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

			Harvest	Days to	Duration	Days to	Plant	Oil	Seed
Variety	Seeding Rate		Stand	10% Blm	of Bloom	Mature	Height	Content	Yield
	seeds/A	lbs/A	plants/A	DAP1	DAP1	DAP1	inches	%	lbs/A
HyClass 955	50k	0.48	83,893	42	21	89	30	46.0	442
HyClass 955	100k	0.96	113,579	42	18	85	33	45.1	595
HyClass 955	150k	2.0	94,219	43	20	86	35	45.0	610
HyClass 955	200k	1.9	103,253	42	16	85	34	46.6	615
HyClass 955	400k	3.8	126,485	42	16	82	34	48.1	1104
HyClass 970	50k	0.65	83,893	45	24	89	34	43.7	490
HyClass 970	100k	1.3	95,509	45	24	92	34	43.5	795
HyClass 970	150k	1.4	118,741	46	22	91	34	44.4	588
HyClass 970	200k	2.6	127,776	45	24	92	35	43.5	995
HyClass 970	400k	5.2	130,357	45	24	92	35	42.7	951
Trial Mean			108,900	44	21	88	34	44.9	719
C.V.%			22.5	1.9	11.7	3.8	4.3	2.6	14.9
LSD 0.05			NS	1	4	6	3	2.0	184

Combined Means

Seeding	Harvest	Days to	Duration	Days to	Plant	Oil	Seed
Rate	Stand	10% Blm	of Bloom	Mature	Height	Content	Yield
seeds/A	plants/A	DAP ¹	DAP ¹	DAP ¹	inches	%	lbs/A
50k	83,893	44	23	89	32	44.9	466
100k	104,544	44	21	89	33	44.3	695
150k	106,480	44	21	89	34	44.7	599
200k	115,515	44	20	89	35	45.1	805
400k	128,421	43	20	87	34	45.4	1028
LSD 0.05	26,136	NS	NS	NS	2	NS	180

 1 DAP = Days after planting.

NS = no statistical difference between seeding rates.

Planting Date: May 17Harvest Date: September 3Row Spacing: 15"Previous Crop: Spring wheatTillage System: Transitional No-till (2nd year)Soil Type: Williams LoamNote: 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 indicated that lower seeding rates were over seeded and that all of the seeding rates produced statistically similar plant stands at harvest. Despite these similarities, there was a direct correlation between harvest stand and yield, with the 400k seeding rate producing the most plants, resulting in significantly higher yields than the lower rates. Additional trials will need to be conducted in order to make firm conclusions on this technology.