

A652-24 (February 2025)

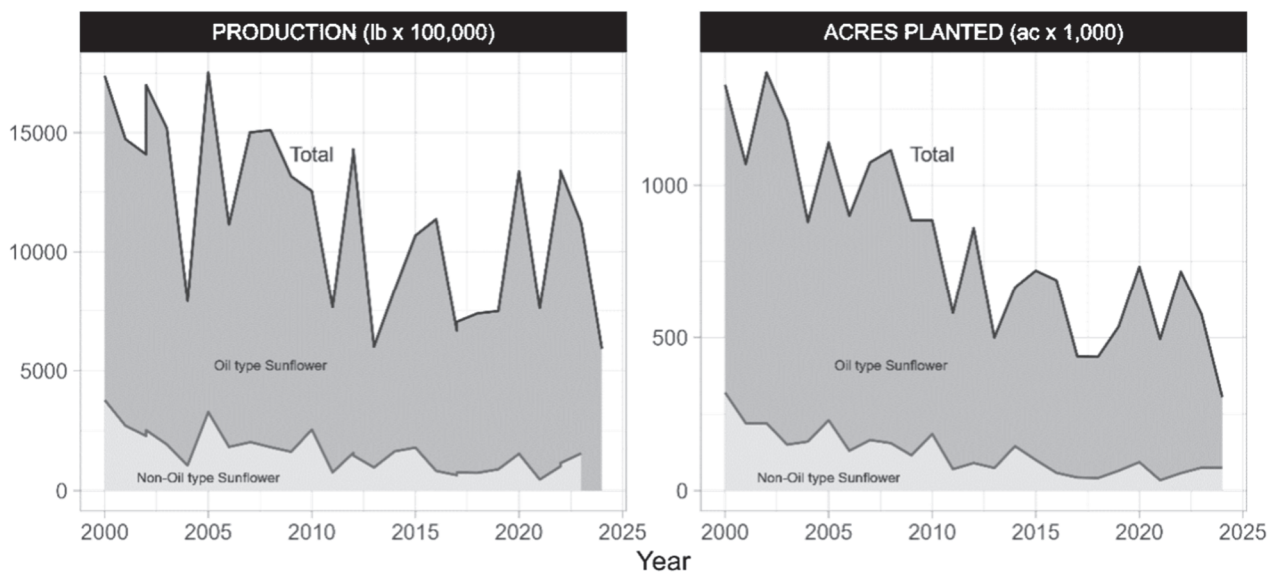
North Dakota Sunflower

Variety Trial Results for 2024 and Selection Guide

Ana Carcedo (North Dakota State University, Main Station); B. Hulke, B. Koehler, Z. Tippins, and A. Berger (Sunflower Unit, U.S. Department of Agriculture-Agricultural Research Service, Fargo); Mike Ostlie, Kristin Simons (Carrington Research Extension Center); Leandro Bortolon, Austin Kraklau, Jayden Hansen (North Central Research Extension Center); Bryan Hanson, Lawrence Henry, Richard Duerr (Langdon Research Extension Center); John Rickertsen (Hettinger Research Extension Center), Justin Jacobs (Williston REC).

Sunflower production in North Dakota has undergone significant changes in recent years, particularly in the distribution between oil-type and non-oil-type sunflowers. The state's sunflower acreage reached a peak of 733,000 acres in 2020 but has since declined to 305,000 acres in 2024. In 2023, oil-type sunflowers covered 500,000 acres, yielding over 965 million pounds. In contrast, non-oil-type sunflowers, though still important, occupied only 75,000 acres and produced 155 million pounds. While oil-type sunflower production has fluctuated in recent years, it remains the dominant crop in the state, whereas non-oil sunflower acreage and production have remained relatively stable.

Figure 1. Sunflower Production, and Acres Planted North Dakota 2000-2024. Data from USDA-NASS.
Total production and acres are divided in Oil (dark grey) and Non-Oil types (light grey).



List of Tables

Table 1. Sunflower Oilseed, Minot, ND. Data from the North Central Research Extension Center.

Table 2. Sunflower Confection (non-oil), Minot, ND. Data from the North Central Research Extension Center.

Table 3. Sunflower Oilseed, Fargo, ND. Data from B. Hulke, B. Koehler, Z. Tippins, and A. Berger.

Table 4. Sunflower Non-oilseed, Fargo, ND. Data from B. Hulke, B. Koehler, Z. Tippins, and A. Berger.

Table 5. Fatty Acid Trial, Fargo, ND. Data from B. Hulke, B. Koehler, Z. Tippins, and A. Berger.

Table 6. Sunflower Oilseed, Nesson Valley, ND. Data from Williston Research Extension Center.

Table 7. Sunflower Confection (non-oil), Nesson Valley, ND. Data from Williston Research Extension Center.

Table 8. Sunflower Confection (Non-oil). Data from Langdon Research Extension Center.

Table 9. Sunflower Oilseed. Data from Langdon Research Extension Center.

Table 10. Sunflower Oilseed. Data from Hettinger Research Extension Center.

Data from Carrington REC was not included due to hail damage.

About This Publication

Variety trial data from all North Dakota State University Research Extension Centers for all crops can be found at www.ag.ndsu.edu/varietytrials and the variety selection tool at <https://vt.ag.ndsu.edu/>.

The agronomic data presented in this publication are from replicated research plots using experimental designs that enable the use of statistical analysis. The least significant difference numbers beneath the columns in tables are derived from the statistical analyses. If the difference between two varieties exceeds the LSD value, it means that with 95% or 90% probability (LSD 5% or 10% level), the higher-yielding variety has a significant yield advantage. If the difference between two varieties is less than the LSD value, then the variety yields are considered similar.

The coefficient of variation (CV) is a measure of variability in the trial and is expressed as a percentage. Large CVs mean a large amount of variation that could not be attributed to differences in the varieties. Only compare values within the table and look for trends for the desired trait among different experimental sites and years.

Sunflower harvest yields were adjusted to 10% moisture. Most of the tables have footnotes explaining information in the table under which they appear. Traits to consider when selecting a sunflower hybrid include yield potential in your area, oil content (for the oil types), test weight, reaction to problematic diseases and insects, maturity date and the weed control system. When selecting a confection sunflower hybrid, the seed size is very important.

Among similar-yielding oilseed hybrids, select the one with the highest oil content. Oil content is intended to differentiate between hybrids at one location. LSD values should be used to determine differences between hybrids. The oilseed crushing market pays a premium for more than 40% oil (at 10% moisture) and discounts for less than 40% oil. Another factor to consider is the oil type. Hybrids are available with traditional (linoleic), midoleic (NuSun) and high-oleic oil compositions. Markets may pay a premium based on the composition of the oil produced by a particular hybrid.

Maturity is especially important if planting is delayed. Yield and oil content often are reduced when a hybrid is damaged by frost before it is fully mature. Often with delayed planting, only an early hybrid will mature and exhibit its full yield potential. An early hybrid likely will be drier at harvest than a later-maturing hybrid, thus reducing drying costs.

The most economical and effective means of managing sunflower diseases and other pests is to plant resistant or tolerant hybrids and keep a minimum of four years of rotation between successive sunflower crops. Most commercial sunflower hybrids in the U.S. have resistance to downy mildew and rust. Some hybrids also may exhibit tolerance to *Phomopsis* stem canker or sunflower midge. Clearfield® and ExpressSun™ hybrids are resistant to Beyond Xtra® and Express® herbicides, respectively. Consult the seed company for information on the reaction of a particular hybrid to diseases and other pests that may pose risks in your growing area.

When selecting a high-yielding and good-quality hybrid, use data that summarize several years and locations. Choose the hybrid that, on average, performs the best at multiple locations near you during several years.

Research specialists and technicians contributed to the fieldwork and data compilation. Secretaries contributed in entering data into the respective sections of this document. We greatly appreciate the assistance provided by everyone involved.

Presentation of data for the varieties tested does not imply approval or endorsement by the authors or agencies conducting the tests. NDSU approves the reproduction of any table in this publication only if no portion is deleted, appropriate footnotes are given, the order of the data is not rearranged and NDSU is credited for the data.

Table 1. Sunflower Oilseed, Minot, ND. Data from the North Central Research Extension Center.

Sunflower Oilseed							Minot, ND				
Company/ Brand	Variety	Days to Flowering	Days to maturity	Plant Height	Test Weight	Oil	Yield				
		(days) ¹	(days) ¹	(inch)	(lb/bu)	(%)	2022	2023	2024	2-yr avg	3-yr avg
							(lb/a)				
Croplan	CP455E	76	145	51	29.4	38.0	2663	3223	2539	2881	2808
Croplan	CP4255E	76	144	55	31.3	40.2	--	2407	2162	2285	--
Croplan	CP4475E	76	139	57	28.7	38.6	--	3260	2875	3068	--
Croplan	CP5249CL	77	139	51	30.4	46.6	--	2909	3035	2972	2972
Croplan	CP5242CL	79	143	54	28.6	44.3	--	--	2018	--	--
Croplan	CP7919CL	84	144	52	30.1	44.4	3048	3497	4118	3808	3554
Dyna-Gro	H49HO19CL	83	139	51	30.4	42.0	2338	2068	3219	2644	2542
Dyna-Gro	H50HO20CP	79	140	55	31.9	45.5	2242	2227	1874	2051	2114
Dyna-Gro	H45HO10EX	77	142	57	27.6	41.8	1850	2867	2886	2877	2534
Dyna-Gro	H47HO11EX	81	143	62	31.2	38.1	2078	3097	2229	2663	2468
Nuseed	N4H422 CL	79	144	55	31.2	41.8	2725	--	2309	2517	--
Nuseed	N4H470 CLP	79	144	57	32.4	46.3	3071	--	3006	3039	--
Nuseed	N4H490 E	83	138	57	31.2	42.5	--	--	2730	--	--
Proseed	50068 CL	86	142	53	30.0	39.1	--	2868	3377	3123	--
Proseed	E-2446 E	76	142	61	31.0	39.5	--	--	1475	--	--
RAGT Semences	AC2201	81	144	61	32.6	40.5	2203	2612	1617	2115	2144
RAGT Semences	AC2101	80	139	59	26.8	36.6	1891	2464	1828	2146	2061
RAGT Semences	AC2202	85	142	65	26.4	40.2	--	2665	1898	2282	--
Sunrich Products	4415 HO/DM/CLP	82	138	48	29.8	39.0	--	2717	3547	3132	--
Sunrich Products	4425CL	81	139	54	29.0	37.4	--	3684	3025	3355	--
Med Maturity Check	8N270CLDM	75	136	47	29.5	39.7	1041	2441	2886	2664	2123
Early Maturity Check	Honeycomb	68	133	45	25.3	32.1	793	1594	1571		
Late Maturity Check	CP559CL	81	139	59	28.7	42.0	2328	2510	3614	3062	2817
Long Term Check	Hybrid 894	77	136	52	30.6	43.6	1254	1747	2345	2046	1782
Trial Mean	--	79	141	55	30	41	2155	2548	2591	--	--
C.V. %	--	5	2	9	6	8.5	12.6	7.6	27	--	--
LSD 10%	--	3	3	7	3	3.6	369	272	423	--	--

¹ Days after planting.

Planting date: May 22, 2024

Harvest date: October 22, 2024

Seeding rate: 21,000 live seeds/acre

Previous crop: wheat

Row spacing: 30"

Soil type: Williams loam

Tillage system: strip-till

Table 2. Sunflower Confection (non-oil), Minot, ND. Data from the North Central Research Extension Center.

Sunflower Confection (non-oil)							Minot, ND				
Company/ Brand	Variety	Days to Flowering	Days to maturity	Plant Height	Test Weight	Oil	Yield				
		(days) ¹	(days) ¹	(inch)	(lb/bu)	(%)	2022	2023	2024	2-yr avg	3-yr avg
							(lb/a)				
CHS	RH1121	86	147	57	24.9	21.6	--	--	4232	--	--
CHS	RH609CLP	80	142	53	19.8	21.2	--	--	3190	--	--
CHS	RRC2319	83	147	61	19.5	23.2	--	--	2962	--	--
CHS	RRC2414	82	149	69	19.9	25.2	--	--	3436	--	--
Dyna-Gro	H45NS16CL	75	134	50	32.2	43.0	1721	1321	2271	1796	1771
Sunrich Products	SS91	77	151	54	22.2	24.5	2687	--	2080	2384	--
Sunrich Products	SS92CL	74	137	46	22.8	21.2	1716	--	2471	2094	--
Long Term Check	Hybrid 924	83	139	55	25.7	26.5	1487	2129	1508	1819	1708
Trial Mean	--	80	143	56	23	25.8	2155	2548	2769	--	--
C.V. %	--	5	4	13	18	9.1	12.6	7.6	31	--	--
LSD 10%	--	5	5	7	4.75	3.4	369	272	568	--	--

¹ Days after planting.

Planting date: May 22, 2024

Harvest date: October 22, 2024

Seeding rate: 21,000 live seeds/acre

Previous crop: wheat

Row spacing: 30"

Soil type: Williams loam

Tillage system: strip-till

Table 3. Sunflower Oilseed, Fargo, ND. Data from B. Hulke, B. Koehler, Z. Tippins, and A. Berger.

Sunflower Oilseed									Fargo, ND
Company/ Brand	Hybrid	Days to Flowering	Days to Maturity	Height	Test Weight	Seed Moisture	Oil	Seed Yield	Hulling Screen ¹
		(days) ²	(days) ²	(inch)	(lb/bu)	(%)	(%)	(lb/a)	
DynaGro	H45HO10EX	65		71	31.3	8.6	42.1	2,401	
DynaGro	H45NS16CL	64	113	72	36.1	8.9	43.2	2,249	
DynaGro	H47HO11EX	67	117	81	35.7	10.5	39.9	2,041	
DynaGro	H49HO19CL	70	114	74	32.5	11.3	43.6	2,503	
DynaGro	H50HO20CP	68	114	65	33.4	10.6	46.9	2,949	
DynaGro	XH41H56CL	54	112	54	32.2	8.9	36.4	1,481	
DynaGro	XH41H90EX	69	114	74	34.0	10.7	42.5	2,571	
Nuseed	Badger DMR	64	112	74	31.7	8.0	34.3	2,825	Exc.
Nuseed	N4H205 E	67	112	74	32.5	8.8	46.0	2,893	
Nuseed	N4H337 E	67	114	74	34.1	9.3	42.9	2,530	
Nuseed	N4H422 CL	65	113	74	34.3	9.5	40.5	2,631	
Nuseed	N4H462 E	68	112	74	33.3	11.6	45.8	2,500	
Nuseed	N4H470 CLP	68	115	74	33.6	10.2	46.6	2,579	
Nuseed	N4H490 E	70	115	74	33.6	10.6	42.6	2,507	
Nuseed	N5H493 CL	69	113	74	30.0	9.2	29.3	1,828	Exc.
Pioneer Hi-Bred	P63HE920	69	116	74	35.7	12.9	39.1	2,775	
Pioneer Hi-Bred	P64HE101	69	116	74	34.8	12.6	39.9	3,176	
Pioneer Hi-Bred	P64HE188	69	114	74	34.1	11.6	42.7	2,275	
Proseed	2508 CP	70	116	74	33.1	9.9	37.5	1,270	Average
Proseed	2534 E	68	114	74	33.6	9.6	43.0	2,818	Poor
Proseed	2591 CP	68	114	74	34.3	10.3	44.8	2,645	Poor
Proseed	50068 CL	66	113	74	33.1	9.8	40.8	2,546	Poor
Proseed	E-2446 E	71	117	74	31.1	10.4	38.3	1,741	Poor
Proseed	E-93 E	70	115	74	29.2	9.2	36.8	1,047	
RAGT Semences	AC2101	65	114	74	31.0	8.0	38.8	1,189	
RAGT Semences	AC2201	67	114	74	34.6	10.0	38.9	1,616	
RAGT Semences	AC2202	67	117	74	33.4	9.0	41.5	1,394	
Sunrich	4415 HO/DM/CLP	66	111	74	32.6	9.4	41.4	2,518	
Sunrich	4425CL	65	113	74	32.1	8.5	35.7	2,182	
USDA	Honeycomb NS ³	55	104	74	31.5	7.7	35.6	1,538	
USDA	Hybrid 894 ⁴	65	109	74	33.1	8.6	42.1	2,055	
Winfield United	CP4157E	65	115	74	33.2	10.3	40.9	2,732	Average
Winfield United	CP4255E	65	116	74	34.5	11.1	40.1	2,217	Poor
Winfield United	CP4475E	64	114	74	34.6	8.9	41.6	2,530	Average
Winfield United	CP455E	66	113	74	34.1	9.7	42.3	2,556	Poor
Winfield United	CP5249CL	64	113	74	30.8	8.4	46.7	2,861	Poor
Winfield United	CP7919CL	68	115	74	32.5	10.8	44.8	3,568	Average
Trial Mean		66	114	74	33.1	9.8	41.0	2,329	
C.V. %		1.7	1.1	74	1.9	8.0	2.2	13.1	
LSD 5%		2	2	74	1.0	1.3	1.5	500	
LSD 10%		2	2	74	0.9	1.1	1.2	418	

Planted: June 6th. Harvested: Oct. 28th. Previous crop: soybeans.

¹ Hulling screen: Exc. = 65% of seed over a 14/64 inch screen; Average = 75% of seed over a 13/64 inch screen; Poor = meets neither criteria.

² Days after planting. Maturity checks: Honeycomb NS = 104 DAP, 8N270CLDM = 108 DAP, 559CL = 113 DAP.

³ Early maturing check.

⁴ Type: TR-Traditonal, NS-NuSun, MO-Mid Oleic, HO-High Oleic, CL=Clearfield,

⁵ Moderate damage from Midge and Bud Moth.

Table 4. Sunflower Non-oilseed, Fargo, ND. Data from B. Hulke, B. Koehler, Z. Tippins, and A. Berger.

Sunflower - Confection (non-oil)												Fargo, ND	
Company/ Brand	Hybrid	Days to Flowering	Days to Maturity	Test Height	Seed Weight	Seed Moisture	Seed Yield	Seed over screen			Seed size		Nut- meat
		(days) ¹	(days) ¹	(inch)	(lb/bu)	(%)	(lb/a)	22/64	20/64	18/64	L	W	(%)
Argensun	H8117EXP	67	121	77	21.3	9.3	2,097	84	94	98	22	9	47
Argensun	H9219EXP	69	117	75	21.1	8.0	2,597	82	92	97	18	10	52
Argensun	Valia 41	67	113	76	23.4	8.3	2,186	82	94	98	19	9	50
Argensun	Valia V5195	66	118	72	20.6	11.7	1,936	89	96	98	22	10	46
Argensun	Valia V8100	72	120	78	22.7	10.3	1,777	76	91	97	24	9	53
CHS	RH1121	65	115	79	23.7	8.0	2,220	86	94	98	18	10	51
CHS	RH609CLP	66	115	79	23.1	7.8	2,275	80	93	97	20	10	49
CHS	RRC2319	66	115	77	22.5	9.8	2,174	73	88	96	21	10	54
CHS	RRC2414	66	114	83	21.7	9.3	2,483	88	96	99	19	10	52
Sunrich Products	SS91	65	117	74	25.2	8.8	1,760	39	71	90	18	8	53
USDA	Hybrid 924 ²	64	111	72	24.6	6.8	1,592	37	62	81	18	9	54
Trial Mean		67	116	76	22.7	8.9	2,100	74	88	95	20	9	51
C.V. %		2.1	2.2	4.9	3.8	19.6	9.9	--	--	--	--	--	--
LSD 5%		2	4	6	1.5	3.0	354	--	--	--	--	--	--
LSD 10%		2	4	5	1.2	2.5	293	--	--	--	--	--	--

Planted: June 6th. Harvested: Oct. 28th. Previous crop: soybeans.

¹ Days after planting (DAP). Maturity checks: Honeycomb NS = 104 DAP, 8N270CLDM = 108 DAP, 559CL = 113 DAP.

² Long-term hybrid check.

³ Moderate damage from Midge and Bud Moth.

Table 5. Fatty Acid Trial, Fargo, ND. Data from B. Hulke, B. Koehler, Z. Tippins, and A. Berger.

Sunflower - Fatty Acid Trial												Fargo, ND	
Company/ Brand	Hybrid	Type ¹	Palmitic			Stearic			Oleic			Linoleic	
----- (% ± SEM) -----													
Nuseed	N4H205 E	HO	3.9	±	0.2	2.5	±	0.1	79.4	±	1.9	14.3	± 1.7
Nuseed	N4H337 E	HO	3.7	±	0.2	2.8	±	0.1	84.5	±	2.7	9.0	± 2.4
Nuseed	N4H462 E	HO	3.5	±	0.1	2.4	±	0.1	87.0	±	1.2	7.2	± 1.1
Nuseed	N5H493 CL	HO	4.2	±	0.2	3.5	±	0.2	81.1	±	2.0	11.3	± 1.8
Proseed	2508 CP	HO	3.2	±	0.1	3.2	±	0.2	90.4	±	0.3	3.2	± 0.2
Proseed	2534 E	HO	3.4	±	0.1	2.7	±	0.1	88.1	±	0.9	5.8	± 0.8
Proseed	2591 CP	HO	3.5	±	0.3	3.3	±	0.1	86.5	±	2.0	6.7	± 1.8
Proseed	50068 CL	HO	3.6	±	0.1	3.1	±	0.1	89.1	±	1.2	4.2	± 1.1
Proseed	E-2446 E	HO	3.4	±	0.1	4.7	±	0.2	89.8	±	0.3	2.2	± 0.2
Sunrich Products	4415 HO/DM/CLP	HO	3.5	±	0.1	3.1	±	0.1	90.0	±	0.2	3.4	± 0.3
Sunrich Products	4425CL	HO	3.5	±	0.2	3.8	±	0.1	77.6	±	2.3	15.2	± 2.2
Sunrich Products	SS91	HO	3.3	±	0.1	2.2	±	0.2	82.0	±	2.3	12.5	± 2.3

¹ HO = high oleic, NS = NuSun.

² Moderate damage from Midge and Bud Moth.

Table 6. Sunflower Oilseed, Nesson Valley, ND. Data from Williston Research Extension Center.

Sunflower Oilseed - Irrigated				WREC, Nesson Valley, ND	
Hybrid	Hundred Seed Weight	Seeds Per Pound	Test Weight	Oil	Yield
	(g)	(seeds)	(lb/bu)	(%)	(lb/a)
N4H422 CL	6	7091	32.4	42.6	2542
N4H490	5	9130	33.6	43.3	2437
4425 CL	7	6521	32.3	38.9	2414
4415 HO/DMR/CLP	6	7629	28.7	38.7	2390
CP4475E	5	9687	33.0	41.1	2387
CP455E	6	7509	32.5	40.5	2355
LS006	5	8439	32.8	40.9	2215
N4H205E	5	8306	32.0	44.0	2160
LS003	7	6286	30.7	39.1	2109
LS005	5	9598	33.2	39.1	2094
CP4457E	7	6692	33.0	40.5	2033
LS001	5	9412	29.0	39.3	1988
N4H470 CLP	5	9461	31.1	46.5	1954
LS002	5	9236	32.2	38.8	1948
LS007	6	7103	31.5	41.9	1936
LS004	8	5374	31.8	35.1	1483
Trial Mean	6	7967	32	40.6	2153
C.V. %	18	17	4	6	12
LSD 10%	0.5	873	0.8	2.2	571

Table 7. Sunflower Confection (non-oil), Nesson Valley, ND. Data from Williston Research Extension Center.

Sunflower Confection (non-oil) - Irrigated				WREC, Nesson Valley, ND	
Hybrid	Hundred Seed Weight	Seeds Per Pound	Test Weight	Oil	Yield
	(g)	(seeds)	(lb/bu)	(%)	(lb/a)
SS91	13	3467	24.8	25.70	2321
SS92CL	13	3503	20.5	19.60	1397
Trial Mean	13	3485	23	23	1859
C.V. %	0	0.5	9.6	13	25
LSD 10%	1.7	455	2.6	4.6	593

Table 8. Sunflower Confection (Non-oil). Data from Langdon Research Extension Center.

Sunflower Confection (non-oil)											Langdon, ND	
Company/ Brand	Hybrid	Type ¹	Days to Flowering	Days to Maturity	Plant Height	Test Weight	Harvest Moist.	Seed over screen			Yield	
								22/64	20/64	18/64	2024	2-yr Avg.
			(days) ³	(days) ³	(inch)	(lbs/bu)	(%)	(%)	(%)	(%)	----- (lb/a) -----	
Sunrich	SS91	Trad.	73	131	62	26.3	20	49	90	94	1893	2160
Sunrich	SS92CL	CL	69	127	51	24.7	18	77	97	98	1631	2128
USDA ²	924	Trad.	71	128	58	27.8	22	7	45	84	1131	1861
Trial Mean			71.3	128.1	57.7	25.9	18.9	--	--	--	1887	--
C.V. %			1.2	1.2	5.5	4.9	15.9	--	--	--	13.1	--
LSD 10%			1.1	2.0	4.0	1.6	3.8	--	--	--	312	--

*Planting Date: May 30**Harvest Date: October 25**Previous Crop: Wheat**Soil Type: Svea-Barnes loam*¹ Trad. = no herbicide tolerance trait, CL=Clearfield² Long term hybrid check.³ Days after planting*Data includes only released hybrids. Experimental lines are not included. Statistics reflect the e*

Table 9. Sunflower Oilseed. Data from Langdon Research Extension Center.

Sunflower - Oilseed									Langdon, ND	
Company/ Brand	Hybrid	Type ¹	Days to Flowering (days) ²	Days to Maturity (days) ²	Plant Height (inch)	Oil (%)	Test Weight (lb/bu)	Harvest Moist. (%)	Yield 2024 2-yr Avg. -----lb/a-----	
Croplan	CP4255E	HO,EX,DMR	73	131	65.0	43.5	34.2	17.2	2146	2416
Croplan	CP4475E	HO,EX,DMR	74	128	69.1	44.3	33.1	13.0	2500	2634
Croplan	CP455E	HO,EX,DMR	76	127	59.1	43.1	33.1	14.0	2629	2619
Croplan	CP5238CL	HO,CL	78	130	64.6	46.8	31.0	19.1	2687	--
Croplan	CP5249CL	HO,CL,DMR	74	125	58.5	47.7	31.1	11.1	2148	2134
Croplan	CP7919CL	HO,CL,DMR	77	129	57.1	44.1	31.6	17.6	2346	--
DynaGro	H45HO10EX	HO,EX	76	125	66.1	44.5	29.6	11.3	2462	2263
DynaGro	H45NS16CL	NS,CL,DMR	73	126	54.6	44.3	33.7	13.3	2185	2232
DynaGro	H47HO11EX	HO,EX,DMR	77	130	67.1	44.2	35.4	17.8	2205	2338
DynaGro	H49HO19CL	HO,CL,DMR	78	128	58.5	45.3	30.2	18.1	2777	2863
DynaGro	H50HO20CP	HO,CP,DMR	78	127	63.1	48.0	30.8	13.3	2473	2251
LIDEA	LS002	HO,EX,DMR	72	126	65.4	42.6	33.0	13.1	2135	--
LIDEA	LS003	HO,EX	78	127	68.3	39.0	30.2	18.0	1449	--
LIDEA	LS004	HO,EX	77	128	75.5	39.7	30.9	15.7	1433	--
LIDEA	LS005	HO,EX	77	127	64.9	44.3	34.2	12.7	2532	--
LIDEA	LS007	HO,EX	78	127	68.7	43.3	32.7	15.2	2004	--
Nuseed	N4H205 E	HO,EX,DMR	76	123	61.0	45.8	28.9	11.2	2199	--
Nuseed	N4H422 CL	HO,CL,DMR	76	128	64.2	44.9	32.3	14.1	2715	2596
Nuseed	N4H470 CLP	HO,CP,DMR	76	127	64.3	48.3	31.9	13.6	2332	2152
Nuseed	N4H490 E	HO,EX,DMR	78	128	64.7	45.9	32.5	14.6	2777	2716
Pioneer	P63HE920	HO,EX,DMR	78	130	71.0	43.9	34.6	16.0	2483	2355
Pioneer	P64HE188	HO,EX,DMR	78	131	61.9	43.8	32.8	19.0	2104	--
Proseed	2508 CP	HO,CP,DMR	77	128	74.0	42.0	32.4	14.8	2308	--
Proseed	2534 E	HO,EX,DMR	78	128	61.5	47.2	32.6	15.6	2597	--
Proseed	2591 CP	HO,CP,DMR	77	127	65.7	49.9	32.2	13.4	2641	--
Proseed	50068 CL	HO,CL,DMR	76	128	62.9	45.2	31.7	15.3	2249	2245
Proseed	E-2446 E	HO,EX,DMR	78	127	67.7	40.2	32.0	15.9	2093	2184
Sunrich	HO/DMR/CLP	HO,CP,DMR	77	127	64.1	42.9	31.4	14.0	2580	2349
Sunrich	4425CL	MO,CL,CON	74	129	65.9	38.8	32.6	14.5	2203	2305
Check ³	USDA 894	Trad.	73	125	64.8	45.3	31.4	11.6	2073	2294
Trial Mean			76.9	127.2	65.4	43.6	32.0	15.1	2236	
C.V. %			1.0	1.2	4.9	3.4	2.7	10.9	14.0	
LSD 5%			1.1	2.1	4.3	2.0	1.2	2.2	426	

Planting Date: May 30; Harvest Date: October 25; Previous Crop: Wheat; Soil Type: Svea-Barnes Loam

¹ Type: HO = High Oleic, NS = NuSun, MO = Mid Oleic, Trad = Traditional(linoleic), CL = Clearfield, EX= ExpressSun, CP = Clearfield plus, DMR = Downy Mildew Resistant, CON=ConOil

² Days after planting

³ Long-term hybrid check

Days after planting maturity checks: Honeycomb NS=123, 8N270CLDM=124, 559CL=126

Data includes only released hybrids. Experimental lines are not included. Statistics reflect the entire trial.

Table 10. Sunflower Oilseed. Data from Hettinger Research Extension Center

Sunflower - Oilseed							Hettinger, ND		
Company/Brand	Hybrid	Oil Type & Traits ¹	Days to Flowering (days) ²	Plant Height (inches)	Test Weight (lb/bu)	Oil Content (%)	Yield		
							2024	2-Year	3-Year
							----- (lb/ac) -----		
CROPLAN	CP4255E	HO EX	65	48	30.1	41.1	1508	--	--
CROPLAN	CP4475E	HO EX	65	55	30.1	44.3	1710	--	--
CROPLAN	CP455E	HO EX	67	48	29.3	40.0	1492		2741
CROPLAN	CP5249CL	HO CL	66	42	29.2	40.4	1512	--	--
Dynagro	H45HO10EX	HO EX	66	48	28.9	39.7	1430	1934	2259
Dynagro	H45NS16CL	NS CL	65	48	30.3	41.6	1543	2110	2325
Dynagro	H47HO11EX	HO EX	68	57	30.5	40.5	1538	2141	2432
Dynagro	H49HO19CL	HO CL	71	47	30.2	41.0	1640	2351	2731
Dynagro	H50HO20CP	HO CP	70	49	29.2	43.1	1459	--	--
Dynagro	XH41H56CL	HO CL	55	37	31.7	39.5	1528	--	--
Dynagro	XH41H90EX	HO EX	72	47	30.0	39.8	1311	--	--
Lidea	LS001	MO EX	65	47	28.3	40.3	1379	--	--
Lidea	LS002	HO EX	65	51	29.8	41.6	1565	--	--
Lidea	LS003	HO EX	72	49	28.3	37.9	1340	--	--
Lidea	LS004	HO EX	69	55	27.9	37.1	1353	--	--
Lidea	LS005	HO CP	69	49	29.8	40.4	1640	--	--
Lidea	LS006	HO EX	69	48	29.1	39.6	1257	--	--
Lidea	LS007	HO EX	71	59	30.4	40.1	1431	--	--
Nuseed	N4H205 E	HO EX	69	43	28.6	41.9	1369	--	--
Nuseed	N4H337 E	HO EX	70	45	28.8	40.7	1406	--	--
Nuseed	N4H422 CL	HO CL	68	57	30.9	43.7	1794	2246	2654
Nuseed	N4H462 E	HO EX	70	46	30.7	42.5	1473	--	--
Nuseed	N4H470 CLP	HO CP	69	44	30.3	43.4	1514	2261	2791
Nuseed	N4H490 E	HO EX	72	47	30.2	39.3	1320		--
Proseed	2508 CP	HO CP	71	63	29.6	36.9	1243	--	--
Proseed	2534 E	HO EX	71	49	30.7	42.8	1502	--	--
Proseed	2591 CP	HO CP	68	50	30.8	43.8	1666	--	--
Proseed	50068 CL	HO CL	70	52	28.9	40.9	1483	--	--
Proseed	E-2446 E	HO EX	72	53	28.9	38.5	1321	--	--
RAGT	AC2101	HO CP	66	53	26.8	39.5	1435	1797	2296
RAGT	AC2201	HO CL	68	52	29.2	40.6	1290	1868	--
RAGT	AC2202	HO CL	70	54	29.1	42.0	1374	--	--
Sunrich	4415	HO CP	68	51	29.4	41.2	1320	1951	2284
Sunrich	4425 CL	MO CL	69	53	29.2	37.1	1586	2197	2743
Thunder	TEX2403SF	HO EX	72	50	27.3	39.2	1182	--	--
Thunder	TEX2404SF	HO EX	71	57	29.9	40.3	1664	--	--
USDA (Check)	894	Conv	67	53	29.4	38.4	1358	1798	2145
CROPLAN (Check)	559CL	NS CL	70	51	28.4	41.4	1537	2404	2758
USDA (Check)	Honeycomb	NS	60	47	27.9	40.6	1125	1284	1113
Mycogen (Check)	8N270CLDM	NS CL	62	46	29.9	41.6	1232	1739	1777
Trial Mean			68	50	29.3	40.4	1431	2028	2361
C.V. %			1.3	8.2	4.2	5.2	14.4	--	--
LSD 5%			1.1	4.8	1.4	2.5	243	--	--
LSD 10%			0.8	3.8	1.1	1.9	188	--	--

¹ Type: TR-Traditonal, NS-NuSun, MO-Mid Oleic, HO-High Oleic, CL=Clearfield, CP=Clearfield Plus, EX=ExpressSun.

² Days after planting.

Planting Date: June 3

Harvest Date: October 11

Previous Crop: Wheat

NDSU Extension does not endorse commercial products or companies even though reference may be made to tradenames, trademarks or service names.

For more information on this and other topics, see www.ndsu.edu/extension

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost, Title IX/ADA Coordinator, Old Main 100, 701-231-7708, ndsu.eoaa@ndsu.edu. This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881.