

Dryland Sunflower Variety Trial - NDSU
WREC, Williston, ND 2017

Variety	Company	Hybrid Type	Oil Type	Days to Flower	Days to Mature	Plant Height	Oil ²			Test Weight	Yield		
							2017	2-Yr Avg	3-Yr Avg*		2017	2-Yr Avg	3-Yr Avg
				DAP ¹	DAP ¹	inch		-----%		(lb/bu)	(lb/a)	(lb/a)	(lb/a)
Cobalt II	Nuseed	Clearfield	High Oleic	70	126	44	38.7	38.1	36.5	30.7	3027	2634	2219
Camaro II	Nuseed	Clearfield	NuSun	72	119	50	36.6	36.8	36.2	31.1	2767	2385	2174
N4HM354	Nuseed	Clearfield	NuSun	72	114	44	39.1	38.7	37.2	30.3	2733	2425	2110
Talon	Nuseed	Express	NuSun	72	119	42	33.6	34.0		26.2	2645	2167	1911
Falcon	Nuseed	Express	NuSun	76	126	46	35.5	36.8	-	30.7	3549	2714	-
63C4 CL	NuTech	Clearfield	High Oleic	72	116	44	38.9	36.8	-	30.4	2683	2027	-
3845 HO	Croplan	Conventional	NuSun	73	125	49	40.0	-	-	31.2	4408	-	-
545 CL	Croplan	Clearfield	NuSun	74	126	41	37.0	-	-	30.1	3440	-	-
Badger DMR	Nuseed	Clearfield	NuSun	70	122	51	30.3	-	-	29.1	3318	-	-
455 E HO	Croplan	Express	High Oleic	73	127	49	38.6	-	-	30.2	3147	-	-
7919 CL HO	Croplan	Clearfield	High Oleic	74	133	49	39.6	-	-	28.9	3075	-	-
3732	Croplan	Conventional	NuSun	73	123	47	38.7	-	-	30.8	3025	-	-
458 E HO	Croplan	Express	High Oleic	73	124	49	37.2	-	-	27.9	3025	-	-
7717 CL HO	Croplan	Clearfield	High Oleic	73	126	48	37.8	-	-	29.4	3004	-	-
549 CL	Croplan	Clearfield	NuSun	70	117	51	36.6	-	-	31.4	2993	-	-
N5LM307	Nuseed	Clearfield	NuSun	71	122	49	31.9	-	-	27.8	2622	-	-
432 E	Croplan	Express	NuSun	70	115	46	34.7	-	-	30.8	2475	-	-
Mean				72.2	122.3	47.0	36.74	-	-	29.84	3055.03	-	-
CV (%)				2.0	1.9	4.9	2.9	-	-	2.2	12.5	-	-
LSD (5%)				2.4	3.9	3.9	1.77	-	-	1.10	637.62	-	-
LSD (10%)				2.0	3.2	3.2	1.48	-	-	0.91	530.24	-	-

Location of the WREC: Latitude 48° 8'; Longitude 103° 44'W; Elevation 2105 ft

Planting Date: 6/6/2017

Previous crop: Durum

Harvest Date: 11/17/17

Soil test (0-6"): P=24 ppm; K=245 ppm; pH=6.5; OM=1.7%

(0-24"): NO3-N=24 lb/a

Soil type: Williams-Bowbells loam

Applied fertilizer in lb/a: 79.92 N, 19.98 S

Chemical Applications: 9 lbs./a Sonalan (fall applied, preplant), 32 oz./a RT3 (Glyphosate) (Burndown, applied 6/7/2017)

 DAP¹ = Days after planting

 Seed Oil Content²= Oils are reported on a oven dried basis, 120 °F for 4 hours

Trial was thinned to a population of 22,000 plants per acre on week of 7/17/17-7/20/17

Carinata Irrigated Variety Trial - NDSU
WREC, Nesson Valley, ND 2017

Variety	Company/ Brand	Days to flower	Flower duration	Days to mature	Plant height	Lodging	Oil [†]	Test weight	Yield	
									2017	2-Yr Avg
		(DAP*)	(Days)	(DAP*)	(in)	(0-9°)	(%)	(lb/bu)	(lb/a)	(lb/a)
A120	Agrisoma	56	13	101	45	1	33.1	52.0	2681.6	3292.8
L140P**	Bayer	52	15	97	46	1	36.8	49.6	2740.2	3236.1
DH-40.008	Agrisoma	57	16	105	49	0	34.0	52.4	2712.1	-
DH-146.842	Agrisoma	59	11	109	27	0	36.1	51.5	2342.5	-
DH-69.485	Agrisoma	60	11	105	43	0	33.9	52.1	2174.8	-
DH-56.149	Agrisoma	60	11	105	47	0	30.9	52.7	2142.9	-
Mean		57.3	12.9	103.7	42.7	0.4	34.14	51.71	2465.68	3264.45
C.V. (%)		-	-	-	-	-	2.47	0.49	15.43	-
LSD (5%)		-	-	-	-	-	1.56	0.46	702.01	-
LSD (10%)		-	-	-	-	-	1.26	0.38	568.87	-

Location: Latitude 48 9.9222°N; Longitude 103 6.132°W; Elevation 1902 ft

Planted: 5-2-2017

Previous crop: Durum

Harvested: 9-7-2017

 Plot size: 48.75 ft²

Soil type: Lihen Loamy Fine Sand

Soil test to (0-6"): P=16 ppm; K=195 ppm; pH=7.6; OM=2.2%

(0-24"): NO3-N=52 lb/a

Applied fertilizer in lb/a broadcast: 319 lbs of Urea (46-0-0)

Yield goal: 2,500 lbs/a

Planting population: 720,000 seeds/a

Herbicides applied: Sonolan 2pt/a (5/4/2017), Section 2EC 8oz/a + Trophy Gold 2qt/100gal H2O (6/26/2017)

Fungicides applied: Priaxor 8oz/a (6/28/2017)

Rainfall: 6.74 in. (5/2/2017 - 9/7/2017)

Irrigation: 12.8 in. (5/2/2017 - 9/7/2017)

**Canola variety used as check

†Days After Planting

†0: no lodging - 9: plants lying flat on ground

†Oil content adjusted to a 8.5% moisture