

Corn Earworm (CEW) Trapping Instructions and Supply List

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.

The **Trap Set Up Instructions** are below. Click on the following for a [CEW Trap Supply List and Trap Supply Companies](#).

Trap Set Up Instructions

1. Use one Heliiothis 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 Heliiothis 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.
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: <https://arcg.is/0Lry5a>
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 gypsy moths.



Figure 1. Heliiothis 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).

CEW Moth Identification



Corn earworm moths are about the same size as western bean cutworm (32 - 45 mm). They are sand to tan brown in colour and have dark commas or “C”s on their forewings. Their antennae are long and thin, If they have been in the trap for a while, they 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. Photo credits: T. Baute, OMAFRA