South Dakota State University
College of Agriculture, Food and Environmental Sciences

South Dakota State University Extension
South Dakota Agricultural Experiment Station at SDSU

2024 South Dakota Sunflower Hybrid Trial Results Onida

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Location:	8 miles east, 2 miles north and .5 miles west Onida, SD 44.737306°, -100.253108°
Cooperator:	Yackley Ranches
Soil Type:	Highmore-Walke silt loams, 0-2% slopes
Fertilizer:	167-28-0-14S-0.1B
Previous crop:	corn
Tillage:	no-till
Row spacing:	30 inches
Seeding Rate:	24,000/acre
Herbicide:	Burndown (fall): 2.5 oz Contain, 3 oz Flumioxazin, 22 oz RT3 Burdown (spring): 4 oz Acuvant, 4 oz Authority Supreme, 32 oz Paraquat 3SL, 24 oz RT3, 8 oz Wheelhouse Pre: 3 oz Acuvant, 4 oz Authority Supreme, 7.2 oz Wheelhouse Post: 3 oz Acuvant, 4 oz Authority Supreme, 7.2 oz Wheelhouse
Fungicide:	4 oz Priaxor
Insecticide:	1) 32 oz Lorsban 4e, 3 oz Warrior @ R5 2) 32 oz Lorsban 4e @ R5 + 5d
Date seeded:	6/19/2024
Date harvested:	11/1/2024

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Table 1a. Sunflower oilseed hybrid performance results (average of 4 replications) at Onida, SD.

Hybrid Information			Agronomic Performance				
Brand	Hybrid	Type*	Yield (lbs/ac) (@10%)	Moisture (%)	Test Weight (lbs/bu)	Oil % (@10%)	Harvest Population (plants/ac)
PIONEER	P64HE101	HO, EX, DM	3240	9.8	27.0	38.5	23729
PIONEER	P64HE188	HO, EX, DM	3069	9.6	27.1	42.7	23843
ADVANTA	HYSUN182IT	CL	3048	8.9	26.4	40.3	22812
PIONEER	P63HE920	HO, EX, DM	3023	10.3	28.7	40.8	23614
CROPLAN	CP4255E	HO, EX	3017	10.0	27.9	41.6	23156
DYNAGRO	H45NS16CL	NS, CL	3007	9.3	28.4	43.7	22239
CROPLAN	CP455E	HO, EX	2937	9.0	27.2	43.2	23843
CROPLAN	CP7919CL	HO, CL	2937	9.3	26.0	42.7	21322
ADVANTA	ADV5310CL	CL	2893	9.8	26.5	44.4	22353
THUNDER SEED	TEX2403SF	HO, EX	2858	9.1	25.4	40.5	22353
CROPLAN	CP4475E	HO, EX	2802	9.2	27.0	42.3	21207
ADVANTA	HYSUN238IT	CL	2792	9.5	28.0	37.1	25448
ADVANTA	HYSUN302IT	CL	2767	9.3	27.6	39.3	22697
NUSEED	N4H470CLP	HO, CLP, DM	2766	9.4	26.8	44.2	22468
CROPLAN	CP5249CL	HO, CL	2766	8.6	25.5	45.5	22353
ADVANTA	ADV5407CL	CL	2763	9.4	25.5	45.9	23614
NUSEED	N4H490E	HO, EX, DM	2730	9.4	27.5	42.0	23385
ADVANTA	ADV5205CLHO	CL, HO	2728	9.0	26.4	40.0	22926
NUSEED	BADGERDMR	NS, CL, DM	2687	9.4	25.8	33.4	22124
ADVANTA	HYSUN254	TRAD	2673	8.7	26.1	42.8	23729
NUSEED	N4H422CL	HO, CL, DM	2652	9.6	26.5	40.9	24875
DYNAGRO	H47HO11EX	HO, EX	2650	10.3	28.1	39.4	19258
DYNAGRO	XH41H90EX	HO, EX	2630	9.7	27.7	42.0	23958
SUNRICH	4425CL	CL	2619	9.6	25.8	37.2	20978
RAGT SEMENCES	AC2202	HO, CL, DM	2617	9.2	27.4	44.2	25105
NUSEED	N5H493CL	HO, CL	2616	9.0	24.0	31.1	24761
DYNAGRO	H50HO20CP	HO, CP	2616	9.6	27.7	45.3	24531
ADVANTA	HU22-3001SJ	SU	2611	9.0	26.6	40.4	22353
		Trial Average	2665	9.4	26.5	26.5	22709
		LSD (0.05)†	350.2	0.6	0.9	1.6	2774
		C.V.‡	9.5	4.7	2.5	2.5	8.5

*Type: NuSun = NS; Traditional =Trad; High Oleic = HO; Clearfield (IMI) = CL; Clearfield Plus (IMI) = CP; Conoil = CO; ExpressSun (SU) = EX; Downy Mildew Resistant = DM; Rust Resistant = Rust.

† Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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Table 1b. Sunflower oilseed hybrid performance results, continued (average of 4 replications) at Onida, SD.

Hybrid Information			Agronomic Performance				
Brand	Hybrid	Type*	Yield (lbs/ac) (@10%)	Moisture (%)	Test Weight (lbs/bu)	Oil % (@10%)	Harvest Population (plants/ac)
DYNAGRO	H49HO19CL	HO, CL	2608	9.0	26.5	42.9	23958
RAGT SEMENCES	AC2201	HO, CL, DM	2595	9.1	26.8	41.8	25104
NUSEED	N4H205E	HO, EX, DM	2549	8.7	25.2	44.4	25563
RAGT SEMENCES	AC2101	HO, CP, DM	2504	8.9	25.6	41.1	21551
NUSEED	N4H462E	HO, EX, DM	2474	8.8	26.7	43.1	22239
ADVANTA	HU22-3005SJ	SU	2465	9.0	25.6	41.5	24875
ADVANTA	HU22-3015SJ	SU	2462	8.9	26.2	40.0	23958
DYNAGRO	H45HO10EX	HO, EX	2453	9.3	25.6	40.8	22239
THUNDER SEED	TEX2404SF	HO, EX	2431	9.8	27.0	42.0	24646
ADVANTA	ALTASUN100	HO	2360	9.8	24.1	39.7	15132
SUNRICH	4415HO/DM/CLP	HO, CP, DM	2353	9.4	26.3	38.9	18570
ADVANTA	ALTASUN452	HO	2119	9.3	25.7	41.4	15017
NUSEED	N4H337E	HO, EX, DM	2084	9.3	26.6	42.6	24187
DYNAGRO	XH41H56CL	HO, CL	819	8.5	23.3	31.9	23041
		Trial Average	2665	9.4	26.5	26.5	22709
		LSD (0.05)†	350.2	0.6	0.9	1.6	2774
		C.V.‡	9.5	4.7	2.5	2.5	8.5

*Type: NuSun = NS; Traditional =Trad; High Oleic = HO; Clearfield (IMI) = CL; Clearfield Plus (IMI) = CP; Conoil = CO; ExpressSun (SU) = EX; Downy Mildew Resistant = DM; Rust Resistant = Rust.

† Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.