

Attract[®] Pheromones

Pheromone traps for monitoring pests in vegetable, fruit and ornamental cultures. Damage by caterpillars is very common in vegetable, fruit and ornamental productions. Pheromone traps are useful tools for monitoring moths. They give information about the population density of the pest and help the grower to determine the optimal control strategy.

Pheromones are signals that are exchanged between individuals of the same species and influence their behaviour. There are for instance sex pheromones that attract the male moths to the females from a large distance. This particular characteristic is used to trap pest insects. There are several types of pheromone traps.

A widely used pheromone trap is the Delta trap. It consists of a sticky insert and a triangle-shaped “house” of long-lasting, water resisting material. In the middle of the ridge of the roof a hanger is attached to hang up the trap. Located under the roof and above the sticky insert, there is the pheromone lure.

The males, attracted by the female pheromone in the lure enter the delta trap, but get stuck on the sticky insert. By counting, the pest density and distribution can be determined. When a certain threshold is reached, control measures are to be taken.

Each moth species has a specific pheromone. The life span of a pheromone lure depends on the moth species and the climate.

Pheromone traps have several important advantages:

- easy to use;
- cheap;
- efficient;
- time saving;
- ecological.

GREENHOUSE VEGETABLES AND ORNAMENTALS

Both in greenhouses/tunnels and in the open field, pheromone traps are used for monitoring moths.

In greenhouses, pheromone traps are used for monitoring a.o. Turkey moth (*Chrysodeixis chalcites*), Tomato moth (*Lacania oleracea*) and Beet army worm (*Spodoptera exigua*). Early monitoring is important as the caterpillars are most efficiently

controlled just after hatching. The traps are hung up in the tunnel on the wire, just above the top of the plants.

To avoid mixing pheromones of different species, it is advised to leave a distance of at least 50 metres between the traps.

OPEN FIELD VEGETABLES

In open field vegetables, pheromone delta traps are used to monitor the Diamond back moth (*Plutella xylostella*) and the pea moth (*Cydia nigricana*) among others. The traps can be placed in the open field on poles.

FRUIT GROWING AND VINEYARDS

In several fruit cultures (especially apple and pear) observations can be simplified by using pheromone traps. Pheromone traps are used for monitoring summer fruit tortrix moth (*Adoxophyes orana*), codling moth (*Cydia pomonella*), red-belted clearwing (*Synanthedon myopaeformis*).

In vineyards, pheromones are used for monitoring *Lobesia botrana*.

The traps are hung up chest-high somewhere in the middle of the crop.

The control strategy based on the observations differs for each crop.

A WIDE RANGE OF LURES

Biobest can supply a wide range of pheromone lures for many moth species.

If you have a specific problem concerning moths, do not hesitate to contact us for a list of pheromone lures.