

2010 Peace Canola Survey

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The 2010 Annual Peace Canola Survey was completed by Agriculture & Agri-Food Canada staff based at Beaverlodge, Saskatoon, and Fort Vermilion. A total of 135 fields were surveyed at flowering stage throughout the BC and Alberta Peace in 2010. Sweep-net sampling was conducted by performing 50 - 180° sweeps per field on the following dates in these areas:

- June 29-30 near Fort Vermilion.
- July 4 near Valleyview, Grande Prairie.
- July 5 near Spirit River, Blueberry Mountain, Rolla BC, Clayhurst BC, Fort St. John BC, Dawson Creek BC, Rycroft, Wanham, Eaglesham, Falher, High Prairie, McLennan, Nampa, Beaverlodge, Valhalla, Rio Grande.
- July 6-7 near Fairview, Grimshaw, Manning, Hawk Hills, Peace River, St. Isidore.

Two economically significant pests were present in the 2010 samples; **lygus bugs** (Miridae: *Lygus* spp.) **and diamondback moth** (Plutellidae: *Plutella xylostella*) **were present in most fields surveyed**. Populations ≥ 10 lygus bugs per 10 sweeps were observed in 25 fields surveyed (N=135 fields) and 10 of those same fields contained ≥ 15 lygus bugs per 10 sweeps. Producers should remain vigilant and monitor fields because the **economic threshold for lygus bugs is applicable at the late flower and early pod stages but varies according to current crop value and control costs** (i.e., usually in the range of 15 lygus bugs per 10 sweeps at late flower or 20 lygus bugs per 10 sweeps at early pod stage). Producers can find lygus monitoring recommendations and detailed economic threshold values by linking to: http://www.westernforum.org/Documents/IPMN%20Protocols/2010_Lygus%20bug%20protocol.pdf.

Diamondback moth (adults + larvae) were present in 78 of 135 fields sampled. While sweep-net sampling will not accurately assess diamondback populations, the presence of 3rd and 4th instar larvae plus adults in this survey suggests that larval populations may coincide with the early pod stage. Diamondback moth larvae will feed on the exterior of canola pods during the early pod stage and damaged pods are prone to shattering, particularly under dry, hot, windy conditions. Producers can find monitoring recommendations for diamondback moth by linking to: http://www.westernforum.org/Documents/IPMN%20Protocols/2010_DBM%20protocol.pdf.

Grasshoppers were present in only 10 fields monitored and the occasional alfalfa looper (Noctuidae: *Autographa californica*) was observed (e.g., 10 fields) during surveying. Thrips were common throughout the fields surveyed. No Bertha armyworm were present in the sweeps and we are again happy to report that **zero cabbage seedpod weevil** (Curculionidae: *Ceutorhynchus obstrictus*) were observed in the 135 fields sampled in the Peace in 2010.

We thank our canola producers for allowing us to sample in their fields and thank you to the following dedicated AAFC staff who surveyed, processed, and mapped this data: Owen Olfert², Ross Weiss², Joe Unruh³, Jennifer Shelby¹, Shirley Suecroft¹, Letitia Da Ros¹, Maggi Pettit³, and David Giffen².

2010 Alberta Canola Survey - DBM per 10 sweepsPresAbs

**Diamondback
adults +
larvae/10
sweeps by
Latitude &
Longitude**

- Present
- Absent

