Faba Bean Seeding Rate Trial at Minot

North Central Research Extension Center

	Seeding	Seedling	Seedling	Harvest	Days to	Days to	Days to	Plant		Height of	Grain	Test	1000	Seed
Variety	Rate	Emergence	Stand	Stand	10% Blm	90% Blm	Mature	Height	Lodging	1st Pod	Protein	Weight	KWT	Yield
	Seeds/sq ft	DAP ¹	#/sqft	# / sq ft	DAP ¹	DAP ¹	DAP ¹	inches	$0-9^{2}$	inches	%	lbs/bu	g	lbs/A
Tabasco	3	13	4.1	3.7	45	75	102	30	1	10	23.5	61.4	401	3816
Tabasco	4	13	V3	3.6	45	74	104	32	0	8	22.9	60.4	395	2857
Tabasco	5	13	4.9	3.6	44	73	100	33	1	8	23.6	60.1	370	3437
Tabasco	6	13	V3	4.2	45	73	107	32	1	9	22.3	60.4	426	3994
Boxer	3	13	V3	4.2	42	75	100	37	1	10	25.7	59.7	470	6198
Boxer	4	13	5.3	4.4	41	73	102	36	0	13	25.8	60.3	493	5644
Boxer	5	13	V3	4.1	41	73	102	38	1	15	25.8	59.5	480	7183
Boxer	6	13	6.2	5.0	41	73	103	37	0	14	25.6	60.1	489	5819
Trial Mean			V3	4.1	43	74	102	34	1	11	24.4	60.2	441	4868
C.V.%			18.5	18.6	1.3	1.1	2.0	2.9	69	20.9	3.6	1.2	3.5	5.3
LSD 5%			V3	NS	1	1	4	2	NS	4	1.6	NS	27	451
LSD 10%			V3	NS	1	1	3	1	NS	3	1.3	NS	22	370

Combined Means

Seeding	Seedling	Seedling	Harvest	Days to	Days to	Days to	Plant		Height of	Grain	Test	1000	Seed
Rate	Emergence	Stand	Stand	10% Blm	90% Blm	Mature	Height	Lodging	1st Pod	Protein	Weight	KWT	Yield
Seeds/sq ft	DAP ¹	#/sqft	#/sqft	DAP ¹	DAP ¹	DAP ¹	inches	$0-9^{2}$	inches	%	lbs/bu	g	lbs/A
3	13	4.0	4.0	43	75	101	34	1	10	24.6	60.5	436	5007
4	13	5.3	4.0	43	74	103	34	0	10	24.4	60.4	444	4250
5	13	5.5	3.9	43	73	101	35	1	12	24.7	59.8	425	5310
6	13	6.4	4.6	43	73	105	34	1	11	23.9	60.3	457	4906
LSD 5%	NS	1.1	NS	NS	1	3	NS	NS	NS	NS	NS	NS	NS

¹ DAP = Days after planting.

NS = *no* statistical difference between treatments.

Planting Date: May 6
Previous Crop: Spring wheat

Harvest Date: August 31 Tillage: Minimum Till

Row Spacing: 7.5" 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 higher seeding rates do not have a direct impact on seed yields. Small but statistically significant interactions between seeding rates and the number of days to the end of flowering and days to mature were observed.

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