

WINTER CANOLA – THE MAJOR FAILURE

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Project objective

Our goal was to investigate whether winter canola can find its place in dryland and irrigated crop rotations and ultimately help southwest Nebraska farmers better manage their soil and water resources while avoiding economic losses.

Issues with emergence and winter survival

Winter canola has shown little potential to become the established crop in the region due to issues with poor germination and winter survival. The crop is typically planted in late August, and harvested the following year in July, which can be a good option for extending period of living roots and a green cover after wheat harvest (July). Canola seed is very small (similar in size to alfalfa) which makes planting operation challenging due to typically little rain and dry soil conditions in August. If soil moisture is present at the time of planting canola will germinate well and can reach the optimum growth stage for winter survival. However, harsh winters will most likely cause sporadic re-growth of the crop the following spring, yielding 200-900 lbs/ac and making it a failure from the economic standpoint.

Searching for genetics with better winter hardiness?

Winter canola had better crop establishment following the harvest of field peas and on the field edges where soil was compacted from heavy machine traffic. Plants that survived the winter had an extended flowering period in June and provided a great habitat for pollinators and predatory insects. Finding varieties with improved winter hardiness or growing spring canola may be a better option for the region.



Figure 1. Winter canola at optimum overwintering stages failed to overwinter the following year (Grant, NE 2018/19)