

2019 CONVENTIONAL SOYBEAN REGIONAL VARIETY TRIAL (SRVT)

Entry	Name	Type ¹	Company Maturity Grouping ²	Years Tested	Site Years	Yield (Kg/ha)	Yield Rank	Yield by location (kg/ha)					% Yield (OAC Prudence)						Days to Maturity ³					Days to Maturity (+/- OAC Prudence) ⁴					Canadian Marketing Agent		
								Outlook Irrigated	Saskatoon	Rosthern	Redvers	Griffin	Outlook Irrigated	Saskatoon	Rosthern	Redvers	Griffin	Mean Yield	Saskatoon	Rosthern	Redvers	Griffin	Mean mat	Saskatoon	Rosthern	Redvers	Griffin	Mean mat			
								12	OAC Prudence	Conv check	00.3	2	7	1732	2	1815	2484	460	630	3273	100	100	100	100	100	100	130.0	135.7		119.3	121.7
6	NSC Watson RR2Y	HT check	000.8			1718	4	1677	2080	729	754	3351	92	84	159	120	102	111	115.7	134.7	110.3	114.7	118.8	-14.3	-1.0	-9.0	-7.0	-8	NorthStar Genetics		
13	TH 33003R2Y	HT check	00.3			1702	5	1504	2088	554	973	3392	83	84	120	154	104	109	128.7	136.0	118.3	118.0	125.3	-1.3	0.3	-1.0	-3.7	-1	Thunder Seeds		
1	Bennie	Con	00.6	2	7	1722	3	1754	2482	372	758	3245	97	100	81	120	99	99	127.3	135.7	119.0	119.7	125.4	-2.7	0.0	-0.3	-2.0	-1	Elite Seeds		
2	X5895-1-S1-25	Con		1	5	1496	12	1417	2179	540	635	2708	78	88	117	101	83	93	121.7	135.0	113.0	114.3	121.0	-8.3	-0.7	-6.3	-7.4	-6	U of S		
3	X5895-1-S1-35	Con		1	5	1655	8	1626	2146	620	652	3230	90	86	135	104	99	103	127.3	132.7	117.3	116.0	123.3	-2.7	-3.0	-2.0	-5.7	-3	U of S		
4	X5897-1-S1-6	Con		1	5	1671	7	1831	2419	619	622	2865	101	97	135	99	88	104	117.0	134.0	113.0	114.3	119.6	-13.0	-1.7	-6.3	-7.4	-7	U of S		
5	X5902-1-S1-2	Con		1	5	1698	6	2047	2246	471	586	3140	113	90	102	93	96	99	124.0	136.3	116.7	116.0	123.3	-6.0	0.6	-2.6	-5.7	-3	U of S		
7	Siberia	Con		2	7	1820	1	1447	2550	655	856	3591	80	103	142	136	110	114	127.3	136.7	118.0	118.0	125.0	-2.7	1.0	-1.3	-3.7	-2	Program		
8	Maxus	Con	00.3	2	7	1455	13	1322	2016	409	640	2889	73	81	89	102	88	87	127.3	136.0	118.0	119.3	125.2	-2.7	0.3	-1.3	-2.4	-2	Program		
9	PR110212Z046	Con	00.4	1	5	1599	10	1810	2177	309	612	3086	100	88	67	97	94	89	130.3	135.7	119.7	121.3	126.8	0.3	0.0	0.4	-0.4	0	Program		
10	PR110187Z017	Con	00.5	1	5	1526	11	1695	2105	370	799	2660	93	85	80	127	81	93	129.7	135.7	119.0	122.0	126.6	-0.3	0.0	-0.3	0.3	0	Program		
11	AAC Edward	Con	00.4	2	7	1625	9	1534	1900	696	767	3230	85	77	151	122	99	107	123.0	130.0	111.3	115.7	120.0	-7.0	-5.7	-8.0	-6.0	-7	SeCan		
GRAND MEAN						1648		1652.2	2220.9	523.3	714.2	3127.8	*% mean yield calculated as mean of site percentages in order to give each site equal weight																		
Yield (bu/ac)						24.5		24.6	33.0	7.8	10.6	46.5																			
CV						11.55		17.5	17.4	14.3	7.9	6.9																			
LSD						163.8		587	254	153	357	438																			
p statistic, a=0.01						0.0000		0.1967	0.0254	0.0000	0.0019	0.0004																			

Outlook dryland site dropped due to drought

Yield means based on G x E statistical analysis in Agrobase

2018 CONVENTIONAL SOYBEAN REGIONAL VARIETY TRIAL (SRVT)

Name	PBR Status	Company Maturity Grouping ¹	Herbicide Tolerance Type ²	Hilum Colour ³	Years Tested	Site Years	Yield (Kg/ha) ⁴	Yield Rank	Days to Maturity ⁵ (+/- OAC Prudence = 110 days)			Yield (% OAC Prudence)		Mean Yield % OAC Prudence ⁴
									Redvers	Rosthern	Mean mat	Redvers	Rosthern	
OAC Prudence		00.3	Con	Y	1	2	1756	4	0	0	0	100	100	100
AAC Edward	UPOV 91	00.4	Con	CLR	1	2	2092	2	-7	-5	-5	117	122	119
Alaska		00	Con	IY	1	2	1423	7	-6	-3	-4	67	96	81
PR110524Z023		00	Con	IY	1	2	2117	1	-3	-2	-2	122	120	121
CFS18.1.01		00.5	Con	IY	1	2	1816	3	1	-1	1	109	97	103
Maxus		00	Con	IY	1	2	1653	5	4	-1	2	98	90	94
Terra S-11			Con	IY	1	2	1521	6	5	0	3	87	86	87
Jari		00.9	Con	IY	1	2	1137	8	8	1	5	80	48	65
GRAND MEAN							1689					1787	1592	
Yield (bu/ac)							25					26.6	23.7	

CV⁶	5.5	6.0	5.8
LSD ⁷ (kg)	173	168	155
LSD (%)	10%	11%	9%

Seeding date	May-23	May-21
Harvest date	Oct-11	Sep-27

¹ Maturity Groups are assigned by individual companies to assist growers select varieties suitable for their area; growers should not rely on only one source of information for judging maturity.

² All varieties in this table are conventional (con) soybean varieties and do not have tolerance to glyphosate.

³ Hilum is the point where seed attaches to the pod. Y-Yellow, IY-Imperfect Yellow, CLR-Clear

⁴ One-year mean yield of the check variety OAC Prudence over 2 sites was 25 bushels/acre in 2018. Typical on-farm yields are 25-38 bu/acre.

⁵ Days to maturity indicates days from seeding to 95% mature pods. Only sites which reached maturity prior to a killing frost were used for calculating days to maturity. From past experience, moist growing seasons result in delayed maturity.

Soybeans are not native to the Canadian Prairies and so crop must be inoculated with soybean inoculant that contains *Bradyrhizobium japonicum* bacteria.

⁶ CV = Coefficient of variation is a measure of relative variability. It is the ratio of the standard deviation to the mean (or average). It shows the extent of variability in relation to the mean or average of a population. For variety trials, a CV of 15% is usually the maximum allowed for a site to be included in the analysis. Higher CVs mean there is too much variability in the data. The lower the CV, the less variability in the data.

⁷ LSD - Least Significant Difference allows comparisons between the means of two varieties. For two varieties to be statistically different the difference in their means must be larger than the LSD. For example - with an LSD at 10% and a yield difference between two varieties of 5% equate to no statistical difference between those two varieties. If the yield difference was 15% then there would be a statistical difference and one variety would be ranked higher than another.