CANOLA – Cabbage seed pod weevil resistance

License Status:
Materials available for license

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Description:

The cabbage seedpod weevil (Ceutorhynchus obstrictis) is an alien invasive species affecting much of the canola production region in western Canada. Guelph researchers have developed a series of canola lines with resistance to the cabbage seed pod weevil (CSPW). These materials are derived from a hybridization of Sinapsis alba x Brassica napus followed by a number of backcrosses to B. napus.

Doubled haploid lines were generated and initially selected for resistance based on larval hole counts in pods. Further replicated field tests were conducted to confirm low susceptibility to CSPW oviposition, larval development, and larval exit-hole counts. Summaries of field results are published in Dosdall and Kott (2006, Crop Sci. 46:2437-2445) and Shaw et al. (2009, Euphytica 170:297-308).

Applications:

- Development of canola varieties with resistance to CSPW.
- CSPW resistant varieties would reduce the need for chemical insecticides.

Status:

- DH lines are available for license on a non-exclusive basis for breeding.
- Territories available for license are Canada and the EU.