eggs are greyish-white and oval shaped. They are laid on the food for larvae and adhere to the material.
Larva/Nymph	Up to 19 mm	Larvae are whitish but can have some light pinkish to yellowish coloring. They have a reddish-brown or yellowish-brown head. Young larvae constantly spin silken tubes to harbor in.
Adult	10 – 14 mm	The wings are pale grey to a brownish-grey with some darker grey markings that may appear wavy. The wingspan is 18 – 27 mm. Adults are attracted to light.
Pupa (if applicable)		Pupae are yellowish-brown to reddish-brown. Larvae travel away from the infested food area to pupate.

Type of feeder (Chewing, sucking, etc.):

The larvae have chewing mouthparts. Adults have siphoning mouthparts but are not known to feed.

Host/s:

The larvae will feed on a variety of foods. Among the foodstuffs they attack are flour, bran, grains, maize, rice, sorghum, oats, barley, dried fruits, nuts, seeds, and chocolate. The adults do not cause damage.

Description of Damage:

The Mediterranean flour moth is an external feeder and damage to goods always begins on the outside surface. It is an important pest of flourmills and warehouses. It produces webbing that will make the appearance of grains undesirable, and may clog machinery, forcing temporary shutdowns in mills. In homes, they are most commonly found in flour or cereals, but can be pests of other stored foods. If found, infested food should be disposed of outdoors and storage areas should be cleaned.

References:

CABI. (2020). *Ephestia kuehniella*. In: Invasive Species Compendium. Wallingford, UK: CAB International. www.cabi.org/isc.

Mallis, A. (2011). *Handbook of pest control* (10th ed.). Mallis Handbook LLC.

Smith, E. H., & Whitman, R. C. (1996). *NPMA field guide to structural pests*. NPMA.

Triplehorn, C. A., & Johnson, N. F. (2005). *Borror and DeLong's introduction to the study of insects* (7th ed.). Brooks/Cole.