

Producers are constantly scouting for new crops to grow in their operation in order to diversify rotations and improve economic returns. Many have heard of Brassica carinata and are interested in growing the crop since it is well adapted to southern Saskatchewan. Developing a preliminary agronomic package for the semi-arid region will provide much sought after regional data for producers. This initial knowledge is critical to those who wish to grow this crop successfully and will hopefully encourage adaptation by others. The projects were designed to demonstrate the following agronomic issues: seeding date, seeding rate, and fertility. In Swift Current, a seeding rate of 6 lb/ac (recommended 129 plants/m²) was used with a fertility package of 73-20-0-10. Six different seeding dates were utilized:

- May 3
- May 11
- May 16
- May 27
- May 31
- June 7

Results show the seeding date of May 11th had significantly higher yield than all other treatments, with the June 7th seeding date having the poorest overall yield. Days to maturity ranged from 87 days for the June 7th seeding date to 114 days for the May 3rd seeding date. It was also found that earlier seeding dates enabled plants to grow evenly, branch out, and matured normally; whereas the later seeded treatments tended to grow uneven and more vertical. Actual days to maturity were reduced with the later seeded treatments, but the days gained did not totally compensate for the days lost from delayed seeding, and matured later come harvest. Depending on spring conditions, it is recommended that earlier seeding dates from mid-April to mid-May will provide the best overall yield results.

A carinata variety study conducted at Indian Head in 2011, 2012 and 2013 showed that carinata responded well to higher rates of fertilizer than growers would normally apply when growing conventional mustard. A

fertility rate of 115-26-13-13 resulted in yields consistent with canola in the Indian Head area:

Year	Yield (bu/ac)
2011	51 bu/ac
2012	30 bu/ac
2013	61 bu/ac

Management practices were also found to be similar to that of canola; however, the carinata seems to exhibit superior shattering resistance, making this crop a good candidate for straight-combining.



Funding for this project was provided by the ADOPT initiative under the Canada-Saskatchewan Growing Forward bi-lateral agreement, and Agrisoma Biosciences.

