

Click Beetle Pheromone Traps – Monitoring

Background: These traps are designed by Bob Vernon at Agriculture and Agri-Food Canada, Agassiz, B.C. to trap adult male click beetles (*Agriotes obscurus* and *A. Lineatus*) and provided by Wim Van Herk. Click beetles are the adult form of wireworms. The goal of this collaborative project is to determine which of these two species are present at different locations throughout Washington State. It is funded by a USDA Western SARE grant awarded to Washington State University and Washington State Department of Agriculture.

Each trap has a base, a lid, a collection cup and a pheromone lure. The pheromone lure is designed to attract just one species of click beetle but is not 100% effective so confirmation of species will be done after specimens are collected.

To avoid confusion use **Black traps for *Agriotes obscurus* (AO)** and **Brown traps for *Agriotes lineatus* (AL)**. Be very careful to avoid cross contamination between the two pheromones. Always handle **AO** traps and lures first.

Installation: Place traps in the ground so lip is flush with soil surface. Traps should be placed about 15 ft apart from each other and located near a grassy field, lawn or meadow. Place plastic collection cup in bottom of trap. No liquid or killing agent is necessary, beetles will be trapped by the trap lid.

Deploy pheromone lure following instructions on next page. Handle AO lures before AL lures to avoid cross contamination of the pheromone.

Collection: Monitor traps from installation date to end of June. Once a week collect the contents of traps in Ziploc bags and freeze. Keep contents separate. Label each bag as follows.

Date:

Trap Color:

Trap Location:

Name of Collector:

Identification: To identify species collected in traps we will ask you to ship all samples collected by mid July to:

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Questions?

Contact: Brook.brouwer@wsu.edu



Click beetles Left. *A. lineatus*; Right *A. obscurus* (photos W. Van Herk)

Please see back side for instructions on installing traps.

Pheromone Trap Installation Instructions



Step 1. Dig hole for base of trap. **Step 2.** Put plastic collection cup in base of trap. **Step 3.** Install trap in ground so lip is at surface level.



Step 4. Open Pheromone packet (AO *Agriotes obscurus* for black trap, AL *Agriotes lineatus* for brown trap). Always handle AO traps and pheromone first. **Step 5.** Follow instructions on packet to peel off one side of foil. **Do not** open inner plastic membrane. **Step 6.** Place pheromone packet in trap.



Step 7. Place lid on trap. **Step 8.** Check for click beetles at weekly intervals and put contents in a ziplock bag.