

Bertha Armyworm (BAW) Monitoring

Contacts:

Scott Meers

Phone (403) 362-1366

Email – scott.meers@gov.ab.ca

Shelley Barkley

Phone (403) 362-1350

Email – shelley.barkley@gov.ab.ca

Purpose:

To monitor populations of the Bertha armyworm using pheromone traps in fields in each agricultural district where canola is grown. Moth trapping will provide advance warning of an outbreak to producers and agronomists and enable them to target monitoring for the larvae.

Field Selection

Select a canola field in your area. The field should not be next to a shelterbelt, steep ditch or within ½ kilometer of a strong light source (such as a farm yard light).

Trap Set Up

Bertha armyworm (BAW) pheromone traps should be set up in the selected field. The traps should be located 2 m from the field edge and a minimum of 50 metres apart. The trap is hung directly by a wire hanger from the “L” shaped metal post supplied. It is best to anchor the bottom of the trap by wiring it to the pole itself. Failure to anchor the bottom of the trap increases the risk of wind damage. The trap bottom is “locked” in place using a pin that goes through the top and bottom.

The lures are placed in the cage that snaps into the top of the trap. Please wear gloves when handling the lures. The vapona strips are wired in AFTER the lures are placed in the cages (this is to avoid getting vapona on the lures). Please use the glove while handling the vapona strip.

Adult Moth Counts

The traps should be checked and the number of moths counted once a week. Dead moths can then be placed in a plastic bag, frozen and sent to Scott Meers or Shelley Barkley for verification if there is a need.

Recording Data

It is important that you sample the field once a week in order to have continuity in the data. Once you have sent Jan Lepp (janet.lepp@gov.ab.ca) the legal land description and or the GPS coordinates of your trap location, you will receive a web address that you use for data entry. Data entry is directly onto this website. Maps are updated within a few minutes of you entering your new trap counts.

For more information about Bertha armyworm visit:

Alberta Insect Pest Monitoring Network at agriculture.alberta.ca/bugs-pest to view the video on How to Set Up a Bertha armyworm trap and to see the Bertha armyworm map click on the Bertha armyworm picture.

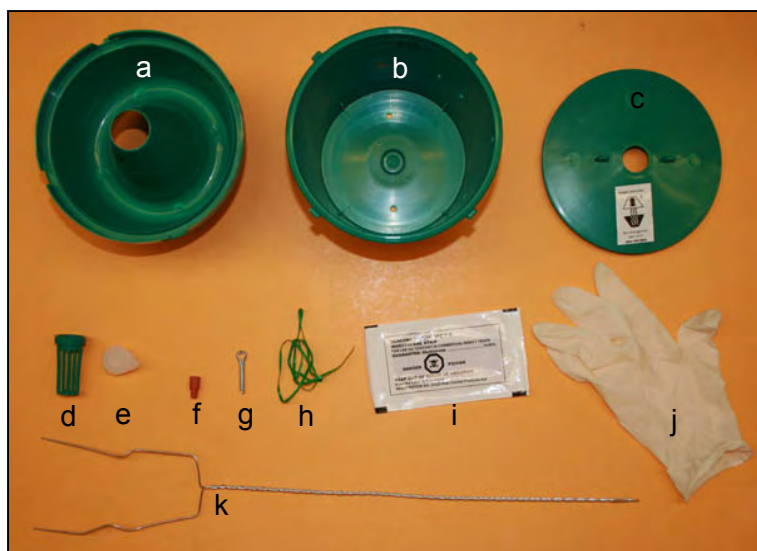
Questions?

Contact Scott Meers or Shelley Barkley

Bertha Armyworm Trap Set Up



Bertha armyworm moth identification



- a. trap funnel
- b. trap bottom
- c. trap lid
- d. lure basket
- e. lure basket lid
- f. lure
- g. cotter pin
- h. twist tie
- i. vaponal
- j. glove
- k. hanging fork

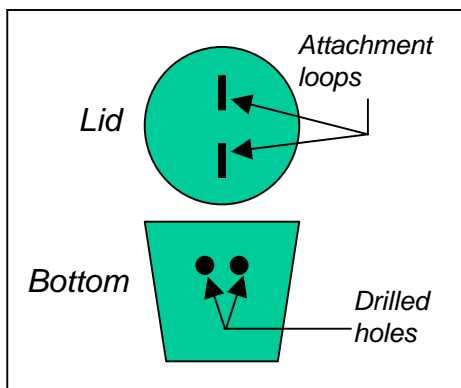
Trap assembly:

Step 1.

The funnel and the bottom are numbered; match these numbers. Assemble the trap unit first using the funnel, lid and bottom.



1 a.
Line up the drilled holes on the lip of the funnel and the lip of the bottom.



1 b.
The attachment loops on the lid will match one set of the drilled holes on the bottom so you can secure the trap to the trap stand.

1 c. Once you have determined the holes used to tie the trap to the trap stand, insert a piece of wire or twist tie through these holes. This will be used later to secure the trap to stand.

Step 2.

2 a.

Put lure into lure basket and put lid on top. Use a glove when handling the lures.



2 b.

Insert the basket into the trap lid and snap in place.



Step 3.

Tie the vapona strip to the wall of the trap basket using the other set of drilled holes.



Step 4.

Assemble the trap, inserting the cotter pin into the drilled hole on the lip of the funnel and the bottom.



Attaching the trap to the stand

Step 5.

Select a canola field not next to a shelterbelt, steep ditch or within ½ kilometer of a strong light source like a farm yard light. Traps should be located 2 metres from the field edge and a minimum of 50 metres apart. Pound the trap stand into the ground.

Step 6.

From the top of the metal bar of the trap stand, insert one of the arms of the wire hanger through one hole and the other arm through the second hole.

Next thread one wire arm through one of the attachment loops on the trap lid, repeat with the other wire and other attachment loop. Be sure that the holes for securing the trap bottom to the trap stand are adjacent to the pole.

Bring the wires back up and wrap around the braided wire section of the hanger.



Step 7.

Secure the trap to the trap stand using wire or twist tie from Step 1.