

Faba Bean Seeding Date Trial at Minot

North Central Research Extension Center

Seeding Date	Variety	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
		DAP ¹	# / sq ft	# / sq ft	DAP ¹	DAP ¹	DAP ¹	inches	0-9 ²	inches	%	lbs/bu	g	lbs/A
April 22	Tabasco	17	5.4	3.5	50	84	111	33	0	11	24.4	58.6	463	4030
May 6	Tabasco	13	V3	3.4	44	73	100	39	0	12	25.6	59.8	503	3911
May 17	Tabasco	10	5.2	3.9	42	73	93	38	0	13	24.0	58.7	416	3657
June 3	Tabasco	9	V3	3.2	39	66	98	33	0	14	24.8	57.6	570	2057
April 22	Boxer	17	V3	4.0	48	84	105	30	0	10	26.1	57.2	522	4818
May 6	Boxer	13	5.1	3.8	44	73	99	37	0	11	25.2	58.7	512	4439
May 17	Boxer	10	V3	3.7	41	72	93	41	0	12	25.7	59.2	500	4071
June 3	Boxer	9	5.1	3.5	35	66	97	39	0	15	26.6	57.4	618	3467
Trial Mean		12	V3	3.6	43	74	100	36	0	12	25.3	58.4	513	3806
C.V.%		0.0	16.3	16.2	3.2	0.6	2.6	3.0	0	15.3	2.2	1.4	3.0	9.5
LSD 5%		1	V3	NS	1	1	3	2	NS	NS	1.0	1.4	27	634
LSD 10%		1	V3	NS	1	1	3	2	NS	3	0.8	1.2	22	521

Combined Means

Seeding Date	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	Harvest Date
	DAP ¹	# / sq ft	# / sq ft	DAP ¹	DAP ¹	DAP ¹	inches	0-9 ²	inches	%	lbs/bu	g	lbs/A	
April 22	17	5.6	3.7	49	84	108	31	0	10	25.2	57.9	493	4424	Aug 31
May 6	13	4.9	3.6	44	73	100	38	0	12	25.4	59.3	508	4175	Aug 31
May 17	10	4.9	3.8	42	72	93	39	0	12	24.8	59.0	458	3864	Aug 31
June 3	9	4.9	3.3	37	66	98	36	0	14	25.7	57.5	594	2762	Sept 29
LSD 5%	1	NS	NS	2	1	3	3	NS	2	NS	1.1	43	725	--

¹ DAP = Days after planting.

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

NS = no statistical difference between treatments.

Planting Rate: 175,000 PLS/A

Row Spacing: 7.5"

Previous Crop: Spring wheat

Soil Type: Williams Loam

Tillage: Minimum Till

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

Summary: Faba beans are a cool season legume that are known to tolerate cold soils and frost. The objectives of this trial were to observe and document agronomic characteristics, seed quality and seed yield of two varieties that were planted at 2 week intervals over a period of a month and a half. As would be expected, statistically significant genetic by environmental interactions were recorded on most characteristics observed with the exception of lodging and grain protein. Although seedling emergence took 17 days for the first seeding date, this delay did not result in any more seed mortality compared to other seeding dates. Plants tended to initiate flowering sooner as seeding date was delayed and had a shorter duration of flowering which probably contributed to the declining yield trend. Plants tended to grow taller as planting dates were delayed and the first seed pod was higher off the ground as well. Statistical differences between seeding dates were also noted for test weight and kernel weight but there was not a clear trend for these characteristics. There was a declining trend for seed yield with delayed seeding although the first three dates produced statistically similar yields.