

## **Grasshopper Control in Winter Wheat (And Canola)**

Wheat and canola planting is underway. Unfortunately, two years of drought have left parts of the state with an abundant supply of hungry grasshoppers. These grasshoppers will eat until cold weather gives them permanent rest. A plague of hungry grasshoppers equals potential damage to newly-emerging wheat and canola. I would like to outline some management options for grasshoppers in winter wheat and canola.



**Option 1 (For Wheat ONLY):** A non-chemical option for winter wheat **(but not canola)** is to double-seed a 60-120 foot strip around the field margn. Grasshoppers move into field margins as their other food sources become depleted. Double-seeded margins produce a thicker plant stand that can hold the foraging grasshoppers. This allows the seedlings in the rest of the field to establish. This can be combined with Option 3. This option is NOT recommended for canola.

**Option 2:** Seed that is treated with imidacloprid (Gaucho), thiamethoxam (Cruiser), or clothianidin (Poncho) will reduce feeding damage from grasshoppers in canola or wheat. Seed treatments will reduce damage from moderate grasshopper numbers, but won't hold up under severe pressure. To be most effective, use the highest registered rate. Seed treatments will also reduce aphids in both crops and fall Hessian fly infestations in wheat (See CR-7088 Effect of Planting Date and Seed Treatment on Diseases and Insect Pests of Wheat).

**Option 3:** Apply an insecticide (liquid or bait) along the field margins at seedling emergence. It may require up to a 150-foot wide band to get effective protection and a second application may be needed in two-three weeks. Check labels for grazing restrictions on any of the products you might select.

Surprisingly, grasshopper densities in Oklahoma are quite varied depending on location. Scout fields before making a treatment decision. Numbers exceeding 3-7 grasshoppers per square yard in a field or 11-20 per square yard in the field margin justify control. As more wheat acres are planted, grasshoppers will spread out and cause less damage.

Remember; our current hot, dry conditions will reduce residual activity of the insecticide, so a repeat application may be necessary. Unfortunately, extreme grasshopper populations are difficult to completely control. For more information, consult <u>EPP-7196</u> *Grasshopper Management in Rangeland, Pastures, and Crops* and <u>CR-7194</u> *Management of Insect and Mite Pests in Small Grains*, and <u>CR-7667</u> *Management of Insect and Mite Pests in Canola*.

Tom A. Royer Extension Entomologist tom.royer@okstate.edu