Using Pheromone Traps to Determine the Presence of Click Beetles

March 2014
Shauna Mellish, Agri-Environmental Specialist
PEI Department of Agriculture and Forestry

Click beetles are the adult stage of wireworms. Typically click beetles over winter in undisturbed habitats such as hedge rows or buffer zones, however click beetles may also be emerging in agricultural field. When click beetles begin to emerge in PEI in May the females begins to lay eggs. Click beetles prefer to lay eggs in cereal crops and grassy areas, such as pasture or hay fields. However; if click beetles emerge within agricultural fields they may lay eggs on less favorable host crops, such as potatoes.

The male click beetles are attracted to females by a pheromone the females give off. Synthetic pheromones can be used to attract and trap males thereby indicating the presence of click beetles in your field. To monitor for click beetles in your field, use the following procedure:

1. **Select fields that were in cereal crops four years previous** – Wireworms have a 4 to 5 year life cycle before emerging as adults. As cereal crops are a preferred host for laying eggs, adults will begin to emerge from those fields 4 years following infiltration.

2. **In May, place Vernon Beetle Traps both 3 meters into the hedgerow along the edge of your field and a minimum of 30 meters into your field** - Traps should be level with the ground. Using this approach will indicate whether click beetles are emerging from within the field or in the undisturbed areas surrounding it.

3. **Use pheromone lures for *Agriotes sputator*** – As pheromones are individualized to the species of click beetle, up to 100% of the click beetles captured will belong to the baited species. *A. sputator* is currently the species of greatest concern in PEI; however other pheromone lures can be used in additional traps to identify if other species of click beetles are also present.

4. **Check traps weekly until early June** – In PEI, the peak of click beetle emergence typically occurs in late May to early June declining thereafter through to the end of June.

5. **Vernon beetle traps and *A. sputator* lures can be purchased from Contech Enterprise Inc.** ([www.contech-inc.com](http://www.contech-inc.com) or 1-800-767-8658) at a cost of $13.39 per trap and $2.25 per lure (plus shipping and taxes).

For more information or assistance with installing your Vernon Beetle Trap please contact Shauna Mellish at (902) 314-0785 or smellish@gov.pe.ca.
**Agriotes sputator** pheromone lure in a Vernon Beetle Trap

Vernon Beetle Trap installed in an undisturbed area next to a potato field

Vernon Beetle Trap installed in a field prior to planting