## Information & Advice About Pantry Moths

## Pest Control Products UK Food (Pantry) Moth Control Advice

## Species:

Indian Meal Moths Plodia interpunctella (Dried Fruit Moth)
Warehouse Moths Ephestia elatella (Cacao Moth, Tobacco Moth)
Tropical Warehouse Moths Ephestia cautella (Dried Currant Moth)
Mediterranean Flour Moths Ephestia kuehniella (Mill Moth/Flour Moth)

Pantry moths can be found in a variety of stored products. These species are largely associated with goods of vegetable origin, to which they may be adapted with varying degrees of specificity.

**Indian Meal Moth (pictured):** The most common pantry moths in the UK, the Indian Meal Moth is a cosmopolitan species originating in South America, that will survive all year round in warm conditions. Food moths will attack dried fruit, cereals, oil seeds and shelled nuts. The larval webbing of food moths may occasionally reach problem proportions.

Wingspan is 10-15mm. The inner third of the upper forewing is a pale yellowish buff; the remainder of the wing is bronze-coloured.

Females produce up to 500 greyish-white eggs, which hatch in 1-18 days depending on conditions. The larvae of food moths migrate over the foodstuff, covering it with silk as they move. Fully-grown larvae are 12mm long. Food and environmental conditions have a strong influence on the larval phase, so that development may take anything from 13 to 288 days. When mature, the larvae of food moths leave the foodstuff and spin thick white cocoons, in which the 7mm long pupae develop. After a pupation period of 12-43 days, the adults emerge, although this species may spend winter as larvae in a silken cocoon.

**Warehouse Moth:** 12 mm wingspan; upper forewing: well-defined, rather sinuate outer band on grey-buff background. These food moths are widely distributed throughout temperate regions, but it is rarely imported except on products from other temperate areas. Food moths are a major pest of warehouses and retail premises; this species will infest cereals, fruit, shelled nuts, cocoa beans, fish, spices and tobacco. Infestations are especially serious where wheat and flour are stored in bulk.

**Tropical Warehouse Moth:** 12-18mm wingspan; upper forewing: dull grey-brown; straight, dark inner band has broad, pale band along inner edge; outer band is obscure. A tropical or subtropical species frequently found on imported cargoes. These food moths are a particular problem in dried fruit and nuts, although this moth will attack cereals, oil seeds and chocolate products.

**Mediterranean Flour Moth:** 20-25mm wingspan; upper forewing: oblique, irregular inner band spotted or streaked. No pale band along inner edge as with Tropical Warehouse



Moth. Originating in Central America but now cosmopolitan. These food moths are a particular problem in mills, bakeries and occasionally even in catering premises. One generation is usually produced, but in warm conditions adults will be present throughout the year, when there may be 4-6 generations.

## **Control of Pantry Moths:**

**Treatment and Control:** Method and timing of control measures against moths depends upon the species involved. The larvae of food moths are frequently difficult to reach because they are concealed in foodstuffs or the fabric of buildings and may be obvious only when they migrate.

**Hygiene and management:** This is important to avoid conditions suitable for the development of moth infestation. Cracks and crevices, which might harbour food moths, should be kept to a minimum. Spillages should be removed promptly, and infested goods dealt with immediately. Uncontaminated products should not be stored in the vicinity of infested materials, to avoid the spread of food moths.

**Monitor traps:** Monitor Traps with pheromone attractants are recommended for these species of food moths. The traps should be placed in storage areas or near products at risk, throughout the year, and are an excellent means of monitoring infestations. For small, domestic infestations, these traps may be effective as control measures against food moths, as they remove adult males from the breeding cycle.

To use monitor traps to tackle food moths, remove the protective paper and place the sticky pad, which includes an integral pheromone attractant, in the lower tray of the trap. One trap should be sufficient to monitor a single confined space such as a larder or cupboard. Where larger areas need to be monitored, a minimum of one trap per 10 square meters should be used. These traps may be reused with replacement sticky pads, which should be replaced every six weeks.

Information taken from Pest Control Products UK website.