NDSU North Central Research Extension Center 2017 Field Pea Seed Singulation Trial at Minot

	Seeding	Harvest	Days to	Days to	Plant		1000	Test	Seed
Variety	Rate	Stand	Bloom	Mature	Height	Lodging	KWT	Weight	Yield
	seeds/A	plants/A	DAP ¹	DAP ¹	inches	0-9*	g	lbs/bu	lbs/A
Striker	150k	144,555	49	75	22	3	211	68.6	1508
Striker	200k	125,195	49	74	21	2	206	67.8	1577
Striker	250k	118,741	49	74	22	2	208	67.7	1853
Striker	300k	122,613	49	74	20	2	210	67.7	1428
Striker	350k	151,008	49	74	21	1	201	67.5	1885
Treasure	150k	120,032	47	71	23	2	194	66.9	1746
Treasure	200k	149,717	47	71	24	3	195	68.1	2270
Treasure	250k	127,776	47	71	25	3	196	67.9	2351
Treasure	300k	116,160	48	72	26	2	195	68.5	2038
Treasure	350k	139,392	46	71	24	2	198	67.8	2516
C.V.%		17.8	0.8	1.1	7.2	29.0	3.8	1.5	17.0
LSD 0.05		NS	1.0	1	3	NS	13	NS	560

Combined Means

Seeding	Harvest	Days to	Days to	Plant		1000	Test	Seed
Rate	Stand	Bloom	Mature	Height	Lodging	KWT	Weight	Yield
seeds/A	plants/A	DAP ¹	DAP ¹	inches	0-9*	g	lbs/bu	lbs/A
150k	132,293	48	73	22	2	202	67.7	1627
200k	137,456	48	72	22	3	200	67.9	1924
250k	123,259	48	72	23	3	202	67.8	2102
300k	119,387	49	73	23	2	202	68.1	1733
350k	145,200	48	72	23	2	200	67.7	2200
LSD 0.05	NS	NS	NS	NS	NS	NS	NS	NS

DAP = Days after planting.

NS = no statistical difference between seeding rates.

Planting Date: May 17

Row Spacing: 15"

Harvest Date: August 1

Previous Crop: Canola

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

Note: The trial was grown under severe drought (3.6" of precip from January 1 - June 30).

Summary: The trial was planted with Great Plains no-till openers using Monosem seed singulation meters. The month of May was very dry and probably hindered germination and seedling establishment. The trial also sustained severe drought throughout the growing season which limited growth and yield. The harvested plant stand was inconsistant with seeding rates and had no correlation with seed yield. All seeding rates produced statistically similar agronomic and seed quality characteristics within each variety and as a combined group. Additional trials will need to be conducted in order to make firm conclusions on this technology.

^{*}Lodging: 0 = none, 9 = lying flat on the ground.