

## XVIII DIAMONDBACK MOTH EVALUATION TRIAL

- Objective:** To determine the level of diamondback moth information as it relates to establishing a forecasting model.
- Background:** Previous work completed by Agriculture and Agri-Food Canada, Environment Canada and the Canola Council of Canada has shown a need to establish a migration forecasting model for diamondback moths. Establishing the deposit points and numbers of diamondbacks present is essential in ground truthing this forecasting model. The diamondback moths recorded are used in establishing the migration forecasting model.
- Methodology:** Trap counts were completed as follows:  
A) Date and number of moths  
B) Date and other insects  
C) Change lures and trap inserts weekly  
D) Forward moth counts as per protocol to Agriculture & Agri-Food Canada
- Observations:** High numbers of diamondback moths were caught in a number of traps this growing season. As many as four generations were observed at some Canola Production Centres. Insecticides were applied to control diamondback moth larvae at seven CPC locations. Plant damage was variable across all sites. Plant damage was most severe during pod development and maturation.
- Results:** All information was forwarded to Agriculture and Agri-Food Canada.
- Discussion:** Early migration of diamondback moths into Canada in May resulted in overlapping generations. Diamondback moth traps act as an excellent tool for monitoring populations. Counts in excess of 90 moths per week indicate a potential threat and the need for increased scouting for larvae (economic threshold of 200-300 larvae/m<sup>2</sup> at podding). At a number of the Canola Production Centres, moth counts were well in excess of 90 per week. Results will be added to Agriculture and Agri-Food Canada's database to improve the diamondback moth migration and forecasting model.