

**NDSU North Central Research Extension Center
2017 Faba Bean Seeding Rate Trial at Minot**

Variety	Seeding Rate	Seedling Emergence	Seedling Stand	Harvest Stand	Days to 10% Blm	Days to 90% Blm	Days to Mature	Plant Height	Lodging	Height of 1st Pod	Grain Protein	Test Weight	1000 KWT	Seed Yield
	Seeds/sq ft	DAP ¹	# / sq ft	# / sq ft	DAP ¹	DAP ¹	DAP ¹	inches	0-9 ²	inches	%	lbs/bu	g	lbs/A
Tabasco	3	13	2.5	3.3	49	73	94	20	0	7	20.6	57.7	367	1002
Tabasco	4	13	4.1	3.5	49	73	94	20	0	7	20.5	57.6	344	1325
Tabasco	5	13	5.2	4.4	48	72	93	18	0	7	21.5	57.4	361	1310
Tabasco	6	13	4.6	3.2	49	72	93	19	0	7	21.1	56.6	349	1274
Boxer	3	13	4.1	3.1	46	73	94	20	0	8	22.7	57.8	403	1478
Boxer	4	13	3.7	3.9	47	73	93	21	0	7	24.1	57.1	458	1777
Boxer	5	13	4.5	4.0	45	73	93	21	0	8	24.1	57.2	429	1675
Boxer	6	13	3.7	4.6	45	72	92	21	0	9	22.5	57.7	437	2048
Trial Mean		13	4.1	3.7	47	73	93	20	0	8	22.1	57.4	394	1486
C.V.%		0.0	20.9	17.4	1.1	0.6	1.5	9.7	0	13.5	2.4	1.4	2.9	16.0
LSD 5%		NS	1.5	1.1	1	NS	NS	NS	NS	NS	0.9	NS	20	416
LSD 10%		NS	1.2	0.9	1	NS	NS	NS	NS	1	0.8	1.1	17	342

Combined Means

Seeding Rate	Seedling Emergence	Seedling Stand	Harvest Stand	Days to 10% Blm	Days to 90% Blm	Days to Mature	Plant Height	Lodging	Height of 1st Pod	Grain Protein	Test Weight	1000 KWT	Seed Yield
Seeds/sq ft	DAP ¹	# / sq ft	# / sq ft	DAP ¹	DAP ¹	DAP ¹	inches	0-9 ²	inches	%	lbs/bu	g	lbs/A
3	13	3.3	3.2	48	73	94	20	0	8	21.7	57.7	385	1240
4	13	3.9	3.7	48	73	94	21	0	7	22.3	57.3	401	1551
5	13	4.9	4.2	47	73	93	19	0	7	22.8	57.3	395	1493
6	13	4.2	3.9	47	72	93	20	0	8	21.8	57.1	393	1661
LSD 5%	NS	1.1	0.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

¹ DAP = Days after planting.

² Lodging: 0 = none, 9 = lying flat on the ground.

NS = no statistical difference between treatments.

Planting Date: April 28

Harvest Date: August 28

Row Spacing: 7.5"

Previous Crop: Canola

Tillage System: Transitional No-till (2nd year)

Soil Type: Williams Loam

Note: Grain protein, test weight and seed yield have been adjusted to 16% moisture.

Summary: Faba beans are large seeded crop, requiring a large volume of seed to be planted, thus restricting the planting speed and number of acres that can be planted in a day. Results of this trial would indicate that seeding rates higher than 4 seeds per square foot do not impact agronomic characteristics, seed quality or yield. The trial sustained a severe drought which did affect agronomic characteristics, seed quality and seed yields.