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20.0 Swath Canola Variety Trial

Project duration: 2017-
Collaborators: Canola Council of Canada, Haplotec

Objectives:

- Evaluate performance of commercial swath canola seed varieties currently available to farmers on the Prairies

Background

Canola is an oil seed crop that has been grown in Canada since the 1940's with close to 5 million seeded hectares annually before the start of the new millennium (Statistics Canada, 1999). Swathing or windrowing is a preferred harvest method for canola and many other crops because it can accelerate maturity and reduce effects of uneven seed ripening thereby minimizing seed loss due to pod shelling (Thomas, 2003; Vera et al., 2007). In the case of the Canadian Prairies which experience early frost, swathing has been reported to protect the maturing crop from untimely frost and hail and reduce harvesting problems caused by late weeds undergrowth or crop regrowth. Furthermore, swathing has also been reported to reduce cases of black leg disease which could impact negatively on the crop quality and yield (Vera et al., 2007). Canola farmers need to be aware of the appropriate stage at which they should swath their crop because premature swathing can reduce yield, test weight, protein and oil content and can also cause chlorophyll retention in the embryo. This is associated with loss in seed grade and increased oil processing costs for removal of chlorophyll.

Materials and Methods

The trial at Melita was arranged as randomized complete block design with 23 treatments (varieties) replicated 4 times. Canola was directly seeded into oat stubble under no till system on the 9th of May 2019. A seeding depth of 0.5" was achieved and fertilizer side banded at 116-35-20-7-2Zn (N-P-K-S) actual lb ac^{-1}. Soil moisture content was good to a depth of 24". Flea beetles were controlled by the application of Pounce insecticide 3 times at 0.08 L ac^{-1}, 0.074 L ac^{-1} and 0.054 L ac^{-1} on May 27, May 29 and June 6