

## Langdon - Oil Sunflower - 2008-2010

Brand	Hybrid	Hybrid Type <sup>1</sup>	Days to Flower	Plant Height (inch)	Head Rot <sup>2</sup> (%)	Stalk Rot <sup>3</sup> (%)	Broken Stems <sup>4</sup> (%)	Oil <sup>5</sup> (%)	Test Weight (lb/bu)	Yield				
										@ 10% moisture			Average	
										2008	2009	2010	2yr	3yr
Croplan Genetics	306 DMR NS	NS, DMR	75	65	14	18	0	42.3	31.0	2199	1176	2120	1648	1832
Croplan Genetics	3080 DMR NS	NS, DMR	74	64	15	22	0	42.7	30.1	1967	862	1737	1299	1522
Croplan Genetics	356A NS	NS	79	66	16	37	0	42.3	31.5	--	--	1935	--	--
Croplan Genetics	460 E NS	NS, EX	79	74	10	19	1	43.3	31.4	--	1336	1777	1556	--
Croplan Genetics	555 CL DMR NS	NS, CL, DMR	77	71	7	11	3	41.7	29.7	--	1438	2265	1852	--
Croplan Genetics	559 CL DMR NS	NS, CL, DMR	80	73	5	14	0	41.3	30.4	--	--	2397	--	--
Croplan Genetics	564 CL NS	NS, CL	79	72	6	42	12	40.0	31.7	--	--	1743	--	--
Dalhgren	4421	NS	72	67	18	28	0	36.0	27.8	2486	1649	2304	1977	2146
Genosys	6007	NS, CL	79	72	6	33	16	39.0	33.9	--	--	1711	--	--
Genosys	7052	HO, CL	79	73	11	24	32	38.7	35.5	--	--	1281	--	--
Genosys	7163	NS	77	68	7	27	0	39.0	29.6	--	--	2437	--	--
Genosys	8037	NS, CL	81	71	12	26	12	39.3	32.9	--	--	1664	--	--
Genosys	8064	HO, CL	82	72	0	13	5	34.7	33.1	--	--	1618	--	--
Integra Fortified Seed	516 NSDM	NS, DMR	78	66	11	31	3	41.3	31.6	--	--	1525	--	--
Integra Fortified Seed	735 NSCLDM	NS, CL, DMR	76	69	8	35	0	38.7	30.0	2056	1124	1803	1463	1661
Integra Fortified Seed	IX09-95010 NSDM	NS, DMR	72	59	12	33	1	43.7	33.5	--	729	1704	1216	--
Integra Fortified Seed	IX10-10576	NS, CL	79	73	16	13	0	40.3	33.1	--	--	2358	--	--
Integra Fortified Seed	IX10-94 NSSU	NS, EX	79	69	13	44	0	38.0	30.4	--	--	1756	--	--
Mycogen Seeds	8N270CLDM	NS, CL, DMR	73	69	11	28	0	41.0	32.2	1866	1309	2265	1787	1813
Mycogen Seeds	8H288CLDM	HO, CL, DMR	75	66	20	17	0	41.0	30.5	1651	847	2060	1454	1519
Mycogen Seeds	8N358CLDM	NS, CL, DMR	76	68	11	21	0	42.3	30.6	2173	1298	1961	1630	1811
Mycogen Seeds	8D310	NS	73	68	5	37	0	34.7	28.0	2270	1678	2100	1889	2016
Mycogen Seeds	8D481	NS	79	75	5	43	0	37.3	33.0	--	1118	1684	1401	--
Mycogen Seeds	8H449DM	HO, DMR	79	69	21	30	0	42.0	32.2	--	--	1539	--	--
Pioneer Brand	P63ME70	NS, EX, DMR	78	72	6	15	0	41.7	30.9	--	--	1889	--	--
Pioneer Brand	P64HE01	HO, EX, DMR	76	68	4	16	6	39.3	35.3	--	--	2139	--	--
Proseed	E-85	NS, DMR	76	73	9	20	0	39.3	28.7	1944	1430	2021	1725	1798
Proseed	E-4	NS, DMR	75	69	12	31	0	37.3	29.9	--	1547	1875	1711	--
Proseed	E-8	NS, DMR	76	74	2	21	4	39.0	30.3	--	1525	2126	1826	--
Proseed	CL9001	NS, CL	75	66	6	47	0	39.0	31.1	--	1324	1823	1573	--

**Langdon - Oil Sunflower - 2008-2010 (continued)**

Brand	Hybrid	Hybrid Type <sup>1</sup>	Days to Flower	Plant Height (inch)	Head Rot <sup>2</sup> (%)	Stalk Rot <sup>3</sup> (%)	Broken Stems <sup>4</sup> (%)	Oil <sup>5</sup> (%)	Test Weight (lb/bu)	Yield				
										@ 10% moisture			Average	
										2008	2009	2010	2yr	3yr
Seeds 2000	Cobra	NS, EX	76	63	11	27	0	41.0	29.8	--	--	2034	--	--
Seeds 2000	Defender Plus	NS, DMR	75	64	7	34	1	39.7	31.4	2069	1158	1948	1553	1725
Seeds 2000	X9866	NS, CL, DMR	80	72	1	36	2	40.7	29.4	--	--	1869	--	--
Seeds 2000	X9828	NS, CL, DMR	79	68	4	30	0	38.0	31.5	--	--	2338	--	--
Syngenta	2930 NS/DM	NS, DMR	73	67	15	26	0	41.7	31.4	1971	1382	1849	1616	1734
Syngenta	3433 NS/DM	NS, DMR	79	64	21	40	4	40.3	31.1	1897	1382	2133	1758	1804
Syngenta	3480 NS/CL/DM	NS, CL, DMR	79	72	3	23	10	43.7	31.5	2143	891	1869	1380	1634
Syngenta	7120 HO/DM	HO, DMR	72	61	7	26	0	39.0	32.3	2258	877	1836	1356	1657
Syngenta	3980 NS/CL	NS, CL	81	75	8	32	0	41.3	30.8	--	1049	1829	1439	--
Triumph	610CLD	NS, CL, DMR	76	63	18	31	6	39.0	31.8	--	--	1763	--	--
Check-USDA	894	TRAD	75	69	11	28	10	42.0	29.3	2051	986	1948	1467	1662
Trial Mean			77	68	10	28	3	40.0	31.2	2007	1196	1934	--	--
C.V. %			1.6	4.6	69	52	220.6	3.4	3.1	13.1	21.4	17.9	--	--
LSD 5%			2.0	5.1	11	NS	10.9	2.2	1.6	425	417	562	--	--

<sup>1</sup>Type: HO = High Oleic, NS = NuSun, Trad = Traditional, CL = Clearfield, EX= Express, DMR = Downy Mildew Resistant.

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

<sup>3</sup>Sclerotinia stalk rot. Indicates percent incidence of basal or mid-stalk rot for each hybrid.

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

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

## Langdon -Confection (non-oil) Sunflower - 2008-2010

Brand	Hybrid	Days to Flower	Plant Height	Test Weight	Head Rot <sup>3</sup>	Stalk Rot <sup>4</sup>	Broken Stems <sup>5</sup>	Seed over screen			Yield				
								22/64	20/64	18/64	@ 10% moisture			Average	
											2008	2009	2010		2 yr
								-----(% over)-----			------(lbs/a)-----				
Croplan Genetics	179	77	70	21.8	3	32	0	67	87	95	--	1290	1685	1487	--
Dahlgren	9530	76	75	22.7	4	25	0	68	87	94	2365	1570	2218	1894	2051
Dahlgren	9592	75	73	20.4	5	12	0	73	89	94	2588	1821	2038	1930	2149
Dahlgren	95EXCL-9530CL <sup>1</sup>	77	75	21.7	8	16	0	50	81	94	2437	1471	1698	1585	1869
Mycogen Seeds	8C451	74	70	20.0	4	19	0	76	93	96	2218	1707	1805	1756	1910
RRC	2215 CL <sup>1</sup>	79	78	21.9	3	23	0	60	90	96	--	--	1665	--	--
RRC	2215	76	73	22.0	3	20	0	63	92	96	2572	1632	2225	1928	2143
RRC	2217	75	70	20.4	2	8	0	72	93	96	--	1559	2105	1832	--
Seeds 2000	Jaguar <sup>1</sup>	74	70	22.1	5	20	6	44	82	93	2208	2136	1785	1960	2043
Seeds 2000	Panther DMR <sup>2</sup>	72	68	22.5	2	35	2	30	78	93	2084	1819	1925	1872	1943
Seeds 2000	6946 DMR <sup>2</sup>	73	68	22.9	5	28	8	3	38	84	--	--	1512	--	--
Seeds 2000	X9151	74	70	23.5	1	17	1	7	41	80	--	--	2038	--	--
Triumph	TRX10454C	74	70	22.2	4	11	3	69	90	96	--	--	2218	--	--
Triumph	747C	72	69	21.4	7	11	0	73	87	95	2408	1399	1751	1575	1853
Check-USDA	924	72	62	24.2	11	28	2	34	72	89	2249	1167	2071	1619	1829
Trial Mean		75	71	22.0	5	20	2	--	--	--	2315	1614	1916	--	--
C.V. %		1.2	3.8	2.6	97	47	321	--	--	--	12.1	13.5	13.3	--	--
LSD 5%		1.5	4.5	1.0	NS	15.8	NS	--	--	--	465	364	427	--	--

<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.

<sup>4</sup> Sclerotinia stalk rot. Indicates percent incidence of basal or mid-stalk rot for each hybrid.

<sup>5</sup> Broken stems were laying flat on the ground. Breakage may have resulted from stalk rot, phoma, or insects. Plants were not harvested.