

North Dakota and South Dakota Sunflower Hybrid Trial Results for 2017 and Selection Guide

Hans Kandel (North Dakota State University); Febina Mathew, Nathan Braun and Paul Okello (South Dakota State University); Mike Ostlie, Blaine Schatz, Ezra Aberle and Kelly Bjerke (Carrington Research Extension Center); Eric Eriksmoen and Joe Effertz (North Central Research Extension Center, Minot); Bryan Hanson, Travis Hakanson and Lawrence Henry (Langdon Research Extension Center); Jerry Bergman, Gautam Pradhan, Emma Link and Austin Link (Williston Research Extension Center); John Rickertsen (Hettinger Research Extension Center)

Introduction

In North Dakota, an estimated 418,000 acres of sunflowers were harvested in 2017. This was about 37 percent less than the acres harvested in 2016. Table 1 contains acreage data for the past 18 growing seasons as reported by the North Dakota Agricultural Statistics Service, U.S. Department of Agriculture.

Table 1. Harvested Sunflower Acreage in North Dakota and Yield Per Acre 2000-2017.

Year	Oil Type (1,000 acres)	Yield (lb/a)	Non-oil Type (1,000 acres)	Yield (lb/a)
2000	965	1,410	300	1,260
2001	835	1,440	215	1,260
2002	1,105	1,310	210	1,200
2003	1,020	1,300	145	1,330
2004	660	1,040	130	810
2005	885	1,610	220	1,490
2006	740	1,260	120	1,520
2007	895	1,450	160	1,270
2008	930	1,430	150	1,210
2009	760	1,520	108	1,500
2010	685	1,460	177	1,440
2011	500	1,380	61	1,250
2012	755	1,700	88	1,670
2013	400	1,260	71	1,360
2014	510	1,340	139	1,180
2015	605	1,470	97	1,850
2016	610	1,730	53	1,550
2017	385	1,097 ¹	33	1,097 ¹

Source: National Agricultural Statistics Service.

¹Estimate by NASS for all sunflower, October 2017.

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EXPERIMENT STATION

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2017 Sunflower Performance Trials

Information about sunflower hybrid performance can be accessed on the web at www.ag.ndsu.edu/varietytrials/. This site has variety trial data from all NDSU Experiment Station locations.

The agronomic data presented in this publication are from replicated research plots using experimental designs that enable the use of statistical analysis. The LSD (least significant difference) numbers beneath the columns in tables are derived from the statistical analyses and apply only to the numbers in the column in which they appear. If the difference between two hybrids exceeds the LSD value, it means that with 95 percent probability (0.05 level) or 90 percent probability (0.10 level), the higher-yielding hybrid has a significant yield advantage. If the difference between two hybrids is less than the LSD value, then the hybrid yields are considered similar.

The abbreviation NS is used to indicate no significant difference for that trait among any of the hybrids. 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 hybrids. In the tables, the “mean” indicates the average of the observations in the trial. 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 percent moisture. In the tables, the sunflower hybrids are arranged in alphabetical order of the company/brand. Most of the tables have footnotes explaining, in more detail, 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 also of importance.

Among similar-yielding oilseed hybrids, select the one with the highest oil content. The oilseed crushing market pays a premium for more than 40 percent oil (at 10 percent moisture) and discounts for less than 40 percent oil.

Another factor to consider is the oil type. Hybrids are available with “traditional” (linoleic), high-oleic and midoleic (NuSun) oil composition. Markets may pay a premium based on the composition of the oil produced by a particular hybrid. Some companies offer guarantees for NuSun or high-oleic levels.

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 the planting of resistant or tolerant hybrids and 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® 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.

The presentation of data for the entries tested does not imply approval or endorsement by the authors or agencies conducting the tests. A listing of seed companies entering hybrids and their brand name is provided in Table 2. Weather data for North Dakota are provided in Table 3.

Research specialists and technicians helped with the field work and data compilation. The assistance given by many secretaries in typing portions of this document is much appreciated. A special thank you goes to Lisa Johnson, Extension Plant Sciences secretary, for assisting in the compilation of this publication.

Table 2. Full Company Name, Abbreviated Name Used in Tables and Website.

Company	Abbreviated	Website
AgVenture Pinnacle	AgVenture	www.agventure.com/sunflowers
CHS Royal Hybrid	CHS Royal Hyb.	www.chssunflower.com/product/hybrid-seed/products
Croplan/Land O'Lakes	Croplan	www.croplan.com
DuPont Pioneer	Pioneer	www.pioneer.com
Dyna-Gro Seed	Dyna-Gro	www.dynagroseed.com
Mycogen Seeds	Mycogen	www.mycogen.com
Nuseed Global/Americas	Nuseed	www.nuseed.com
NuTech Seed LLC	NuTech	www.nutechseed.com
Proseed Inc.	Proseed	www.proseed.net
Red River Commodities	Red River Comm.	www.redriv.com
SunOpta	SunOpta	www.sunopta.com
Thunder Seed	Thunder	www.thunderseed.com
U.S. Department of Agriculture	USDA	www.ars.usda.gov/plains-area/fargo-nd/rvvarc/docs/main/
Valia Genetics	Valia	--

Table 3. April-September 2017 Average Temperature, Precipitation and Rankings for Select North Dakota Locations.

Location	Average Temperature (Ranking)	Total Precipitation (Ranking)
Bowman	59.4 F (44th Warmest Period Since 1915)	7.4 inches (10th Driest Period Since 1915)
Bismarck	62.3 F (12th Warmest Period Since 1875)	11.1 inches (55th Driest Period Since 1875)
Cavalier	58.2 F (43rd Warmest Period Since 1934)	12.2 inches (32nd Driest Period Since 1927)
Fargo	61.9 F (24th Warmest Period Since 1881)	11.2 inches (20th Driest Period Since 1881)
Minot Exp. Station	59.6 F (29th Warmest Period Since 1905)	8.3 inches (14th Driest Period Since 1905)
Williston Exp. Station	62.0 F (9th Warmest Period Since 1894)	9.1 inches (41st Driest Period Since 1894)
North Dakota Average ¹	59.7 F (33rd Warmest Period Since 1895)	10.7 inches (14th Driest Period Since 1894)

Source: Adnan Akyüz, NDSU, North Dakota state climatologist.

¹Statewide values are calculated based on all available locations in North Dakota rather than the mathematical average of the list above.

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Table 4. 2017 Sunflower - Non-oilseed Hybrids With Traits and Locations Where Tested.

Company/ Brand	Hybrid	Hybrid Type ¹	Location in which the hybrid has been tested				
			Carrington	Langdon	Minot	Haakon	Onida
CHS Royal Hybrid	RH609CLP	CP	--	--	X	X	X
Nuseed	4334	CL	X	--	--	X	X
Nuseed	NSKM53777	CL	--	--	--	X	X
Nuseed	Panther DMR	Trad., DM	X	X	X	X	X
Red River Comm.	2215	Trad.	X	X	--	X	X
Red River Comm.	2215CL	CL	X	X	--	X	X
Red River Comm.	2217CP	CP	X	X	--	X	X
Red River Comm.	2310	Trad.	--	--	--	X	X
SunOpta	9510	Trad.	X	--	X	X	X
SunOpta	9524	Trad.	X	--	X	X	X
SunOpta	9549	Trad.	X	--	X	X	X
SunOpta	9553	Trad.	X	--	X	X	X
SunOpta	9590	Trad.	--	--	--	X	X
Valia	Valia 41	Trad.	X	--	--	X	X
USDA ²	924	Trad.	X	X	X	X	X

¹Hybrid type provided by companies.

CL = Clearfield, CP = Clearfield plus, Trad. = no herbicide tolerance trait, DM = downy mildew resistant.

²Long-term hybrid check.

Table 5. 2017 Sunflower - Oilseed Hybrids With Traits and Locations Where Tested (Page 1 of 2).

Company/ Brand	Hybrid	Hybrid Type ¹	Location in which the hybrid has been tested						
			Carrington	Hettinger	Langdon	Minot	Williston	Haakon	Onida
AgVenture	AF3H681ES	HO, EX, DM	--	--	--	--	--	X	X
AgVenture	AF3N692ES	NS, EX, DM	--	--	--	--	--	X	X
AgVenture	AF3N94CD	NS, CL, DM	--	--	--	--	--	X	X
AgVenture	AF4H95CD	HO, CL, DM	--	--	--	--	--	X	X
AgVenture	XF2N14CD	NS, CL, DM	--	--	--	--	--	X	X
AgVenture	XF4N08CD	NS, CL, DM	--	--	--	--	--	X	X
Croplan	3732	NS	X	X	X	X	X	--	X
Croplan	3845 HO	HO	X	X	X	X	X	--	X
Croplan	432 E	NS, EX, DM	X	X	X	X	X	--	X
Croplan	450 E HO	HO, EX, DM	X	--	X	--		--	X
Croplan	455 E HO	HO, EX, DM	X	X	X	X	X	--	X
Croplan	458 E HO	HO, EX, DM	X	X	X	X	X	--	X
Croplan	545 CL	NS, CL, DM	X	X	X	X	X	--	X
Croplan	549 CL	NS, CL, DM	X	X	X	X	X	--	X
Croplan	568 CL HO	HO, CL, DM	X	X	X	X		--	X
Croplan	7717 CL HO	HO, CL, DM	X	X	X	X	X	--	X
Croplan	7919 CL HO	HO, CL, DM	X	X	X	X	X	--	X
Dyna-Gro	XH71H11CL	HO, CL	X	--	--	X	--	--	X
Dyna-Gro	XH71H27CL	HO, CL	--	--	--	--	--	--	X
Dyna-Gro	XH71N33CL	NS, CL	X	--	--	X	--	--	X
Dyna-Gro	XH71N44CL	NS, CL	--	--	--	--	--	--	X
Dyna-Gro	XH72H22CL	HO, CL	--	--	--	--	--	--	X
Dyna-Gro	XH72H38CL	HO, CL	X	--	--		--	--	X
Dyna-Gro	XH72H47CL	HO, CL	X	--	--	X	--	--	X
Dyna-Gro	XH72H61CL	HO, CL	X	--	--	X	--	--	X
Dyna-Gro	XH72N54CP	HO, CP	--	--	--	--	--	--	X
Dyna-Gro	XH73H14CL	HO, CL	--	--	--	--	--	--	X
Dyna-Gro	XH73H32CL	HO, CL	--	--	--	--	--	--	X
Mycogen	8H449CLDM	HO, CL, DM	X	X	--	X	--	X	X
Mycogen	8D310CL	CON, CL, DM	X	X	--	X	--	--	X
Mycogen	E76437	HO, CL, DM	X	--	--	--	--	X	X
Mycogen	E83529CL	HO, CL, DM	--	X	--	--	--	--	--
Mycogen	MY8H270CL	HO, CL, DM	--		--	X	--	--	X
Mycogen	MY8H456CL	HO, CL, DM	X	X	--	--	--	X	X
Nuseed	Badger DMR	CON, CL, DM	X	X	X	X	X	X	X
Nuseed	Camaro II	NS, CL, DM	X	X	X	X	X	X	X
Nuseed	Cobalt II	HO, CL, DM	--	--	X	X	X	--	--
Nuseed	Falcon	NS, EX	X	X	X	X	X	X	X
Nuseed	Hornet	HO, CL, DM	X	X	--	X	--	X	X
Nuseed	N4HE302	HO, EX	--	--	X	--	--	--	--
Nuseed	N4HM340	HO, CL	X	X	--	--	--	--	--
Nuseed	N4HM354	NS, CL, DM	X	X	X	X	X	X	X
Nuseed	N4HP470	HO, CP	X	X	--	--	--	--	--
Nuseed	N5LM307	CON, CL, DM	X	X	X	X	X	X	X

Table 5. 2017 Sunflower - Oilseed Hybrids With Traits and Locations Where Tested (Page 2 of 2).

Company/ Brand	Hybrid	Hybrid Type ¹	Location in which the hybrid has been tested						
			Carrington	Hettinger	Langdon	Minot	Williston	Haakon	Onida
Nuseed	N4HE302	HO, EX	x	--	--	--	--	--	--
Nuseed	NHK12S111	HO, EX	--	x	--	--	--	--	--
Nuseed	Talon	NS, EX	--	--	x	x	x	x	x
NuTech	63C4 CL	NS, CL, DM	x	--	x	--	x	--	--
NuTech	68H7	HO, EX, DM	x	--	x	--	--	--	--
NuTech	69M2	NS, EX, DM	x	--	x	--	--	--	--
Pioneer	P63HE60	HO, EX, DM	x	--	x	--	--	--	--
Pioneer	P63HE90	HO, EX DM	x	--	x	--	--	x	x
Pioneer	P64ME01	NS, EX, DM	x	--	x	--	--	x	x
Proseed	12G25 CL	NS/HO, CL	x	x	x	x	--	x	x
Proseed	E-21 CL	NS/HO, CL, DM	x	x	x	x	--	x	x
Proseed	E-31 CL	NS/HO, CL, DM	x	x	x	x	--	x	x
Proseed	E-362436	NS/HO, DM	x	x	x	x	--	x	x
Proseed	E-50016 CL	NS/HO CL	x	x	x	x	--	--	--
Proseed	E-53051 CL	NS, CL	--	--	--	--	--	x	x
Proseed	E-71 CL	NS, CL	x	x	x	x	--	x	x
Proseed	E-72	NS	x	x	x	x	--	x	x
Proseed	E-73 CL	NS, CL	x	x	x	x	--	x	x
SunOpta	4415HO/CLP/DM	HO, CP, DM	x	--	--	x	--	--	x
SunOpta	4421 CL	NS/CON, CL	x	--	--	x	--	--	x
SunOpta	4425 CL	NS/CON, CL	x	--	--	x	--	--	x
Thunder	11N94	NS, CL, DM	x	x	x	x	--	x	x
Thunder	12N92	NS, CL, DM	x	x	x	x	--	x	x
Thunder	35H92	HO, CL, DM	x	x	x	x	--	x	x
Thunder	42H94	HO, CL, DM	x	x	x	x	--	x	x
Croplan ²	559 CL	NS, CL, DM	x	x	x	x	--	--	--
Mycogen ²	8N270CLDM	NS, CL, DM	x	x	x	x	--	--	--
USDA ²	Honeycomb NS	NS	x	x	x	x	--	--	--
USDA ³	894	Trad.	x	x	x	x	--	x	x

¹Hybrid type provided by companies; some hybrids may have additional traits.

HO = high oleic, NS = NuSun, CON = ConOil, Trad. = traditional (linoleic),

EX = ExpressSun, CL = Clearfield, CP = Clearfield plus, DM = downy mildew resistant.

²Honeycomb NS = early maturing check; 8N270CLDM = medium maturing check; and 559 CL = late maturing check.

³894 = Long-term hybrid check.

Table 6. 2017 Sunflower - Oilseed - Carrington N.D. - Authors, M. Ostlie, B. Schatz, E. Aberle and K. Bjerke (Page 1 of 2).

Company/ Brand	Hybrid	Days to Flower (DAP) ²	Plant Height (inch)	Plant Lodge ¹ (0-9)	Days to PM (DAP) ²	Test Weight (lb/bu)	Oil Content (%)	Seed Yield 2017 3-yr. Avg. ------(lb/a)-----	
Croplan	3732	72	59	0.8	127	31.6	47.5	2,234	--
Croplan	3845 HO	71	55	1.0	127	31.4	47.8	2,050	--
Croplan	432 E	67	61	0.3	125	31.5	39.8	2,844	2,072
Croplan	450 E HO	71	63	1.0	129	29.8	40.9	2,052	--
Croplan	455 E HO	70	64	1.0	128	30.9	42.7	2,232	--
Croplan	458 E HO	69	65	1.0	128	29.8	43.8	2,285	1,877
Croplan	545 CL	73	58	0.8	130	30.9	45.9	2,547	2,100
Croplan	549 CL	68	66	0	123	32.2	46.3	2,700	2,025
Croplan	568 CL HO	75	57	0.8	132	30.1	45.3	2,313	--
Croplan	7717 CL HO	70	59	1.3	127	31.1	44.4	1,917	--
Croplan	7919 CL HO	73	59	1.0	130	30.3	45.8	2,500	--
Dyna-Gro	XH71H11CL	68	55	0.8	125	31.7	44.0	1,929	--
Dyna-Gro	XH71N33CL	68	55	1.3	125	32.8	47.9	1,792	--
Dyna-Gro	XH72H38CL	70	58	1.3	127	30.7	47.3	2,496	--
Dyna-Gro	XH72H47CL	72	60	1.3	128	30.0	48.2	1,769	--
Dyna-Gro	XH72H61CL	69	54	1.3	125	31.4	47.7	1,840	--
Mycogen	8D310CL	72	63	1.0	127	26.9	36.9	1,934	2,025
Mycogen	8H449CLDM	71	61	1.3	129	33.5	49.2	2,477	2,158
Mycogen	E76437	78	72	1.0	130	29.9	45.7	2,125	--
Mycogen	MY8H456CL	73	67	1.3	128	29.7	49.4	1,749	--
Nuseed	Badger DMR	67	63	1.5	124	29.9	37.6	2,622	2,140
Nuseed	Camaro II	70	57	0.5	126	30.7	47.4	2,133	1,972
Nuseed	Falcon	70	60	1.3	126	31.8	44.8	1,376	1,636
Nuseed	Hornet	72	62	1.0	126	29.2	44.8	2,319	1,850
Nuseed	N4HM340	74	60	0.8	129	25.9	39.6	1,800	--
Nuseed	N4HM354	68	56	1.8	124	32.7	46.5	1,774	--
Nuseed	N4HP470	73	69	1.8	129	30.6	47.2	2,262	--
Nuseed	N5LM307	67	57	1.3	124	26.9	40.9	1,644	--
Nuseed	N4HE302	70	65	1.0	126	28.6	44.0	2,443	--
NuTech	63C4 CL	68	56	2.0	125	32.6	46.9	2,148	--
NuTech	68H7	72	64	1.5	128	31.5	40.1	1,624	1,704
NuTech	69M2	73	63	1.8	128	30.2	44.9	2,312	--
Pioneer	P63HE60	69	58	0.3	125	31.1	43.1	2,110	--
Pioneer	P63HE90	72	64	1.0	129	30.1	42.5	2,285	--
Pioneer	P64ME01	72	64	1.0	130	30.9	43.2	2,322	--
Proseed	12G25 CL	72	60	1.3	126	31.8	46.8	2,192	--
Proseed	E 50016 CL	72	64	1.0	127	29.6	44.5	2,328	--
Proseed	E-21 CL	72	69	1.5	128	28.3	38.1	1,770	--
Proseed	E-31 CL	72	66	1.3	129	27.8	40.2	2,054	1,616
Mean		70	61	1.0	127	30.4	43.8	2,093	1,828
CV %		1.4	8.1	61.5	1.7	2.3	3.4	15.0	--
LSD 0.05		1.3	6.8	0.9	2.9	1.0	2.1	434	--
LSD 0.10		1.1	5.7	0.7	2.5	0.8	1.7	364	--

Table 6. 2017 Sunflower - Oilseed - Carrington N.D. - Authors, M. Ostlie, B. Schatz, E. Aberle and K. Bjerke (Page 2 of 2).

Company/ Brand	Hybrid	Days to Flower (DAP) ²	Plant Height (inch)	Plant Lodge ¹ (0-9)	Days to PM (DAP) ²	Test Weight (lb/bu)	Oil Content (%)	Seed Yield 2017 -----lb/a-----	3-yr. Avg.
Proseed	E-362436	70	68	1.0	126	32.5	43.8	2,414	--
Proseed	E-71 CL	72	65	0.8	128	26.8	38.6	2,193	--
Proseed	E-72	74	71	1.0	130	29.4	44.2	1,909	--
Proseed	E-73 CL	73	68	1.3	127	27.5	39.2	2,312	--
SunOpta	4415HO/CLP/DM	70	62	1.3	125	29.8	43.7	1,924	1,617
SunOpta	4421 CL	72	63	1.3	128	27.8	35.0	1,805	1,901
SunOpta	4425 CL	70	62	0.5	127	29.8	39.6	2,267	--
Thunder	11N94	71	64	0.8	127	31.6	45.3	2,127	1,798
Thunder	12N92	68	56	1.3	125	32.7	47.4	1,961	--
Thunder	35H92	69	58	1.0	125	31.6	43.7	1,617	1,401
Thunder	42H94	73	64	1.3	129	29.3	44.7	1,745	1,706
Croplan ³	559 CL	71	61	0.5	129	31.5	44.2	2,762	2,099
Mycogen ³	8N270CLDM	67	54	0.8	123	30.5	43.9	1,911	1,808
USDA ³	Honeycomb NS	64	50	0.5	124	30.0	40.9	1,858	1,348
USDA ⁴	894	68	55	1.0	125	30.2	39.6	1,633	1,542
Mean		70	61	1.0	127	30.4	43.8	2,093	1,828
CV %		1.4	8.1	61.5	1.7	2.3	3.4	15.0	--
LSD 0.05		1.3	6.8	0.9	2.9	1.0	2.1	434	--
LSD 0.10		1.1	5.7	0.7	2.5	0.8	1.7	364	--

Planted: May 25. Harvested: Nov. 2. Previous crop: field pea.

¹Description of lodging: 0-none, 9-lying flat on the ground.

²Days after planting.

³Honeycomb NS = early maturing check; 8N270CLDM = medium maturing check; and 559 CL = late maturing check.

⁴894 = Long-term hybrid check.

Table 7. 2017 Sunflower - Non-oilseed - Carrington N.D. - Authors, M. Ostlie, B. Schatz, E. Aberle and K. Bjerke.

Company/ Brand	Hybrid	Days to Flower	Plant Height	Days to PM	Seed Over Screen			Harvest Moist.	Test Weight	Seed Yield	
					22/64	20/64	18/64			2017	3-yr. Avg.
		(DAP) ¹	(inch)	(DAP) ¹	(%)	(%)	(%)	(%)	(lb/bu)	----- (lb/a) -----	
Nuseed	4334	71	56	132	62	85	95	11	21.6	1,769	--
Nuseed	Panther DMR	67	54	129	34	63	87	11	24.1	1,897	1,839
Red River Comm.	2215	69	57	131	58	85	93	10	23.5	1,677	1,720
Red River Comm.	2215CL	73	63	136	66	84	91	13	22.4	1,723	1,679
Red River Comm.	2217CP	74	54	137	72	86	93	12	21.8	1,609	--
SunOpta	9510	71	63	131	77	90	94	11	22.7	1,803	--
SunOpta	9524	72	62	136	83	92	96	11	22.2	1,843	1,977
SunOpta	9549	68	48	130	65	84	93	10	19.9	1,592	--
SunOpta	9553	71	61	132	80	90	94	10	20.6	1,752	--
Valia	Valia 41	72	58	132	70	88	95	11	23.3	1,976	--
USDA ²	924	68	55	130	36	61	81	10	24.6	1,484	1,583
Mean		70	57	132	64	82	92	11	22.4	1,739	1,759
CV (%)		0.7	6.4	0.8	13.1	6.7	3.2	8.2	4.4	14.3	--
LSD 0.05		0.7	5.2	1.6	11.9	8.0	4.3	1.3	1.4	NS	--
LSD 0.10		0.6	4.4	1.3	9.9	6.6	3.6	1.1	1.2	NS	--

Planted: May 25. Harvested: Nov. 3. Previous crop: field pea.

¹Days after planting.²Long-term hybrid check.**Table 8. 2017 Sunflower - Non-oilseed - Langdon, N.D. - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Hybrid	Days to Flower	Days to PM	Plant Height	Seed Over Screen			Harvest Moist.	Test Weight	Seed Yield	
					22/64	20/64	18/64			2017	3-yr. Avg.
		(DAP) ¹	(DAP) ¹	(inch)	(%)	(%)	(%)	(%)	(lb/bu)	----- (lb/a) -----	
Nuseed	Panther DMR	75	124	62	52	80	92	12	27.1	2,863	3,014
Red River Comm.	2215	76	125	61	84	92	93	21	23.4	2,861	--
Red River Comm.	2215CL	82	129	66	85	92	93	28	22.0	2,760	--
Red River Comm.	2217CP	82	129	64	84	90	91	29	21.0	2,870	--
USDA ²	924	77	123	64	35	57	80	16	26.5	2,444	2,650
Mean		78	126	63	68	82	90	21	24.0	2,759	2,832
CV %		1.5	1.0	6.4	--	--	--	12.3	7.5	9.7	--
LSD 0.05		2.1	2.1	NS	--	--	--	4.3	3.2	514	--
LSD 0.10		1.7	1.7	NS	--	--	--	3.5	2.6	421	--

Planted: May 18. Harvested: Oct. 18.

¹Days after planting.²Long-term hybrid check.

Table 9. 2017 Sunflower - Oilseed - Langdon, N.D. - Authors, B. Hanson, T. Hakanson and L. Henry.

Company/ Brand	Hybrid	Days to Flower (DAP) ¹	Days to PM (DAP) ¹	Plant Height (inch)	Test Weight (lb/bu)	Harvest Moisture (%)	Oil Content (%)	Seed Yield		
								2017	2-yr. Avg.	3-yr. Avg.
Croplan	3732	82	127	66	32.4	15	46.9	3,507	--	--
Croplan	3845 HO	81	126	67	32.9	16	49.3	3,209	--	--
Croplan	432 E	77	123	66	35.2	14	41.9	3,193	2,821	3,023
Croplan	450 E HO	82	126	67	34.2	20	47.9	3,394	--	--
Croplan	455 E HO	80	127	69	32.4	15	47.1	3,801	3,578	--
Croplan	458 E HO	80	125	66	32.5	16	45.2	2,640	2,814	2,820
Croplan	545 CL	82	126	65	32.5	27	46.3	3,365	3,415	3,412
Croplan	549 CL	77	122	70	35.4	11	47.9	3,778	3,329	3,232
Croplan	568 CL HO	85	130	65	29.3	25	47.2	3,403	--	--
Croplan	7717 CL HO	80	124	66	33.6	16	45.9	3,134	--	--
Croplan	7919 CL HO	82	128	68	30.2	25	49.4	3,843	--	--
Nuseed	Badger DMR ²	77	123	72	33.4	12	36.3	3,728	3,763	3,430
Nuseed	Camaro II	81	124	66	32.6	18	45.0	3,457	3,263	3,295
Nuseed	Cobalt II	79	124	64	34.5	15	45.8	2,934	3,008	2,995
Nuseed	Falcon	82	126	64	33.2	20	44.4	2,888	2,963	3,003
Nuseed	N4HE302	80	124	66	30.6	17	45.0	3,082	--	--
Nuseed	N4HM354	77	121	64	36.1	12	47.5	3,066	3,287	--
Nuseed	N5LM307 ²	77	121	63	31.2	19	40.4	2,964	2,855	--
Nuseed	Talon	78	123	64	29.9	12	45.5	3,647	3,565	3,472
NuTech	63C4 CL	77	122	65	35.8	13	46.0	3,111	3,151	--
NuTech	68H7	82	127	74	35.3	27	42.9	2,505	2,972	2,927
NuTech	69M2	83	128	74	32.5	16	46.3	3,512	--	--
Pioneer	P63HE60	78	123	67	34.7	11	46.5	3,006	2,855	--
Pioneer	P63HE90	81	127	73	32.3	17	46.7	3,281	3,379	--
Pioneer	P64ME01	82	127	68	32.9	26	43.6	3,095	--	--
Proseed	12G25 CL	81	125	63	33.7	20	48.1	3,364	3,425	--
Proseed	E-21 CL	81	125	74	31.0	23	38.3	2,488	--	--
Proseed	E-31 CL	82	125	71	31.5	15	44.2	2,940	2,803	2,754
Proseed	E-362436	81	124	75	35.5	15	45.1	2,954	--	--
Proseed	E-50016 CL	82	126	69	31.5	15	46.7	3,425	--	--
Proseed	E-71 CL	81	125	68	30.6	16	41.0	2,859	--	--
Proseed	E-72	82	126	75	32.2	14	45.0	2,841	--	--
Proseed	E-73 CL	81	126	72	30.0	16	40.7	3,118	--	--
Thunder	11N94	81	125	68	32.8	23	45.2	3,308	--	--
Thunder	12N92	77	122	64	34.8	11	48.5	3,131	--	--
Thunder	35H92	78	123	64	35.0	11	46.6	2,967	--	--
Thunder	42H94	83	125	69	30.3	18	47.7	3,784	--	--
Croplan ³	559CL	81	125	72	33.3	12	47.8	3,589	--	--
Mycogen ³	8N270CLDM	75	122	61	34.2	15	47.3	2,748	--	--
USDA ³	Honeycomb NS	68	114	55	33.7	9	42.0	2,085	--	--
USDA ⁴	894	78	125	61	33.9	13	44.9	2,841	2,552	2,601
Mean		80	124	67	32.9	17	45.3	3,170	3,147	3,080
CV %		0.8	0.8	3.3	2.4	15.7	3.0	9.9	--	--
LSD 0.05		1.1	1.6	3.7	1.3	4.3	2.2	514	--	--
LSD 0.10		0.9	1.3	3.1	1.1	3.6	1.8	430	--	--

Planted: May 18. Harvested: Oct. 18.

¹Days after planting.²Conoil³Honeycomb NS = early maturing check; 8N270CLDM = medium maturing check; and 559 CL = late maturing check.⁴894 = Long-term hybrid check.

Table 10. 2017 Sunflower - Oilseed - Minot, N.D. - Authors, E. Eriksmoen and J. Effertz.

Company/ Brand	Hybrid	Days to Flower (DAP) ¹	Days to Maturity (DAP) ¹	Plant Height (inch)	Oil Content (%)	Test Weight (lb/bu)	Seed Yield	
							2017 ----- (lb/a)	2-yr. Avg. ----- (lb/a)
Croplan	3732	64	119	63	47.6	35.3	2,813	--
Croplan	3845 HO	63	119	64	47.7	34.2	2,490	--
Croplan	432 E	58	112	63	39.9	33.7	2,247	--
Croplan	455 E HO	61	117	63	45.2	34.3	2,744	--
Croplan	458 E HO	60	114	68	43.3	32.9	2,941	--
Croplan	545 CL	64	114	58	44.7	34.0	3,144	--
Croplan	549 CL	58	111	66	42.5	34.2	2,302	--
Croplan	568 CL HO	64	119	60	45.5	34.0	3,595	--
Croplan	7717 CL HO	61	114	61	42.7	33.4	3,225	--
Croplan	7919 CL HO	62	119	62	44.9	34.0	3,419	--
Dyna-Gro	HX71H11CL	58	113	57	44.0	34.3	1,834	--
Dyna-Gro	XH71N33CL	57	112	58	45.3	35.2	2,000	--
Dyna-Gro	XH72H47CL	63	118	61	47.3	32.9	2,735	--
Dyna-Gro	XH72H61CL	57	113	56	48.1	34.1	2,984	--
Mycogen	8D310CL	62	120	62	36.0	32.2	2,382	2,821
Mycogen	MY8H270CL	57	113	59	46.1	33.5	2,649	2,678
Mycogen	8H449CLDM	61	119	65	47.8	35.8	3,167	3,068
Nuseed	Badger DMR	58	113	70	35.7	32.5	3,816	3,479
Nuseed	Camaro II	62	113	59	44.4	34.4	3,000	2,705
Nuseed	Cobalt II	59	112	55	44.7	33.9	2,534	2,873
Nuseed	Falcon	62	120	60	43.8	35.0	2,792	2,938
Nuseed	Hornet	65	119	60	47.7	33.1	2,651	2,853
Nuseed	N4HM354	58	113	56	43.9	34.2	2,567	2,922
Nuseed	N5LM307	58	112	56	39.1	30.9	2,901	2,863
Nuseed	Talon	60	112	59	42.4	31.8	2,802	2,989
Proseed	12G25 CL	62	118	58	47.2	35.2	2,888	3,124
Proseed	50016CL	61	117	62	43.3	31.5	2,142	--
Proseed	E-21 CL	61	116	67	37.4	31.1	2,034	--
Proseed	E-31 CL	61	115	65	39.0	29.9	2,723	3,209
Proseed	E-362436	61	115	65	42.5	34.1	2,387	--
Proseed	E-71 CL	61	113	66	36.5	28.4	2,117	--
Proseed	E-72	65	115	69	41.7	31.9	2,291	--
Proseed	E-73 CL	63	113	61	38.9	28.8	2,627	--
SunOpta	4415HO/CLP/DM	60	113	64	42.8	32.5	2,519	--
SunOpta	4421CL	63	117	62	37.5	31.8	2,085	--
SunOpta	4425CL	61	115	64	39.0	32.9	2,467	--
Thunder	11N94	61	114	63	45.7	34.3	2,895	--
Thunder	12N92	59	113	58	46.7	33.7	2,347	--
Thunder	35H92	58	113	58	44.0	35.1	2,332	--
Thunder	42H94	62	114	64	45.8	33.0	2,992	--
Croplan ²	559CL	65	120	59	43.9	34.2	1,782	2,323
Mycogen ²	8N270CLDM	58	112	54	44.5	32.7	2,231	2,352
USDA ²	Honeycomb NS	54	109	47	40.1	30.0	1,212	1,517
USDA ³	894	61	113	55	42.2	32.7	1,818	2,227
Mean		61	115	61	43.2	33.1	2,582	2,761
CV %		2.2	1.3	4.4	2.8	2.3	16.5	--
LSD 0.05		2.0	2.0	4.0	2.0	1.2	693	--
LSD 0.10		2.0	2.0	4.0	1.7	1.0	580	--

Planted: May 23. Harvested: Oct. 22. Previous crop: barley.

¹Days after planting.²Honeycomb NS = early maturing check; 8N270CLDM = medium maturing check; and 559 CL = late maturing check.³894 = Long-term hybrid check.

Table 11. 2017 Sunflower - Non-oilseed - Minot, N.D. - Authors, E. Eriksmoen and J. Effertz.

Company/ Brand	Hybrid	Days to	Days to	Plant	Test	Seed Over Screen			Seed Yield		
		Flower	Maturity	Height	Weight	22/64	20/64	18/64	2017	2-yr. Avg.	3-yr. Avg.
		(DAP) ¹	(DAP) ¹	(inch)	(lb/bu)	------(%)-----			------(lb/a)-----		
Nuseed	Panther DMR	57	111	57	25.1	11	29	95	2,650	2,292	2,013
CHS Royal Hyb.	RH609CLP	60	113	64	24.8	2	6	97	2,644	2,266	2,068
SunOpta	9510	60	118	68	26.0	5	14	94	3,081	--	--
SunOpta	9524	61	113	60	25.7	2	6	99	2,478	--	--
SunOpta	9549	59	119	55	22.0	2	7	99	3,732	--	--
SunOpta	9553	59	118	69	23.5	1	3	99	3,510	--	--
USDA ²	924	60	120	62	25.8	4	14	95	2,034	1,683	1,704
Mean		59	115	61	24.5	4	11	97	2,658	1,974	1,886
CV %		1.7	1.2	3.0	2.9	93.0	102.0	2.8	7.6	--	--
LSD 0.05		2.0	2.0	3.0	1.2	NS	NS	NS	238	--	--
LSD 0.10		1.0	2.0	3.0	1.0	NS	NS	4.0	196	--	--

Planted: May 23. Harvested: Oct. 22. Previous crop: barley.

¹Days after planting.²Long-term hybrid check.**Table 12. 2017 Sunflower - Oilseed - Williston, N.D. - Authors, J. Bergman, G. Pradhan, E. Link and A. Link.**

Company	Hybrid	Days to	Days to	Plant	Oil ¹	Test	Seed Yield		
		Flower	Maturity	Height	Content	Weight	2017	2-yr. Avg.	3-yr. Avg.
		(DAP) ²	(DAP) ²	(inch)	(%)	(lb/bu)	------(lb/a)-----		
Croplan	3732	73	123	47	38.7	30.8	3,025	--	--
Croplan	3845 HO	73	125	49	40.0	31.2	4,408	--	--
Croplan	432 E	70	115	46	34.7	30.8	2,475	--	--
Croplan	455 E HO	73	127	49	38.6	30.2	3,147	--	--
Croplan	458 E HO	73	124	49	37.2	27.9	3,025	--	--
Croplan	545 CL	74	126	41	37.0	30.1	3,440	--	--
Croplan	549 CL	70	117	51	36.6	31.4	2,993	--	--
Croplan	7717 CL HO	73	126	48	37.8	29.4	3,004	--	--
Croplan	7919 CL HO	74	133	49	39.6	28.9	3,075	--	--
Nuseed	Badger DMR	70	122	51	30.3	29.1	3,318	--	--
Nuseed	Camaro II	72	119	50	36.6	31.1	2,767	2,385	2,174
Nuseed	Cobalt II	70	126	44	38.7	30.7	3,027	2,634	2,219
Nuseed	Falcon	76	126	46	35.5	30.7	3,549	2,714	-
Nuseed	N4HM354	72	114	44	39.1	30.3	2,733	2,425	2,110
Nuseed	N5LM307	71	122	49	31.9	27.8	2,622	--	--
Nuseed	Talon	72	119	42	33.6	26.2	2,645	2,167	1,911
NuTech	63C4 CL	72	116	44	38.9	30.4	2,683	2,027	-
Mean		72	122	47	36.6	29.8	3,057	--	--
CV %		2.0	1.9	4.9	2.9	2.2	12.5	--	--
LSD 0.05		2.4	3.9	3.9	1.8	1.1	638	--	--
LSD 0.10		2.0	3.2	3.2	1.5	0.9	530	--	--

Planted: June 6. Harvested: Nov. 17. Previous crop: durum.

¹Seed Oil = Oils are reported on an oven-dried basis, 120 F for four hours.²Days after planting.

Table 13. 2017 Sunflower - Oilseed - Hettinger N.D. - Author, J. Rickertsen.

Company	Hybrid	Days to Flower (DAP) ¹	Plant Height (inch)	Plant Lodge (%)	Test Weight (lb/bu)	Oil Content (%)	Seed Yield		
							2017	2-yr. Avg.	3-yr. Avg.
							------(lb/a)-----		
Croplan	3732	73	38	2	25.7	39.8	1,581	--	--
Croplan	3845 HO	73	41	15	25.6	41.8	1,944	--	--
Croplan	432 E	66	43	16	25.9	36.5	1,893	2,121	2,128
Croplan	455 E HO	71	38	24	24.9	39.0	1,562	2,107	--
Croplan	458 E HO	70	38	17	24.7	38.7	1,924	2,255	2,453
Croplan	545 CL	73	43	18	24.9	38.4	1,878	2,427	2,828
Croplan	549 CL	69	48	25	26.3	39.6	1,875	2,225	2,565
Croplan	568 CL HO	75	41	33	25.1	40.0	1,820	--	--
Croplan	7717 CL HO	69	49	34	26.2	41.6	1,825	2,098	2,422
Croplan	7919 CL HO	73	47	14	25.0	41.4	2,467	2,698	--
Mycogen	8D310CL	74	47	18	24.0	35.7	1,692	1,857	2,254
Mycogen	8H449CLDM	72	38	16	28.4	42.8	2,011	2,441	2,906
Mycogen	E83529CL	80	47	6	24.6	39.4	1,994	--	--
Mycogen	MY8H456CL	74	43	15	25.2	42.9	2,132	--	--
Nuseed	Badger DMR	69	45	9	25.5	35.2	2,172	2,136	2,196
Nuseed	Camaro II	72	45	18	26.6	40.0	2,065	2,239	2,585
Nuseed	Falcon	72	42	6	25.2	39.5	1,996	2,144	2,477
Nuseed	Hornet	74	44	26	25.0	42.1	2,260	2,764	3,240
Nuseed	N4HM340	75	43	14	23.8	38.6	1,993	--	--
Nuseed	N4HM354	70	42	15	26.2	42.1	2,111	2,550	--
Nuseed	N4HP470	73	47	8	26.2	44.2	2,535	--	--
Nuseed	N5LM307	68	44	10	23.8	36.0	1,803	2,008	--
Nuseed	NHK12S111	69	43	10	24.8	39.8	1,884	--	--
Proseed	12G25 CL	71	41	11	26.1	43.8	1,806	2,304	--
Proseed	E 50016 CL	74	38	26	24.5	39.3	1,547	--	--
Proseed	E-21 CL	73	47	34	23.5	35.8	1,602	--	--
Proseed	E-31 CL	71	46	23	23.4	35.9	1,967	2,181	2,229
Proseed	E-362436	70	49	13	26.8	40.3	1,919	--	--
Proseed	E-71 CL	74	45	14	22.6	35.3	1,585	--	--
Proseed	E-72	76	52	13	24.1	41.8	1,881	--	--
Proseed	E-73 CL	74	41	14	22.3	37.9	1,763	--	--
Thunder	11N94	74	44	9	26.2	40.3	1,817	--	--
Thunder	12N92	69	42	5	25.2	40.5	2,010	--	--
Thunder	35H92	70	44	14	25.7	41.0	1,823	--	--
Thunder	42H94	76	48	15	25.3	42.5	2,343	--	--
Croplan ²	559CL	73	47	23	25.4	40.5	2,162	2,261	--
Croplan ²	450 E HO	72	41	11	24.7	38.9	1,996	--	--
Mycogen ²	8N270CLDM	64	40	25	25.9	40.5	1,659	1,908	2,103
USDA ²	Honeycomb NS	62	41	4	25.7	36.6	791	1,154	1,368
USDA ³	894	71	46	9	24.9	38.8	1,897	2,083	2,394
Mean		72	44	16	25.1	39.6	1,900	2,188	2,410
CV %		5.3	9.4	10	3.1	4.1	20.6	--	--
LSD 0.05		2.3	5.8	13.6	1.1	2.3	547	--	--
LSD 0.10		1.9	4.8	11.3	0.9	1.9	458	--	--

Planted: May 31. Harvested: Oct. 27. Previous crop: wheat.

¹Days after planting.²Honeycomb NS = early maturing check; 8N270CLDM = medium maturing check; and 559 CL = late maturing check.³894 = Long-term hybrid check.

Table 14. 2017 Sunflower - Oilseed - Haakon, S.D. - Authors, F. Mathew, N. Braun and P. Okello.

Company/ Brand	Hybrid	Oil Content¹	Plant Height	Seed Yield 2017
		(%)	(inch)	(lb/a)
AgVenture	AF3H681ES	49.8	40.3	2,018
AgVenture	AF3N692ES	52.2	52.8	1,984
AgVenture	AF3N94CD	49.6	48.5	1,973
AgVenture	AF4H95CD	52.0	44.5	1,859
AgVenture	XF2N14CD	51.7	41.3	1,702
AgVenture	XF4N08CD	51.9	42.0	2,185
Mycogen	8H449CLDM	54.8	34.0	1,801
Mycogen	E76437	51.5	52.3	1,598
Mycogen	MY8H456CL	53.9	45.3	1,528
Nuseed	Badger DMR	43.1	53.0	1,895
Nuseed	Camaro II	50.1	44.5	2,077
Nuseed	Falcon	50.4	49.5	2,106
Nuseed	Hornet	53.4	51.0	1,988
Nuseed	N4HM354	51.3	41.8	1,736
Nuseed	N5LM307	46.4	44.0	1,859
Nuseed	Talon	48.3	47.5	1,554
Pioneer	P63HE90	50.0	55.0	2,026
Pioneer	P64ME01	50.4	48.3	2,095
Proseed	12G25 CL	54.3	48.0	1,648
Proseed	E-21 CL	45.6	52.8	1,994
Proseed	E-31 CL	48.6	50.3	1,942
Proseed	E-362436	50.5	51.8	2,214
Proseed	E-53051 CL	50.3	49.5	1,608
Proseed	E-71 CL	48.6	48.3	2,182
Proseed	E-72	52.9	52.0	1,953
Proseed	E-73 CL	47.5	51.3	1,684
Thunder	11N94	50.9	49.3	1,724
Thunder	12N92	50.8	42.0	1,914
Thunder	35H92	49.4	41.8	2,103
Thunder	42H94	53.3	45.0	2,115
USDA ²	894	48.9	42.0	1,702
Mean		50.4	47.1	1,896
CV %		3.8	14.9	18.9
LSD 0.05		2.7	9.9	1022
LSD 0.10		2.2	8.2	972

Planted: June 14. Harvested: Nov. 14. Previous crop: corn.

¹Oil content is adjusted for oleic acid content.

²894 = Long-term hybrid check.

Table 15. 2017 Sunflower - Oilseed - Onida, S.D. - Authors, F. Mathew, N. Braun and P. Okello (Page 1 of 2).

Company/ Brand	Hybrid	Oil Content¹	Plant Height	Seed Yield 2017
		(%)	(inch)	(lb/a)
AgVenture	AF3H681ES	49.9	53.8	2,141
AgVenture	AF3N692ES	53.5	65.3	2,529
AgVenture	AF3N94CD	51.8	55.0	1,914
AgVenture	AF4H95CD	54.4	54.0	2,941
AgVenture	XF2N14CD	51.6	54.8	2,676
AgVenture	XF4N08CD	49.5	55.5	2,027
Croplan	3732	52.6	51.3	2,246
Croplan	3845 HO	51.8	49.5	2,371
Croplan	432 E	49.9	57.3	2,141
Croplan	450 E HO	51.3	59.8	2,146
Croplan	455 E HO	48.7	60.0	2,366
Croplan	458 E HO	52.3	60.8	2,629
Croplan	545 CL	49.9	54.3	2,022
Croplan	549 CL	50.0	61.5	2,717
Croplan	568 CL HO	47.8	57.0	2,280
Croplan	7717 CL HO	53.1	53.3	2,487
Croplan	7919 CL HO	54.6	56.3	2,605
Dyna-Gro	XH71H11CL	52.0	43.8	2,601
Dyna-Gro	XH71H27CL	53.9	56.8	2,782
Dyna-Gro	XH71N33CL	52.7	52.5	2,614
Dyna-Gro	XH71N44CL	51.9	53.8	2,744
Dyna-Gro	XH72H22CL	51.2	53.8	2,223
Dyna-Gro	XH72H38CL	51.1	59.3	1,943
Dyna-Gro	XH72H47CL	54.2	62.5	2,479
Dyna-Gro	XH72H61CL	52.3	43.0	1,731
Dyna-Gro	XH72N54CP	56.7	60.0	2,567
Dyna-Gro	XH73H14CL	50.5	56.5	2,152
Dyna-Gro	XH73H32CL	51.0	61.3	2,072
Mycogen	8D310CLDM	48.9	57.0	1,800
Mycogen	8H449CLDM	54.6	55.5	2,540
Mycogen	E76437	52.1	62.0	2,251
Mycogen	MY8H270CL	52.9	55.3	2,557
Mycogen	MY8H456CL	54.0	57.0	2,298
Nuseed	Badger DMR	47.0	60.0	2,752
Nuseed	Camaro II	50.7	52.5	1,982
Nuseed	Falcon	50.8	55.3	2,670
Nuseed	Hornet	53.3	54.3	2,428
Nuseed	N4HM354	51.6	48.5	2,229
Nuseed	N5LM307	48.9	57.0	2,408
Nuseed	Talon	49.1	54.3	2,040
Pioneer	P63HE90	51.8	63.0	2,528
Pioneer	P64ME01	51.9	59.3	2,265
Proseed	12G25 CL	55.4	60.3	2,575
Proseed	E-21 CL	47.7	67.3	2,189
Proseed	E-31 CL	50.9	55.8	2,298
Proseed	E-362436	51.9	69.3	2,307
Proseed	E-53051 CL	50.9	56.5	2,231
Proseed	E-71 CL	48.7	59.0	2,159
Proseed	E-72	52.4	67.5	2,045
Mean		51.5	56.6	2,360
CV %		5.8	13.8	18
LSD 0.05		4.2	10.9	592
LSD 0.10		3.5	9.1	496

Table 15. 2017 Sunflower - Oilseed - Onida, S.D. - Authors, F. Mathew, N. Braun and P. Okello (Page 2 of 2).

Company/ Brand	Hybrid	Oil	Plant	Seed Yield
		Content ¹	Height	2017
		(%)	(inch)	(lb/a)
Proseed	E-73 CL	50.1	60.0	2,065
SunOpta	4415HO/CLP/DM	50.2	55.3	2,591
SunOpta	4421CL	54.8	58.5	2,684
SunOpta	4425CL	48.4	58.5	2,508
Thunder	11N94	50.6	59.3	2,393
Thunder	12N92	52.9	61.0	2,863
Thunder	35H92	51.7	46.5	2,305
Thunder	42H94	53.2	40.8	2,454
USDA ²	894	50.0	54.8	2,313
Mean		51.5	56.6	2,360
CV %		5.8	13.8	18.0
LSD 0.05		4.2	10.9	592
LSD 0.10		3.5	9.1	496

Planted: June 15. Harvested: Nov. 13. Previous crop: corn.

¹Oil content is adjusted for oleic acid content.

²894 = Long-term hybrid check.

Table 16. 2017 Sunflower - Non-oilseed - Haakon and Onida, S.D. - Authors, F. Mathew, N. Braun and P. Okello.

Company/ Brand	Hybrid	Haakon		Onida	
		Plant Height	Seed Yield 2017	Plant Height	Seed Yield 2017
		(inch)	(lb/a)	(inch)	(lb/a)
CHS Royal Hybrid	RH609CLP	55.7	2,182	64.0	2,844
Nuseed	4334	52.0	1,040	62.7	2,593
Nuseed	NSKM53777	53.0	2,154	61.0	2,735
Nuseed	Panther DMR	41.9	1,565	55.3	3,076
Red River Comm.	2215	53.0	1,823	59.7	2,530
Red River Comm.	2215 CL	52.3	1,459	62.0	3,389
Red River Comm.	2217 CP	46.0	1,698	54.3	2,784
Red River Comm.	2310	53.7	1,758	73.3	2,486
SunOpta	9510	--	--	67.3	2,708
SunOpta	9524	--	--	60.0	2,985
SunOpta	9549	--	--	58.0	3,087
SunOpta	9553	--	--	62.7	3,026
SunOpta	9590	--	--	50.7	3,078
Valia	Valia 41	52.3	1,495	56.3	2,934
USDA ²	924	44.0	1,529	64.0	2,236
Mean		50.4	1,670	60.8	2,833
CV %		9.7	22.1	10.3	20.5
LSD 0.05		8.4	608	10.4	1,833
LSD 0.10		6.9	436	7.5	1,721

Planted Haakon: June 14. Harvested: Nov. 14. Previous crop: corn.

Planted Onida: June 15. Harvested: Nov. 13. Previous crop: corn.

²Long-term hybrid check.

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