

**NDSU North Central Research Extension Center  
2017 Fabo Bean Seeding Date Trial at Minot**

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 <sup>1</sup>	# / sq ft	# / sq ft	DAP <sup>1</sup>	DAP <sup>1</sup>	DAP <sup>1</sup>	inches	0-9 <sup>2</sup>	inches	%	lbs/bu	g	lbs/A
April 12	Tabasco	20	4.6	3.9	59	86	102	18	0	7	23.0	56.8	367	799
April 28	Tabasco	13	3.3	3.6	46	73	90	20	0	7	23.1	57.5	326	982
May 10	Tabasco	11	3.7	3.8	45	69	85	20	0	7	23.3	57.2	329	832
May 24	Tabasco	11	2.9	2.9	42	63	84	21	0	8	22.7	57.8	358	646
April 12	Boxer	20	3.6	4.8	59	85	102	19	0	6	25.0	57.5	467	1576
April 28	Boxer	13	4.7	4.4	45	73	90	25	0	9	24.9	57.9	465	1670
May 10	Boxer	11	3.4	4.4	43	69	87	25	0	8	24.8	57.7	417	1053
May 24	Boxer	11	2.6	3.5	42	65	85	18	0	9	25.2	57.2	461	698
Trial Mean		14	3.6	3.9	48	73	91	21	0	8	24.0	57.5	399	1032
C.V.%		0.0	22.0	15.6	0.9	0.7	2.2	11.0	0	6.7	2.9	0.6	3.0	27.4
LSD 5%		1	1.4	1.1	1	1	4	4	NS	1	1.2	0.6	21	496
LSD 10%		1	1.1	0.9	1	1	3	3	NS	1	1.0	0.5	17	406

**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 <sup>1</sup>	# / sq ft	# / sq ft	DAP <sup>1</sup>	DAP <sup>1</sup>	DAP <sup>1</sup>	inches	0-9 <sup>2</sup>	inches	%	lbs/bu	g	lbs/A	
April 12	20	4.1	4.3	59	86	102	18	0	7	24.0	57.2	417	1188	Aug 28
April 28	13	4.0	4.0	46	73	90	23	0	8	24.0	57.7	396	1326	Aug 28
May 10	11	3.6	4.1	44	69	86	22	0	8	24.1	57.4	373	943	Aug 28
May 24	11	2.7	3.2	42	64	85	19	0	8	24.0	57.5	410	672	Aug 28
LSD 5%	1	1.0	0.8	1	1	2	3	NS	NS	NS	NS	NS	479	--

<sup>1</sup> DAP = Days after planting.

<sup>2</sup> 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: Canola

Soil Type: Williams Loam

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

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

**Summary:** Fabo 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. Although seedling emergence took 20 days for the first seeding date, this delay did not result in any additional 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 also tended to be higher off the ground. There was a declining trend for seed yield with delayed seeding although the first three dates produced statistically similar yields. The trial sustained severe drought which impacted overall agronomic characteristics, seed quality and seed yields.