

# Pheromone traps for helioverpa moths: set up and operation

Pheromone traps provide the opportunity to determine when *Helicoverpa punctigera* moths are migrating into crops in spring, and when *H. armigera* moths are emerging from winter diapause.

Moth activity provides an early warning of the potential for egg lays, and subsequent damaging larval infestations in crops. Data from pheromone traps can be used to predict the timing of egg hatch and the rate of larval development. It can help answer common questions like, "If these moths lay eggs, when will the larvae start to damage my crops?"



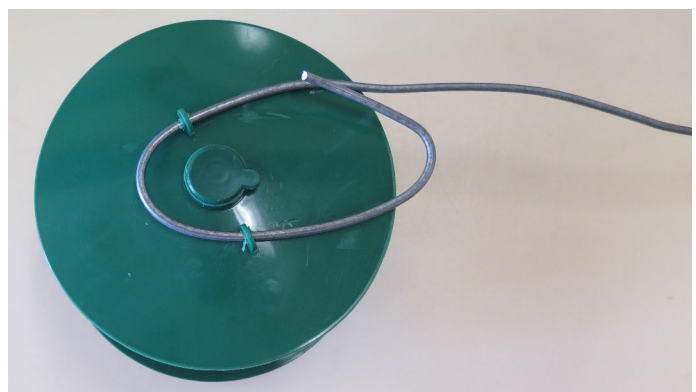
## 1. Trap assembly

When you receive your trap, it will come in bits. It is your job to put it together.



First, attach wire to the top. This is used to suspend the trap from a picket in the field.

Slide the wire through the first lug in the top plate, bend and slide back through the second lug then bend again to secure.



Clip the lid carefully onto the 4 'legs' of the funnel. Too much force will bend, and possibly break, the legs.

Fit the pot onto the base of the funnel and turn until it clicks into place. Ensure the pot is firmly secured. If it is not secured correctly, the base can fall off the trap when it moves in the wind.

Coat the inside of the base with surface spray or add a dichlorvos insecticide cube (effective for two months). This kills moths as they enter the trap, preventing them from flying out when you check the trap or knocking all their scales off before you can check them. Re-spray the pot when replacing the lures, or sooner if moths are still alive when you check the trap.



Place the pheromone lure into the 'basket'. Try to handle the lure as little as possible, or wear a glove, to avoid cross contamination.

**Make sure you put the right lure into each trap.**

Some lures are colour-coded so you can easily check. For example, Entosol lures are yellow for *Helicoverpa punctigera* and orange for *Helicoverpa armigera*.



Change the lure at 4 week intervals so the trap stays attractive. If it helps you remember, write in pen on the trap when the lure was replaced. Keep spare lures in the refrigerator to maintain their potency.

## 2. Siting the trap in the field

The traps should be located so that they are easily accessible, even after rain.

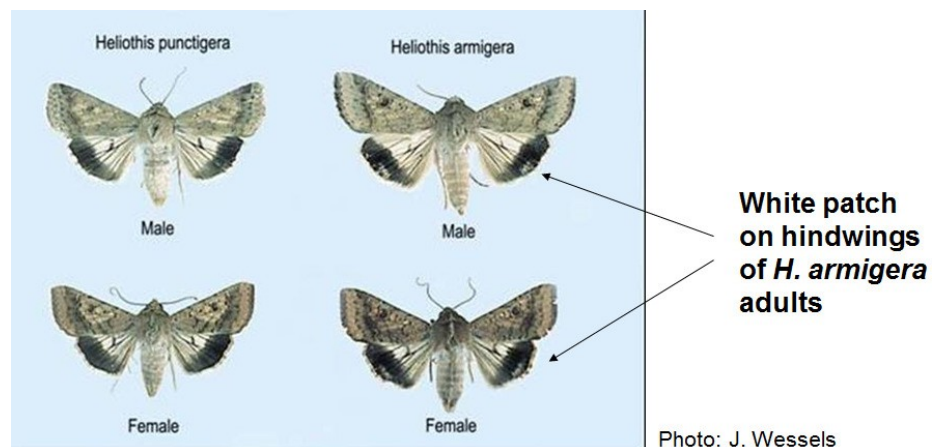
- Place them 50-100 metres apart. You may place them in the crop, or on the edge of the crop (e.g. along the fence line, beside a channel) out of the way of machinery.
- Select a crop that will be attractive to helicoverpa (e.g. chick peas, field peas, canola, faba beans). Moths will be attracted to the crop from some distance and then to the pheromone traps from the crop.

## 3. Checking the trap

Check the traps once a week, preferably on the same day each week.

Remove the pot from the funnel and check for moths. The pheromone lure only attracts male moths. Count and record the number of moths in each trap. Be sure to correctly identify the *H. punctigera* and *H. armigera* counts when recording the data.

The pheromones are reliable in terms of the species of moth they attract. If you want to make sure that the lure is attracting the right species, check the hindwing of the moths. This picture shows the differences between moths: *Helicoverpa punctigera* moths lack the pale patch in the dark band on the hindwing.



*Watch a video on how to set up pheromone traps at the Beatsheet YouTube channel.*