Estimated Canola Plant Populations Under Various Seeding Conditions

To maximize yield, ideal plant populations range from 7-14 plants/ft². At any set seeding rate (lb/ac), the typical average for emergence is around 50% depending on field conditions. The plant population will also be affected by seed size, measured as thousand seed weight (TSW) in grams.

These tables show the impact that TSW and % survival can have on canola plant densities, for a variety of seeding rates.

The shaded areas in the tables represent plant populations sufficient to ensure optimum yields.

Seed Survival (%) = 20%

Thousand Seed	Seeding Rates (lb/ac)						
Weight (grams)	3	4	5	6	7	8	
2.5	2.5	3.3	4.2	5.0	5.8	6.7	
3	2.1	2.8	3.5	4.2	4.9	5.6	
3.5	1.8	2.4	3.0	3.6	4.2	4.8	
4	1.6	2.1	2.6	3.1	3.6	4.2	
4.5	1.4	1.9	2.3	2.8	3.2	3.7	
5	1.3	1.7	2.1	2.5	2.9	3.3	
5.5	1.1	1.5	1.9	2.3	2.7	3.0	
6	1.0	1.4	1.7	2.1	2.4	2.8	

Seed Survival (%) = 30%

Thousand Seed	Seeding Rates (lb/ac)						
Weight (grams)	3	4	5	6	7	8	
2.5	3.8	5.0	6.3	7.5	8.8	10.0	
3	3.1	4.2	5.2	6.3	7.3	8.3	
3.5	2.7	3.6	4.5	5.4	6.3	7.1	
4	2.3	3.1	3.9	4.7	5.5	6.3	
4.5	2.1	2.8	3.5	4.2	4.9	5.6	
5	1.9	2.5	3.1	3.8	4.4	5.0	
5.5	1.7	2.3	2.8	3.4	4.0	4.5	
6	1.6	2.1	2.6	3.1	3.6	4.2	

Seed Survival (%) = 40%

Thousand Seed	Seeding Rates (lb/ac)						
Weight (grams)	3	4	5	6	7	8	
2.5	5.0	6.7	8.3	10.0	11.7	13.3	
3	4.2	5.6	6.9	8.3	9.7	11.1	
3.5	3.6	4.8	6.0	7.1	8.3	9.5	
4	3.1	4.2	5.2	6.3	7.3	8.3	
4.5	2.8	3.7	4.6	5.6	6.5	7.4	
5	2.5	3.3	4.2	5.0	5.8	6.7	
5.5	2.3	3.0	3.8	4.5	5.3	6.1	
6	2.1	2.8	3.5	4.2	4.9	5.6	

Seed Survival (%) = 60%

Thousand Seed	Seeding Rates (lb/ac)					
Weight (grams)	3	4	5	6	7	8
2.5	7.5	10.0	12.5	15.0	17.5	20.0
3	6.3	8.3	10.4	12.5	14.6	16.7
3.5	5.4	7.1	8.9	10.7	12.5	14.3
4	4.7	6.3	7.8	9.4	10.9	12.5
4.5	4.2	5.6	6.9	8.3	9.7	11.1
5	3.8	5.0	6.3	7.5	8.8	10.0
5.5	3.4	4.5	5.7	6.8	8.0	9.1
6	3.1	4.2	5.2	6.3	7.3	8.3

Seed Survival (%) = 70%

Thousand Seed	Seeding Rates (lb/ac)						
Weight (grams)	3	4	5	6	7	8	
2.5	8.8	11.7	14.6	17.5	20.4	23.3	
3	7.3	9.7	12.2	14.6	17.0	19.5	
3.5	6.3	8.3	10.4	12.5	14.6	16.7	
4	5.5	7.3	9.1	10.9	12.8	14.6	
4.5	4.9	6.5	8.1	9.7	11.3	13.0	
5	4.4	5.8	7.3	8.8	10.2	11.7	
5.5	4.0	5.3	6.6	8.0	9.3	10.6	
6	3.6	4.9	6.1	7.3	8.5	9.7	

Seed Survival (%) = 80%

Thousand Seed Weight (grams)	Seeding Rates (lb/ac)						
	3	4	5	6	7	8	
2.5	10.0	13.3	16.7	20.0	23.3	26.7	
3	8.3	11.1	13.9	16.7	19.5	22.2	
3.5	7.1	9.5	11.9	14.3	16.7	19.1	
4	6.3	8.3	10.4	12.5	14.6	16.7	
4.5	5.6	7.4	9.3	11.1	13.0	14.8	
5	5.0	6.7	8.3	10.0	11.7	13.3	
5.5	4.5	6.1	7.6	9.1	10.6	12.1	
6	4.2	5.6	6.9	8.3	9.7	11.1	

For more information, visit www.canola-council.org/growing_publications and select Canol@Facts Plant Populations for Profitability and Factors Affecting Canola Survival from Seeding to 21 Days after Emergence.





