

Sunflower Irrigated Variety Trial - NDSU

WREC, Nesson Valley, ND 2020

| Variety | Brand / Company | Oil Type | Plant Height (in) | Days to Flower (DAP*) | Days to Maturity (DAP*) | Oil [†] | | Test Weight (lb/bu) | Harvest Moisture (%) | Yield [‡] | |
|------------------|------------------|----------|-------------------|-----------------------|-------------------------|------------------|--------------|---------------------|----------------------|--------------------|-----------------|
| | | | | | | 2020 (%) | 2-Yr Avg (%) | | | 2020 (lb/a) | 2-Yr Avg (lb/a) |
| SF440 | S&W Seed Company | HO | 75 | 72 | 116 | 33.8 | - | 31.8 | 8.9 | 3188.6 | - |
| N4H470 CL Plus | NuSeed | HO | 70 | 70 | 116 | 34.7 | 38.2 | 32.3 | 9.7 | 3108.4 | 2969.3 |
| N4H302 E | NuSeed | HO | 63 | 69 | 116 | 32.5 | 35.3 | 29.8 | 8.6 | 3075.3 | 2794.0 |
| E-50016 | Proseed | HO | 71 | 70 | 116 | 30.4 | - | 29.2 | 7.8 | 3010.1 | - |
| H44HO12CL | Dyna-Gro | HO | 67 | 65 | 115 | 34.8 | 37.5 | 31.8 | 8.5 | 2922.7 | 2516.0 |
| H45HO10EX | Dyna-Gro | HO | 66 | 68 | 117 | 33.4 | 36.4 | 28.8 | 7.9 | 2853.3 | 2546.9 |
| Camaro II | NuSeed | NS | 72 | 69 | 115 | 32.1 | 36.1 | 32.3 | 8.6 | 2833.6 | 2719.4 |
| H42HO18CL | Dyna-Gro | HO | 65 | 66 | 115 | 32.6 | 35.7 | 31.0 | 7.7 | 2729.6 | 2509.3 |
| E-91 E | Proseed | HO | 76 | 69 | 116 | 32.3 | 34.0 | 30.8 | 7.9 | 2689.8 | 2392.3 |
| SF110 | S&W Seed Company | HO | 70 | 67 | 116 | 32.5 | - | 31.7 | 7.5 | 2640.6 | - |
| E-93 E | Proseed | NS | 76 | 68 | 115 | 30.2 | - | 28.5 | 7.9 | 2611.9 | - |
| 12G25 CL | Proseed | HO | 67 | 67 | 115 | 33.6 | - | 31.9 | 8.9 | 2386.8 | - |
| Falcon | NuSeed | NS | 66 | 70 | 116 | 32.0 | 36.2 | 31.2 | 7.7 | 2320.1 | 2699.1 |
| MEAN | | | 69.4 | 68.3 | 115.6 | 32.7 | 36.2 | 30.9 | 8.3 | 2797.7 | 2643.3 |
| C.V. (%) | | | 6.5 | 1.5 | 0.6 | 3.32 | - | 2.50 | 7.26 | 14.97 | - |
| LSD (5%) | | | 7.7 | 1.7 | 1.2 | 1.83 | - | 1.30 | 1.00 | 705.77 | - |
| LSD (10%) | | | 6.4 | 1.4 | 1.0 | 1.52 | - | 1.08 | 0.83 | 585.05 | - |

* Days after planting + 0: no lodging - 9: plants lying flat on the ground † Oil content adjusted to 10% moisture ‡ Yield adjusted to harvest moisture

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

Elevation: 1902 ft

Soil test (0-6 in.): P=20 ppm; K=134 ppm; pH=7.7; OM=1.9%

Previous crop: Winter Wheat

(0-24 in.): NO₃-N=29 lb/a

Planted: 5/27/2020

Yield goal: 2,5000 lb/a

Harvested: 11/5/2020

Planting population: 22,000 seeds/a

Soil type: Lihen Loamy Fine Sand

Fertilizer applied: 270 lb/a of Urea (46-0-0) [5/28]

Plot size: 90 ft²

Herbicides applied: Prowl H2O (2pt/a) [5/29], Cornerstone (32oz/a), Class Act NG (1qt/100gal) [5/29],

Rainfall: 5.0 inches [5/27-11/5]

Section 3 (5.33oz/a), Superb (1qt/100gal) [6/26]

Irrigation: 18.8 inches [5/27 -11/5]

Fungicides applied: none applied