# **GLMPMN Corn Earworm (CEW) Trapping and Reporting Instructions**

Pheromone traps are used to monitor for adult CEW moth migration from the southern US and when peak moth flight occurs. This document only provides information on how to set up CEW traps. In crops like sweet corn where a spray threshold based on trap counts exist, please refer to your local extension sites for more information.

### **Trap Set Up Instructions**

- Use one Heliothis trap per field (Fig. 1a). Install traps by early June and monitored at least weekly until early September. Monitor traps more frequently as peak flight approaches as the traps can fill up quickly and the moths can rub against each other, losing their markings used to identify them.
- 2. Trap placement is very important. Each trap should be placed within grassy weeds along the field edge; avoid bare ground or along windbreaks or hedgerows.
- 3. Pound a 6-foot stake or metal T-bar into the ground and tie the Heliothis to it so that the trap bottom is no higher than 2 feet from the ground or 10 cm above the grassy weed canopy. Pull the anchor string away from the trap and anchor it to the ground to maintain the trap's conical shape. Move the trap higher up the stake as the vegetation grows taller or trim the vegetation under the trap to maintain the 10 cm of clearance above the grassy vegetation.
- 4. Use a new pair of disposable gloves each time you handle a pheromone lure to reduce the risk of cross contamination of the lures. Use a small binder clip or paper clip to attach the lure to the elastic band running across the opening of the bottom of the trap (Fig. 1b). Change the CEW lure every two weeks. Discard the spent lure back at the office or at home.
- 5. When returning to count weekly moth catches, carefully remove top mesh bucket from the Velcro ring and invert the cone to dump the contents into a Ziploc bag. If moths are still alive, place bag in a freezer for a few hours before counting them.

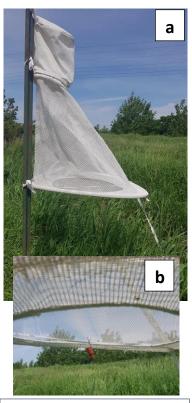


Figure 1. Heliothis trap with 10 cm clearance above grassy weeds and anchor string pulling trap into cone (a). Lure is clipped onto elastic band at the trap opening (b).

- 6. Traps should be checked at least weekly. Enter trap site details and weekly trap counts into the Great Lakes and Maritimes Pest Monitoring Network at: <u>https://arcg.is/0Lry5a</u>
- 7. Make sure you are only counting CEW moths (See CEW Moth Identification on Page 2). Other moths can get captured in the trap that are not CEW, especially spongy moths.

## **CEW Moth Identification**

**Corn earworm** moths are 32 - 45 mm in size and are sand to tan brown in colour. They have dark commas or "C"s on their forewings. Their antennae are long and thin. If traps are not checked frequently, the moths start to lose their markings. Go by their shape, size and sandy colour. Always best to check traps more than once a week so you can see them when they are fresh and get familiar with what they look like. If the antennae are bushy, or feather like, the moths are not corn earworm.







- Corn Earworm (CEW) Trap Supply Checklist:
  - □ 1 Heliothis trap per field
  - □ 10 CEW pheromone lures\* (changed every 2 weeks)
  - □ 1 six to seven-foot tall wooden stake or metal T-bar
  - □ 1 small stake or tent peg for anchor string
  - □ 1 small black binder clip or paper clip to hold lure
  - □ Box of disposable gloves change every time you handle a lure
  - □ Ziploc bags

\*lures can be purchased in singles or in packs of 25. Unused lures can be stored in the freezer and used the following year if there are some unused.

### **Canadian Supply Companies for CEW Traps and Lures**

**distributions Solida** - 480 rang Saint-Antoine Saint-Ferréol-les-Neiges, QC GOA 3R0; Tel: 1-418-826-0900 <u>www.solida.ca</u>

### US Supply Companies for CEW Traps and Lures

Gempler's - PO Box 5175, Janesville, WI 53547-5175; Tel: 1-800-382-8473 <u>https://gemplers.com</u>

Great Lakes IPM Inc. - 7563 N Crystal Rd. Vestaburg, MI, 48891; Tel: 1-800-235-0285 <u>www.greatlakesipm.com</u>

The is only a partial list of trap supply companies. This list does not imply any endorsement.