

Wireworms

Wireworms *Limonius californicus* (Mannerheim) and *Hypnoidus bicolor* (Eschscholtz) (Coleoptera: Elateridae) have been recognized as a serious pest of wheat and barley in the Golden Triangle areas of Montana. Due to its long life cycle and cryptic habitat, wireworms are difficult to control.



Fig. 1 Wireworm



Fig. 2 Adult click beetle

Damage

Wireworms feed on seeds, roots and young seedlings. Adult click beetle cause no crop damage. Some of the main signs that indicate the field infestation of wireworm are as follows:

- Hollowed out seeds
- Wilted plants with dead central leaf
- Thin stands (Fig. 3)

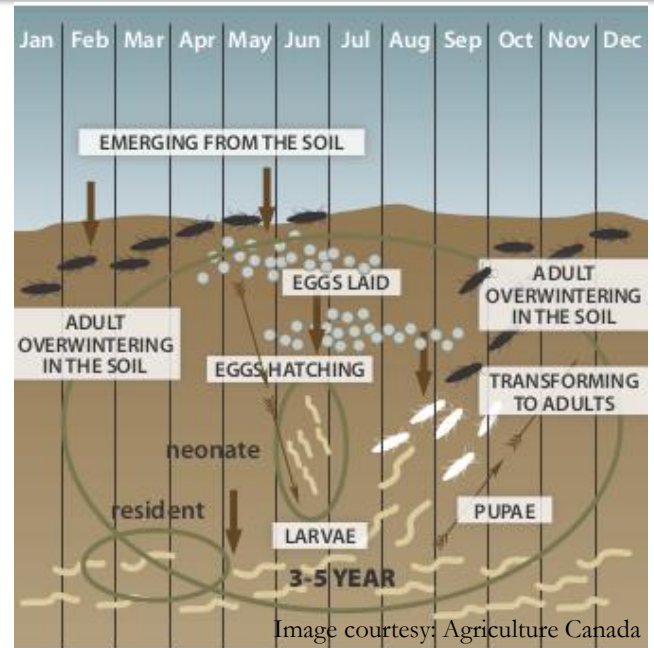


Fig. 3 Patchy standing



Fig. 4 wireworm damage

Life cycle



Wireworm research in 2013 at WTARC

Evaluated the efficacy of entomopathogenic fungi against wireworm. Three fungi when applied as granules in furrow or as soil drenches, were more effective than when used as seed-coating treatments, and provided an efficacy comparable or superior to imidacloprid.

Thresholds

- 2-4 average number of wireworms per bait trap.
- Although soil sampling is problematic, some researchers recommend treatment if wireworms are visible during discing or seeding of a field.