



Agronomic Tip: Recommended Seeding Rates

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Wondering what rate you should seed your canola at? To maximize yield potential of your canola variety it is advisable to seed at **5 pounds per acre**.

The main risk with reducing seeding rates is low plant population in the field. Canola plants have the ability to alter the size and number of pods and branches to make use of available light moisture and nutrients. Low plant populations will not be able to optimize the available light, soil moisture and nutrients thus reducing yields. A reduced seeding rate means more time is required for plant ground cover giving ample opportunities for weeds as well greater moisture losses through evaporation. Lighter plant stands often require more days to mature, increasing the risk of fall frost damage.

Seeding with higher than recommended seeding rates also can cause problems. Due to increased plant competition, plants are smaller and are thinner stemmed with fewer branches and pods. The thinner plants are more susceptible to lodging and sclerotinia pressure.

The Canola Council of Canada recommends a seeding rate of 5 to 8 lbs/ac for canola production on the prairies. If producers are looking to cut seeding rates, they must be confident in excellent field conditions. These conditions include: fields with low weed pressure or a herbicide application early in the growing season, warm moist soil conditions, a low potential for soil crusting, a seed lot with a good vigour rating, and accurate shallow seed placement with good seed to soil contact.

By cutting seeding rates, producers are also putting a lot of faith in environmental conditions. According to the Canola Council of Canada's Canola Growers Manual, under **very good** environmental conditions 60 to 80% of the planted seed will produce viable plants. With **average** environmental conditions, the number of viable plants produced drops to 40 to 60% of the planted seed.

If field and environmental conditions are less than ideal, producers may want to up their seeding rate to 6 to 7 lbs/ac to compensate for the environmental stress. Less than ideal condition include: heavy weed pressure, cool soils and soils with crusting potential.

To ensure accurate seeding rates, drill calibration is an important step. Since the thousand kernel weight (TKW) of a specific variety can vary from year to year and even between seed lots, it is very important that the drill be calibrated every time a different variety or seed lot is changed. This will ensure accurate seed metering by the drill.



Calibrating the drill can be done in three steps:

1. Measure out a 30.5m (100 feet) distance.
2. Collect and weigh the seed from one drill run over this distance.
3. Calculate the seeding rate with the appropriate equation given below:
 - [Grams of seed ÷ row spacing (inches)] x 12 = **seeding rate (lbs/ac)**
 - [Ounces of seed ÷ row spacing (inches)] x 342 = **seeding rate (lbs/ac)**

Example: 3.75 grams or 0.13 ounces collected

1. (3.75 grams of seed collected ÷ 9" row spacing) x 12 = **5.0 lbs/ac**
 2. (0.13 ounces of seed collected ÷ 9" row spacing) x 342 = **5.0 lbs/ac**
- (Canola Council of Canada: Canola Growers Manual)*

Compiled by CANTERRA SEEDS