SUNFLOWER HYBRID PERFORMANCE TRIALS

Carberry 2022

Oil Sunflower markets - include birdfood, oil crush and de-hull. Variety selection becomes more important when trying to capture de-hull markets. Choose varieties with better de-hull ratio, larger size and higher test weight. Environment will contribute greatly to final product. Plant population and environment will contribute greatly to the final product. Percent (%) oil content was unavailable at press time, visit www.mbcropalliance.ca for more details.

OILS — CARBERRY 2022

Hybrid	Herbicide/Disease Tolerance[1]	Oil Type[2]	Company	Yield (lb/ac)	Moisture (%)	Maturity[3] (days to R9)	Height (inches)	Test Wt[4] (lb/bu)	Oil (%)
P63HE60	ExSun/DM	HO	Pioneer Hi-Bred	1403	13.2	127	57	28.1	44.4
P63ME80	ExSun/DM	NS	Pioneer Hi-Bred	2188	12.7	125	55	30.2	49.2
N4H302 E	ExSun	HO	Nuseed	1785	15.9	135	56	25.9	45.1
Talon	ExSun	NS	Nuseed	2412	15.8	135	58	24.7	42.3
CP432E	ExSun	NS	WinField United | CROPLAN	2288	13.6	135	58	31.4	47.3
CP455E	ExSun	HO	WinField United | CROPLAN	2157	18.0	145	57	28.4	45.7
Experimental lines being tested/proposed for registration in Canada									
P63HE501	ExSun	HO	Pioneer Hi-Bred	2175	14.0	135	59	29.1	42.5
P63HE920	ExSun	HO	Pioneer Hi-Bred	2197	19.6	141	58	26.7	39.7
N4H161 CL	CL	HO	Nuseed	2638	14.2	114	45	29.5	46.1
Camaro II	CL	NS	Nuseed	2601	17.5	136	63	32.5	48.0
X4219	ExSun	NS	Nuseed	2269	15.3	130	57	31.9	43.8
Site Average				2192	15.4	132	57	29.0	
CV%				11.36	12.50	0.74	2.60	6.79	
Sign Diff				Yes	Yes	Yes	Yes	Yes	
LSD (0.05)				427	3.3	2	3	3.4	
Planting Date				May 25, 2022					
Desiccation Date									
Harvest Date				October 26, 2022					

1 Genetic traits include CL = Clearfield herbicide tolerance; ExSun = Express SG herbicide tolerance; DM = Downy Mildew Resistance.

2 Oil Type designations are NS=NuSun; HO=High Oleic; CO = ConOil

3 Physiological maturity for sunflowers is R9, where the bracts on the head are almost completely brown.

4 Test weights are reported in lbs per Avery (Canadian) bushel.

All sunflowers varieties listed are susceptible to sclerotinia and sunflower rust strains present in Manitoba. Genetic resistance to verticillium wilt is rated as moderately susceptible to moderately resistant for all sunflower varieties presented. Plant population and environment will contribute greatly to the final product.

NON-OILS — CARBERRY 2022

Hybrid	Genetic Trait[3]	Company	Yield (lb/ac)	Moisture (%)	Maturity[1]	Height	2022 Seeding Sizing (%)[2]			Test Wgt[4]
							>22/64	>20/64	<20/64	(lb/bu A)
6946 DMR	DM	Nuseed	2266	19.7	129	59	18	41	41	18.1
Panther DMR	DM	Nuseed	2071	22.8	129	56	33	34	33	13.5
Experimental lines being tested/proposed for registration in Canada										
EX 570309	ExSun	MCA	2043	23.3	125	61	45	24	31	15.5
EX 359239	ExSun	MCA	1595	21.0	126	62	69	20	11	16.8
EX 20057	ExSun	MCA	1854	19.1	125	61	31	34	35	18.4
EX 20306	ExSun	MCA	1813	22.1	121	59	61	24	15	14.7
EX 200239	ExSun	MCA	1536	21.6	126	57	56	29	16	15.5
NJKE05926	ExSun	Nuseed	2367	24.6	126	56	1	12	87	17.2
NJKM65823	IMI	Nuseed	1915	25.7	135	59	18	43	39	15.0
NDKM15700	IMI	Nuseed	2230	22.7	134	52	18	41	40	15.8
NDKM16761	IMI	Nuseed	2165	23.6	132	58	11	34	55	16.0
20-EXP3	ExSun	CHS Sunflower	2940	20.6	134	60	58	30	12	14.0
21-EXP1	ExSun	CHS Sunflower	2366	29.0	137	58	25	29	47	12.0
Site Average			2089	23	130	58				15.6
CV %			9.77	15.95	2.39	3.93				14.82
Sign Diff			Yes	No	Yes	Yes				No
LSD (0.05)			350	6.1	5	4				3.9
Planting Date			May 25, 2022							
Desiccation Date										
Harvest Date			October 26, 2022							

1 Physiological maturity for sunflowers is R9, where the bracts on the head are almost completely brown.

2 Totals may not add to 100% due to rounding.

3 Genetic traits include CL = Clearfield tolerance; ExSun = Express tolerance; DM = Downy Mildew Resistance.

4 Test weights are reported in lbs per Avery (Canadian) bushel.

MANITOBA CROP ALLIANCE