

Tips for Early Seeding Canola

By Brian Hall, OMAFRA, Stratford

An early start to the spring has found some growers planting spring cereals, and others asking if it is okay to plant canola. Seeding canola early especially on sandy soils, will reduce the risk that canola will be under moisture and or heat stress during flowering. Stress at flowering is one of the greatest yield deterrent factors. Canola begins to flower 50 – 60 days after planting, so an early April seeding could potentially begin flowering in early – mid June.

Western Canadian canola growers are often faced with the decision of seeding when there is risk of freezing temperatures, so I consulted with John Mayko, Senior Agronomist with the Canola Council of Ontario. The greatest risk of early seeding is if a sudden cold snap is received following emergence. Early seeded canola that have undergone a hardening period of several days of cold temperatures can withstand – 8^o C to -12^o C temperatures. Rapidly growing canola seedlings are more susceptible to frost damage than plants that are growing slowly under cold temperatures. Unhardened canola seedlings can be killed by temperatures of only -3^o to -4^o C.

- Soil temperatures should be 5^o C at seeding depth. Check temperatures at 8:00 a.m. & again at 3:30 p.m. A thumb rule is when grass has started to green up in your area it is okay to seed canola. At 4^o C germination takes up to 10 -14 days to complete, but at 6^o C takes only 6-7 days.
- Ensure the soil is fit at tillage depth. Canola is much more sensitive to crusting and emergence issues than cereals. Soil should crumble easily and not form a ball or ribbon when rolled between your fingers. Most soil compaction and damage is done by the first pass over the field. Any yield gain from early planting will be more than lost by planting into marginal conditions. Soils should be slightly 'lumpy' to reduce risk of crusting from heavy rains.
- Increase seeding rate by 5 to 10% to account for greater mortality.
- Seed shallow – ½ inch depth, but no deeper than 1 inch. Seeding into moisture is not the priority this early. Plant slow to achieve uniform planting depth.
- Packing after planting is not as important as when seeding later in the season when soils can dry out quickly.
- Use a starter fertilizer. Western research supports yield response with an initial 10 – 15 lb/ac (11 – 17 kg/ha) of phosphorus at planting. 10 -20 lb/ac of nitrogen as MAP is suggested. Higher nitrogen rates can cause ammonia toxicity, especially on sandy soils. Standard MAP fertilizer (not mini-MAP) or rock sulphate are the only fertilizers that can be safely mixed with the seed in the seed box.
- Watch emerged canola for flea beetles. Early canola will have a jump on flea beetles, because the beetles don't begin to emerge until air temperatures reach 14^o C. However, slow establishment will give beetles more opportunity to cause damage.
- Be prepared to control cabbage seedpod weevils. Early flowering canola is more likely to coincide with peak populations of weevils.
- Be prepared to walk your field to assess for frost damage and do population counts. The optimum plant population is 7 – 12 plants/sq ft, and a minimum of 3-4 plants/sq ft has near full yield potential.