

# Western Bean Cutworm Pheromone Trapping Instructions in Dry Beans

**PHEROMONE TRAPPING** - Two traps per dry bean field is sufficient

**Supply List:**

- 6 Foot Wooden Stake or Metal T-bar
  - o Found at your local lumber or hardware store
- 3/8" x 8" Zinc Lag Screw Eye (Figure 1)
  - o Found at your local hardware store
- All Green Bucket or Universal Trap (Figure 2)
  - o Ontario/Quebec Supplier: Item #301Y602  
<http://solida.quebec/index.php/grandes-cultures-insectes-ravageurs/grandes-cultures-pieges/?lang=en#unitrap>
  - o Michigan Supplier: Item #IPS-G004  
<http://www.greatlakesipm.com/universalmothtraps.html>
- WBC Pheromone Lures (will be changed once every 3 weeks – 5 lures per season) (Figure 3)
  - \*\*Keep in freezer when not in use**
  - o Ontario/Quebec Supplier: Scentry brand lures <http://www.solida.ca/> - will need to contact directly at 418-826-0900 or info@solida.ca
  - o Michigan Supplier: Item #SC-L206 (Scentry brand lures- also come in cases of 12) or Item #TR-3406 (Trece brand lures – also come in cases of 25) <http://www.greatlakesipm.com/westernbeancutworm.html>
- Fumigant or Vapour Strips (Figure 4)
  - o Plastic strips with insecticide can be ordered through <http://www.solida.ca/> (these strips will last you 2 months each)
  - o If you cannot get a hold of these strips you can purchase the Ortho Home Defense Strips for flies and mosquitoes at your local hardware store - one Ortho Home Defense Strip can be cut into five one inch wide pieces, ensure that gloves are being used to handle these (these strips will last you the whole season)



Figure 1



Figure 2



Figure 3



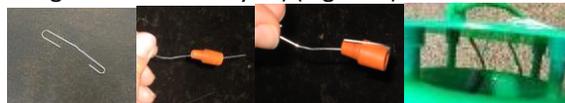
Figure 4

**Instructions:**

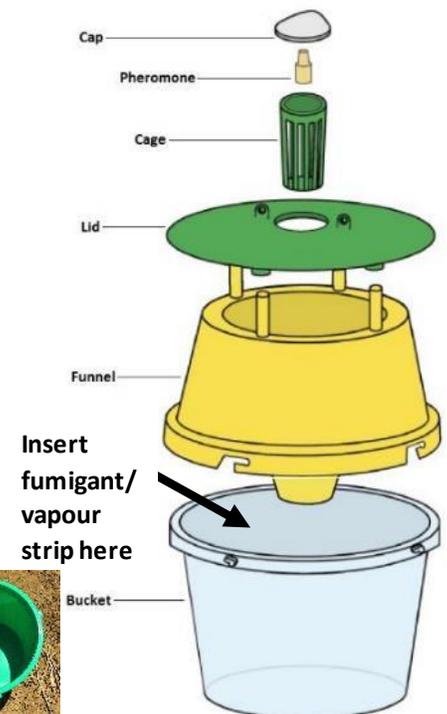
1. Bucket Trap Preparation

- a. Insert 1 WBC Pheromone Lure within the small cage located on the lid of the bucket trap (ensure the cap is fully closed before putting into the lid).
- b. Place the cage into the lid of the bucket trap until you hear a snap – if cage is missing can push the sharp end of a paperclip through the rubber lure and bend the end of the paperclip back over the lure to secure it in place and tape the paperclip to the top of the lid (in hole where cage would normally sit) (Figure 5).

Figure 5



- c. The fumigant/vapour strip can be inserted into the bucket (ensure that gloves are used when handling the insecticide).
- d. Loop the accompanying string through the two holes located on the lid (can use twist tie or other string if missing).



2. Insert the 3/8" x 8" Zinc Lag Screw into the 6 foot wooden stake or metal T-bar (approx. 8 in. from the top) (Figure 6).
3. When locating an area to put the trap, ensure that one trap is positioned on the prevailing wind side of the corn field, along the edge or within the first few rows of the bean field. This allows the pheromone plume to be blown into the field providing a better indication of moth activity in the field. Place the other trap on the opposite side of the field (or at least 50m away) (Figure 7).
4. Pound (or auger) the stake about 1-2 feet into the ground (enough so that the stake remains upright until Sept.) and fill in the hole with soil that was dug up and compress the soil around the pole (Figure 8).
5. Attach the bucket trap strings to the screw at the top and tie in a bow with a loose double knot (this will make it easier to take the bucket trap down later) (Figure 9).
6. Take GPS coordinates of the traps and ensure everything is secure and properly closed before leaving the field.
7. Unscrew the bucket from the funnel and collect moths (Figure 10). Check the traps at least weekly, counting and discarding any moths captured within the bucket. When counting ensure that the moths are WBC moths (other moths and look-alikes are known to be captured in these traps as well (Figures 11-14)).

**\*\*When nearing peak flight times it is wise to check the traps more often as the buckets can be filled quite easily and the moths are less likely to be deteriorated (Figure 16).**

**\*\*Check traps after extreme weather**

**\*\*Every 3 weeks:** discard of old lure at home, do not leave it in the field as it will conflict with the pheromones from the new lure.



Figure 6



Figure 7



Figure 8



Figure 9



Figure 10



Figure 11



Figure 12



Figure 13



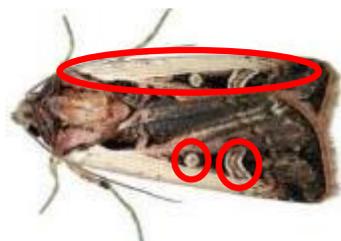
Figure 14

Figure 11 – **Dingy Cutworm:** Does not have broad white band on edge of wing or the full moon shape.

Figure 12 – **Yellow Striped Armyworm:** Does not have broad white band on edge of wing, the full moon shape or the crescent shape.

Figure 13 – **Fall Armyworm:** Does not have white bands along the edge of the wing.

Figure 14 – **Yellow Underwing:** Easily distinguishable because of orange yellow underwing.



**Figure 15 – Western Bean Cutworm:**

Has a broad, white band on the edge of the wing, a full moon shape about half way down the wing and a crescent moon shape about 2/3 of the way down the wing.



**Figure 16 -** Moth's wings can become deteriorated and scales lost in the trap, rendering the moth unrecognizable.