

### Oil Sunflower - 2007-2009

Brand	Hybrid	Hybrid Type <sup>1</sup>	Days to Flower	Days to Mature	Plant Ht. (inch)	Head Rot <sup>2</sup> (%)	Assert Damage <sup>3</sup> (%)	Broken Stems <sup>4</sup> (%)	Oil <sup>5</sup> (%)	Test Wt. (lb/bu)	Harv. Moist. (%)	Yield				
												@ 10% moisture			Average	
												2007	2008	2009 <sup>6</sup>	2yr	3yr
Croplan	306 DMR NS	NS,DM	88	120	58	39	3	11	43.3	27.9	16	--	2199	1176	1687	--
Croplan	3080 DMR NS	NS,DM	88	120	54	57	0	4	42.4	26.2	15	2794	1967	862	1415	1874
Croplan	369 DMR NS	NS,DM	90	121	59	64	12	3	40.2	25.7	16	--	1739	1000	1370	--
Croplan	460 E NS	NS, Ex	90	120	63	77	0	4	43.1	26.0	15	--	--	1336	--	--
Croplan	555 CL DMR NS	NS,CL,DM	89	121	63	38	4	14	43.0	26.0	17	--	--	1438	--	--
Dahlgren	4421	NS	89	120	59	50	8	5	37.8	27.5	21	3014	2486	1649	2068	2383
Dahlgren	4416CL	NS,CL	92	122	70	51	5	8	33.7	25.7	23	--	--	1330	--	--
Integra	735 CLNSDM	NS,CL,DM	88	119	58	50	0	17	42.0	27.7	15	2396	2056	1124	1590	1859
Integra	IX09-85716 NSCLD	NS,CL,CM	90	121	61	74	0	2	40.5	27.9	15	--	--	1586	--	--
Integra	IX09-95010 NSDM	NS,DM	86	116	47	41	20	39	41.2	28.3	17	--	--	729	--	--
Integra	Ix09-95016 NSDM	NS,DM	90	121	57	75	5	15	43.4	28.0	23	--	--	1049	--	--
Mycogen	8D310	NS	89	120	58	26	6	3	39.6	28.5	22	--	2270	1678	1974	--
Mycogen	8D481	NS	93	125	65	67	2	4	40.4	27.0	20	--	--	1118	--	--
Mycogen	8H288CLDM	HO,CL,DM	87	122	54	68	2	11	41.4	26.9	23	--	1651	847	1249	--
Mycogen	8N270CLDM	NS,CL,DM	85	120	59	19	0	16	43.9	30.9	20	2623	1866	1309	1588	1933
Mycogen	8N358CLDM	NS,CL,DM	89	120	58	57	0	4	41.4	27.7	21	--	2173	1298	1735	--
Mycogen	8N433DM	NS,DM	91	122	64	83	3	3	40.5	27.5	18	--	--	966	--	--
Pioneer	63N82	NS,Ex	89	122	62	22	0	1	46.4	31.4	28	--	2187	1529	1858	--
Pioneer	64H41	HO	90	122	64	20	0	6	43.4	31.7	27	2541	2268	1540	1904	2116
Proseed	6007	NS,CL	91	118	69	38	0	5	41.3	30.9	19	--	1788	1358	1573	--
Proseed	7052	NS,CL	89	118	67	39	0	4	44.9	32.1	17	--	2024	1790	1907	--
Proseed	7207	NS,CL	92	121	68	52	0	2	40.8	25.8	14	--	2217	1151	1684	--
Proseed	7001 CL	NS,CL	92	124	63	53	3	1	39.7	27.4	26	--	--	1083	--	--
Proseed	9001 CL	NS,CL	88	117	58	46	1	4	41.6	27.5	16	--	--	1324	--	--
Proseed	E-4	NS,DM	88	118	58	18	4	4	41.0	29.1	17	--	--	1547	--	--
Proseed	E-5	NS,DM	91	123	63	30	3	1	42.7	29.0	26	2805	1837	1367	1602	2003
Proseed	E-6	NS,DM	92	121	66	70	3	4	38.9	24.3	20	--	1641	1179	1410	--
Proseed	E-8	NS,DM	89	121	65	35	6	3	43.7	26.6	24	--	--	1525	--	--

<b>Oil Sunflower (continued)</b>																
Brand	Hybrid	Hybrid Type <sup>1</sup>	Days	Days	Plant Ht.	Head Rot <sup>2</sup>	Assert Damage <sup>3</sup>	Broken Stems <sup>4</sup>	Oil <sup>5</sup>	Test Wt.	Harv. Moist.	Yield				
			to Flower	to Mature								@ 10% moisture			Average	
			(days)	(days)								2007	2008	2009 <sup>6</sup>	2yr	3yr
Proseed	E-85	NS,DM	89	120	64	47	4	3	40.4	26.9	17	2560	1944	1430	1687	1978
Seeds 2000	Defender Plus	NS,DM	87	117	53	36	10	21	40.7	28.4	17	2732	2069	1158	1613	1986
Seeds 2000	Viper	NS,CL	91	121	51	84	0	7	39.4	27.5	19	--	1679	658	1169	--
Seeds 2000	X5619	NS, Ex	90	120	58	79	0	23	42.8	25.3	16	--	--	984	--	--
Syngenta	DKF29-30	NS,DM	87	117	56	50	0	7	44.9	28.5	12	2431	1971	1382	1676	1928
Syngenta	DKF34-33	NS,DM	90	121	56	67	3	3	42.9	28.3	15	2593	1897	1382	1639	1957
Syngenta	DKF34-80CL	NS,CL,DM	90	117	57	70	0	16	40.1	25.3	14	2927	2143	891	1517	1987
Syngenta	DKF39-80CL	NS,CL	93	124	71	71	0	3	39.3	26.8	23	--	--	1049	--	--
Syngenta	IS7120	HO,DM	87	117	51	36	7	25	41.1	26.4	14	2494	2258	877	1568	1876
Syngenta	MH9001CL	NS,CL	93	123	64	72	2	3	42.7	25.8	28	--	--	1047	--	--
Syngenta	MH9002CL	NS,CL	90	120	63	76	0	2	40.0	28.0	14	--	--	1462	--	--
Triumph	s671	NS,SS	94	124	44	90	0	9	35.7	29.6	19	--	--	508	--	--
Triumph	s655	NS,DM	94	124	41	91	0	5	36.6	27.6	19	--	1593	529	1061	--
UDSA-Check	894	Trad	88	117	58	57	2	6	40.6	28.1	13	2691	2051	986	1518	1909
LSD 5%			1.2	2.3	5.0	26	9	16	2.2	1.3	4.3	563	425	417	--	--

<sup>1</sup>Type: HO = High Oleic, NS = NuSun, Trad = Traditional, CL = Clearfield, Ex= ExpressSun, DM = Downy Mildew Resistant, SS=Short Stature.

<sup>2</sup>Sclerotinia head rot. Indicates percent incidence of head rot for each hybrid. It does not indicate severity. Infected plants were harvested.

<sup>3</sup>Percent of plants with deformed heads. Assert sprayed June 23 at 0.7 pt/a. Temperature was 68<sup>0</sup>F, R.H. 46%. Growth stage was 6 leaves. Heads were not harvested but replaced with normal heads from outside harvest area.

<sup>4</sup>Broken stems were laying flat on the ground. Breakage may have resulted from stalk rot, phoma, or insects. Plants were not harvested.

<sup>5</sup>Oils were adjusted to 10% moisture. Oil % of NuSun and Traditional hybrids were adjusted for oil type.

<sup>6</sup>Percent Sclerotinia head rot incidence was plotted against yield with a resulting R<sup>2</sup>=0.34. The yield variation and generally low yields were due to head rot.

Days to mature hybrid check: Hysun 311=117, SF270=116, PI6451=121.

### Confectionary (Non-oil) Sunflower - 2007-2009

Brand	Hybrid	Days to Flower	Days to Mature	Plant Height (inch)	Test Weight (lbs/bu)	Harvest Moist. (%)	Head Rot <sup>3</sup> (%)	Assert Damage <sup>4</sup> (%)	Seed over screen			Yield @ 10% moisture			Average	
									22/64	20/64	18/64	2007	2008	2009	2 yr	3yr
									-----% over-----			-----lbs/a-----				
CHS Sunflower	RH1121	93	123	64	21.9	29	35	19	57	78	85	2440	3066	1766	2416	2424
CHS Sunflower	RH3126RT	89	122	64	22.5	30	24	7	55	77	86	--	--	1319	--	--
CHS Sunflower	RH400CL <sup>1</sup>	85	120	59	23.8	25	15	0	83	94	95	--	--	1913	--	--
Croplan Genetics	179	94	126	65	18.9	32	48	10	59	80	85	--	--	1290	--	--
Dahlgren	95EXCL <sup>1</sup>	93	124	67	21.3	28	54	2	45	78	85	--	2437	1471	1954	--
Dahlgren	9530	91	123	63	21.9	28	42	22	47	77	86	--	--	1570	--	--
Dahlgren	9592	89	122	44	21.3	25	26	0	55	75	83	--	2588	1821	--	--
Mycogen Seeds	8C451	89	122	58	20.7	28	36	2	55	81	87	--	2218	1707	--	--
RRC	2215	88	121	60	23.0	28	32	13	42	71	86	2398	2572	1632	2102	2201
RRC	2216	88	122	61	23.1	30	25	15	52	81	88	2740	2490	1639	2065	2290
RRC	2217	90	123	61	20.0	25	53	7	50	74	81	--	--	1559	--	--
Seeds 2000	Jaguar <sup>1</sup>	86	119	57	22.3	20	18	0	26	70	86	2612	2208	2136	2172	2319
Seeds 2000	Panther DMR <sup>2</sup>	85	121	57	24.4	19	16	9	21	60	85	2465	2084	1819	1952	2123
Triumph Seed Co.	747C	88	124	56	23.2	37	6	16	71	89	93	2478	2408	1399	1904	2095
Check-USDA	924	86	120	59	24.7	23	21	23	18	45	76	2388	2249	1167	1708	1935
LSD 5%		1.4	3.0	NS	1.6	5.3	15.7	NS				538	465	364	--	--

<sup>1</sup> Clearfield hybrid

<sup>2</sup> Downy mildew resistant

<sup>3</sup> Sclerotinia head rot. Indicates percent incidence of head rot for each hybrid. It does not indicate severity. Infected plants were harvested.

<sup>4</sup> Percent of plants with deformed heads. Assert sprayed June 23 at 0.7 pt/a. Temperature was 68<sup>o</sup>F, R.H. 46%. Growth stage was 6 leaves.

Heads were not harvested but replaced with normal heads from outside harvest area.

Days to mature hybrid check: Hysun 311=117, SF270=116, PI6451=121.