# *Cadra cautella(almond moth)*

The almond moth or tropical warehouse moth (Cadra cautella) is a small, stored-product pest. Almond moths infest stored food commodities - flour, bran, oats, dates and other grains, as well as dried fruits.It belongs to the family of snout moths (Pyralidae). This species may be confused with the related Indian mealmoth (Plodia interpunctella) or the Mediterranean flour moth (Ephestia kuehniella), which are also common pantry pests in the same subfamily.

Cadra cautella is a major pest of in-shell peanuts stored in bulk, but it is also a problem at food-processing plants.

## Life History

The life cycle of C. cautella is short with many generations per year and a single female can produce 50 to 500 eggs/female. Only 8–20% of the offspring from these eggs survived on the available food. The more closely the distribution of the eggs matched that of the food resource, the higher the population growth rate will be. Population growth rates were low because females laid too many eggs at some locations and did not lay any eggs at others. Population growth decreased from seven- to threefold as the number of locations with some peanuts increased from one to 24. Because female moths found only a small amount of the food during each generation, population growth was supported for several generations. Sweeping up these food residues and killing the insects that were infesting them would reduce the number of insects that were around to infest the peanuts stored in the warehouse after the next harvest.

## Hosts

Wheat, rice, maize, jowar, groundnuts, spices.


## Nature of Damage

Larva feeds on germ portion leaving the rest of the kernel undamaged. In bulk infestation its damage is limited to peripheral top layers only. Web formation covers the bags, floor-space and mill machinery thereby leading to clogging in mills.

## Identification of the Pest

Egg: Eggs are laid in grains exposed at the sampling tube spots in jute bags.

Larva: Greyish white, hairy with dark brown head with 2 dark areas on the first segment behind the head.

Pupa: Spins silken cocoon at the time of pupation.

Adult: Dirty white to greyish in colour with indistinct black bands

## Management

Reducing the ability of males to find mates has been shown to be a potential method of managing five species of moths and two species of beetles.

Mass trapping has been shown to reduce populations of Anagasta kuehniella, C. cautella, Lasioderma serricorne, or P. interpunctella by 50–99.6% in a bakery, a chocolate factory, flour mills, a grain elevator, a cigarette factory, and warehouses over a period of a year or more.

Use Pheromone Traps continuously throughout the year to monitor population. For mass trapping one trap recommended for every 150 Sq Meters.

Always use Phero – Sensor $^{TM}$ – SP / BP Traps in dusty areas or heavy populations and Delta trap in non dusty areas and with low population density for best results.

**Specifications of Pheromone Lures**

1. Works for a minimum period of 30-45 days in after installation (temperature ranging 27-30 degree Celsius).
2. Made of high quality silicone rubber for uniform release of pheromone in tube form.
3. Packed individually in aluminum foil pouches.
4. Have a shelf life of 18 months from manufacturing.