

## **SUNFLOWER HYBRID PERFORMANCE TRIALS**

Rossendale 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 ROSSENDALE 2022											
Hybrid	Herbicide/Disease Tolerance <sup>1</sup>	Oil Type <sup>2</sup>	Company	Yield (lb/ac)	Moisture (%)	Maturity³ (days to R9)	Height (inches)	Test Wt <sup>4</sup> (lb/bu)	Oil (%)		
P63HE60	ExSun/DM	но	Pioneer Hi-Bred	2293	13.8	116	61	26.2	47.6		
P63ME80	ExSun/DM	NS	Pioneer Hi-Bred	2070	13.1	119	62	29.4	51.1		
N4H302 E	ExSun	но	Nuseed	2052	16.9	120	64	24.3	46.9		
Talon	ExSun	NS	Nuseed	2100	15.9	114	58	26.2	46.1		
CP432E	ExSun	NS	WinField United   CROPLAN	2142	11.7	115	56	27.7	47.1		
CP455E	ExSun	но	WinField United   CROPLAN	2335	16.1	119	62	26.4	46.9		
Experimental lines being tested/proposed for registration in Canada											
P63HE501	ExSun	но	Pioneer Hi-Bred	2109	12.7	120	60	28.0	46.4		
P63HE920	ExSun	но	Pioneer Hi-Bred	1988	16.2	119	61	30.2	45.2		
N4H161 CL	CL	но	Nuseed	1956	14.6	110	49	29.2	47.0		
Camaro II	CL	N5	Nuseed	2096	16.6	121	64	26.3	47.9		
X4219	ExSun	NS	Nuseed	2111	15.8	119	64	27.4	49.3		
Site Average				2114	14.9	118	60	27.4			
CV%				7.5	17.4	1.01	3.41	9.93			
Sign Diff				No	No	Yes	Yes	No			
LSD (0.05)				270	4.4	2	3	4.6			
Planting Date				June 8, 2022							
Desiccation Date											
Harvest Date					November 2, 2022						

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

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 ROSSENDALE 2022											
Hybrid	Genetic Trait <sup>3</sup> Company		Yield (lb/ac)	Moisture (%)	Maturity <sup>1</sup>	Height	2022 Seeding Sizing (%) <sup>2</sup> >22/64 >20/64 <20/64			Test Wgt <sup>4</sup>	
6946 DMR	DM	Nuseed	2274	9.4	113	53	17	35	48	23.8	
Panther DMR	DM	Nuseed	2247	12.7	110	52	36	31	33	23.9	
Experimental lines being tested/proposed for registration in Canada											
EX 570309	ExSun	MCA	2400	10.1	111	59	46	26	27	25.1	
EX 359239	ExSun	MCA	2201	10.9	115	60	80	9	12	24.6	
EX 20057	ExSun	MCA	2687	10.6	116	56	64	20	17	24.1	
EX 20306	ExSun	MCA	2296	8.8	116	53	68	17	15	24.4	
EX 200239	ExSun	MCA	2222	12.6	116	58	87	7	5	24.0	
NJKE05926	ExSun	Nuseed	2053	11.9	114	54	1	16	83	26.2	
NJKM65823	IMI	Nuseed	2155	13.8	119	57	16	40	45	24.5	
NDKM15700	IMI	Nuseed	2191	11.2	112	51	50	29	21	20.9	
NDKM16761	IMI	Nuseed	2174	9.0	117	52	39	40	22	26.0	
20-EXP3	ExSun	CHS Sunflower	2141	12.6	118	58	43	33	24	23.6	
21-EXP1	ExSun	CHS Sunflower	2018	15.4	119	59	47	39	14	18.3	
Site Average		2235	11.5	115	55				23.8		
CV%			9.41	12.52	0.81	3.60				6.80	
Sign Diff			No	No	Yes	Yes				Yes	
LSD (0.05)			458	3.2	2	4				3.5	
Planting Date			June 8, 2022								
Desiccation Date											
Harvest Date			November 2, 2022								

 $<sup>1\,</sup>Physiological\ maturity\ for\ sunflowers\ is\ R9, where\ the\ bracts\ on\ the\ head\ are\ almost\ completely\ brown.$ 



<sup>2</sup> Oil Type designations are NS=NuSun; HO=High Oleic; CO = ConOil

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

<sup>4</sup> Test weights are reported in lbs per Avery (Canadian) bushel.

<sup>2</sup> Totals may not add to 100% due to rounding.

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

<sup>4</sup> Test weights are reported in lbs per Avery (Canadian) bushel.