2016 PULSE AND SOYBEAN VARIETY EVALUATION GUIDE

REVISED Wide Row Yield Data 2/6/17

MANITOBA Pulse Soybean GROWERS

This publication features the results from MPSG sponsored tr

The independent evaluation of soybean and pulse varieties across five different crop types (soybeans, edible beans, peas, faba beans and lentils) found within this publication are made possible with your continued support through your MPSG check-off. The objective of these trials is to provide the Manitoba soybean and pulse industry with independent, scientific information on variety performance and agronomic characteristics.

The evaluation of Roundup Ready soybeans was conducted at 12 locations in 2016, which are reported by eastern and western Manitoba. In eastern Manitoba, there are three categories – early, mid and late sites. *Long-season* sites include Morden and Rosebank, which test long- and mid-season varieties. *Mid-season* sites include Morris and St. Adolphe – these varieties are also called the *core* sites because they test all varieties. *Short-season* sites include Arborg, Beausejour and Stonewall, which test early- and mid-season varieties. Western Manitoba sites include Boissevain, Carberry, Dauphin, Hamiota and Melita. Conventional (non-GM) soybeans were tested at select sites in eastern and western Manitoba.

The evaluation of dry beans is conducted under both wide row (≥60 cm) and narrow row (≤40 cm), which are reported separately. Wide row trials were conducted at three locations – Carman, Morden, and Winkler. Narrow row trials were conducted at two locations – Morden and Stonewall. Entries in the evaluation are separated into small- (navy, black), medium- (pinto, pink, yellow) and large-seeded (cranberry, light red kidney and Great Northern).

There are two main types of data tables – *Variety Description* and *Yield by Location*. Variety description tables include long-term maturity and yield data, as well as agronomic characteristics. Yield by location tables report yield data from the current year for each location.

All trials are replicated three times and randomized to allow for statistical analysis. Statistical yield differences can be evaluated only using single-site year data, which is found in all *Yield by Location* tables. To compare yields, look at the LSD (Least Significant Difference). The LSD represents the yield quantity (in bu/ac or lbs/ac) that two varieties must differ before you can say with a 95% confidence that a true yield difference exists due to genetics.

We acknowledge the hard work of all the people who plant, maintain, take notes, harvest the plots, and are responsible for the data contained within this publication. We appreciate the hard work of the staff at Manitoba Agriculture, Agriculture and Agri-Food Canada, Cereal Research Centre, the WADO, PCDF, PESAI and CMCDC research facilities and the private research companies, without whom this publication would not have been possible.

NOTES FOR ALL SOYBEAN TABLES

Manitoba Variety Zone – Soybean varieties have been organized into four maturity zones – very early, early, mid and long season. These zones reflect the Manitoba Soybean Maturity Map, which displays soybean maturity zones based on long term heat unit and frost-free period data. Varieties fall into certain zones based on their average relative days to maturity. The zone indicates the longest variety zone that varieties should be selected from for each region.

Company Maturity Grouping – Maturity grouping is the ranking of maturity provided by seed suppliers.

Relative Days to Maturity (DTM) – This value is the number of days from seeding to plant maturity (R-8 or 95% of pods on the main stem have turned color) and is expressed as + or – days relative to the check variety. Actual days to maturity for the check variety is found in the grey box at the bottom of the table. Relative days to maturity is shown as an average of three previous years and by individual year. Maturity can vary by year which is why it is important to use long term data when making variety selection decisions.

Yield % Check – This value indicates the average yield across all site years that the variety has been tested relative to the check.

Site Years Tested – This value indicates the total number of individual site years that a variety has been tested at. For example, if a variety was tested at five sites in two years, the total site years would be 10. The higher the number, the more environments the variety has been tested in. Typically, a variety is tested at two to five sites per year.

Hilum Colour – Hilum colour be Clear (CL), Yellow (Y), Imperfect Yellow (IY), Grey (G), Brown (BR), Buff (BF), Tan (TN) Imperfect Black (IB) or Black (BL). The hilum is the point of attachment on the soybean seed where it attaches to the pod. Hilum colour is a marketing factor.

Relative seeds/lb – This is the seed number/weight of the varieties as provided by the seed suppliers. Soybean seed size can vary greatly between varieties as well as between seed lots of the same variety. Seed number/weight for individual seed lots should be used when calculating seeding rates.

Lodging is rated at harvest; 1 = standing upright, 5 = flat on the ground.

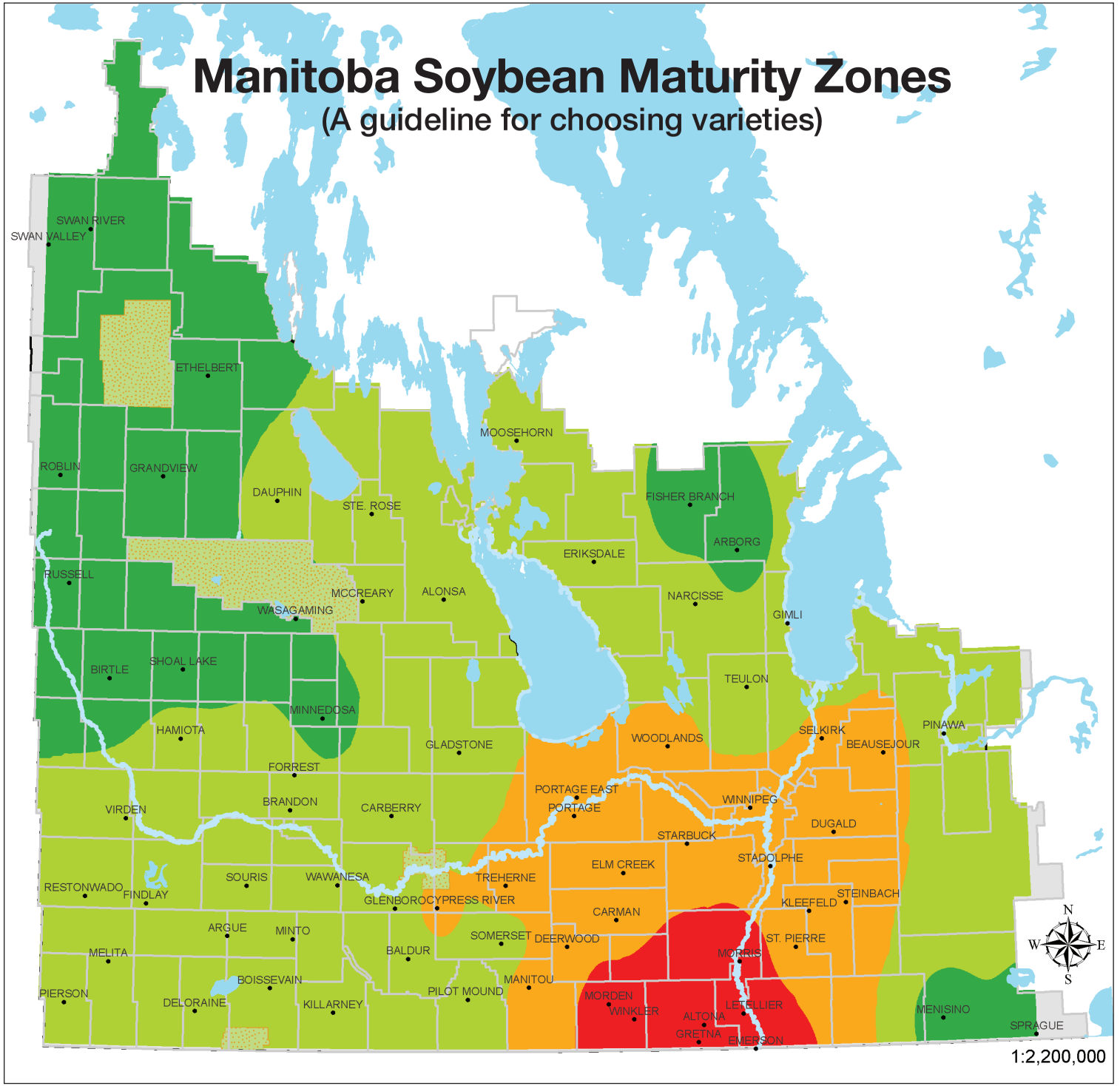
Iron Deficiency Chlorosis (IDC) ratings are given to each variety based on the following scale: 1 = green leaves, 2 = yellowish leaves, 3 = green veins with yellow leaves, 4 = brown dead tissue between green veins, 5 = severe chlorosis and a stunted growing point. Ratings provided are the three-year average from a site near Winnipeg that is prone to iron chlorosis. Lower IDC ratings generally perform better on soils prone to iron chlorosis. Groupings are also provided based on the following scale: T = Tolerant, ST = Semi-Tolerant and S = Susceptible.

Coefficient of Variation (CV) is the statistical measure of random variation in a trial. CV less than 15% generally indicates a more uniform trial and conclusive data.

Least Significant Difference (LSD) is the numerical value that two varieties must differ before it can be said with a 95% chance of certainty that a true yield difference exists.

Manitoba Soybean Maturity Zones

(A guideline for choosing varieties)



Map Elements

- Water Bodies
- Rural Municipalities
- Prov/Nat. Parks

Maturity Zones

- Very Early
- Early
- Mid
- Long

Maturity Zone	CHU	FFP (days)	Maturity Grouping
V. Early	<2250	<110	<00.2
Early	2250–2400	110–118	00.2–00.3
Mid	2401–2550	119–125	00.4–00.6
Long	>2550	>125	>00.6

This map is based on 1981–2010 Climate Normal Data for cumulative Corn Heat Units (CHU, May 15 – Sept 20) and average frost-free period (FFP, days Tmin > 0°C).

The map outlines the longest maturity suggested for each production area, but earlier varieties can also perform well. Use in conjunction with Soybean Variety Evaluation Guide, which outlines varieties according to maturity zones.

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ROUNDUP READY SOYBEANS – VARIETY DESCRIPTIONS

Manitoba Variety Zone	Company Maturity Grouping	Variety	Type[1]	Relative Days to Maturity[2] + / - of Check				Yield % Check	Site Years Tested	Hilum Colour	Relative Seeds/ lb	Lodging[3]	IDC[4]		SCN[5]	PRR[6]
				Average	2016	2015	2014						Rating (1– 5)	Grouping		
Very Early Season Zone	000.6	NSC LEROY RR2Y	R2Y	-10	-10	–	–	83	5	Y	2595	1.5	2.2	ST	–	–
	00.2	P002T04R	RR1	-8	-6	-9	-9	81	18	TN	3163	1.1	2.2	ST	–	1k
	000.9	22-60RY	R2Y	-7	-7	-7	-6	89	18	BL	3353	1.0	2.1	ST	–	1c
	000.9	S0009-M2	R2Y	-6	-6	-6	–	88	11	IY	3070	1.8	2.2	ST	–	6
	000.8	NSC Watson RR2Y	R2Y	-5	-5	-6	–	86	11	IY	2989	1.5	1.9	ST	–	–
Early Season Zone	00.1	NSC Reston RR2Y	R2Y	-4	-4	-3	-5	91	30	BL	3096	1.2	2.7	S	–	1k
	00.2	LS Northwester	R2Y	-4	-2	-5	-4	86	18	BL	3266	1.5	2.0	ST	–	–
	00.2	Bishop R2	R2Y	-3	-1	-4	-5	90	35	IY	3024	1.8	2.3	S	–	–
	000.9	23-11RY	R2Y	-3	-2	-3	-5	94	18	BL	3122	1.1	1.7	T	–	1c
	00.1	Notus R2	R2Y	-3	-4	-3	-3	94	18	BL	2259	1.0	1.7	T	–	1c
	00.3	Mahony R2	R2Y	-3	-2	-3	-4	100	18	BL	2642	1.4	2.9	S	–	–
	00.1	S001-B1	R2Y	-3	-3	–	–	98	5	Y	2680	1.3	1.9	ST	–	1c
	00.3	McLeod R2	R2Y	-3	-2	-3	-4	95	30	BL	2402	1.4	1.8	ST	–	–
	00.5	S007-Y4	R2Y	-3	-2	-3	-4	104	24	IY	3243	1.1	2.0	ST	–	1c
	000	Torro R2	R2Y	-3	-2	-4	–	89	11	BL	2668	2.3	2.4	S	–	–
	00.2	23-60RY	R2Y	-2	-1	-2	-4	100	24	BL	2849	1.5	1.7	T	–	–
	00.3	S003-L3	R2Y	-2	-1	-3	–	95	11	BR	2385	1.5	2.2	ST	–	–
	00.6	P006T78R	RR1	-2	0	-4	-2	95	18	BR	2834	1.1	2.2	ST	–	1c
	00.3	PS 0035 NR2	R2Y	-2	0	-2	-4	99	24	BL	2400	1.7	1.9	ST	SCN	–
	00.3	NSC Austin RR2Y	R2Y	-2	-1	-3	–	93	11	Y	2598	1.1	2.2	ST	–	–
	00.4	TH 32004R2Y	R2Y	-2	-1	-1	-2	99	38	BL	2900	1.4	1.9	ST	–	1c
	Experimental lines that are being tested / proposed for registration in Canada															
	000	CFS16.3.01R2	R2Y	-6	-6	–	–	92	5	IB	3752	1.5	2.2	ST	–	
	000.9	EXP 000917R2	R2Y	-6	-6	–	–	85	4	BL	2950	1.8	1.7	T	–	
Mid Season Zone	00.4	PS 0055 R2	R2Y	-1	1	-3	-2	97	17	IY	3000	1.2	1.8	ST	–	1k
	00.3	Akras R2	R2Y	-1	-1	-2	-1	102	29	BL	2236	1.1	1.7	T	–	1k
	00.3	NSC Gladstone RR2Y	R2Y	-1	0	-1	-3	98	24	BL	2394	1.3	2.1	ST	–	–
	00.2	TH 35002R2Y	R2Y	-1	0	-1	-3	93	18	BL	3100	1.7	2.3	S	–	–
	00.2	LS 002R24N	R2Y	-1	1	-1	-3	102	24	BL	2853	1.8	2.0	ST	SCN	–
	00.6	P006T46R	RR1	-1	-1	–	–	103	5	BR	2785	1.6	2.1	ST	–	1c
	00.6	Chadburn R2	R2Y	0	0	0	-1	97	37	BL	2800	1.5	1.7	T	–	–
	00.6	S006-W5	R2Y	0	0	-1	-	111	10	IY	3060	1.2	2.6	S	–	1a,3a
	00.3	LS 003R24N	R2Y	0	2	0	-3	97	23	BL	2645	1.8	1.9	ST	SCN	1c,1k
	00.5	Lono R2	R2Y	0	0	-1	0	103	24	BL	2820	1.2	2.0	ST	–	1k
	00.5	P005T13R	RR1	0	0	–	–	91	5	BR	2986	1.2	1.8	ST	–	1c
	00.5	TH 33005R2Y	R2Y	0	0	-1	0	102	29	BL	2900	1.1	1.9	ST	–	1c,1k
	00.5	24-10RY	R2Y	0	0	0	0	100	48	BL	2442	1.4	1.9	ST	–	1k
	00.8	P008T70R	RR1	0	2	-1	-1	100	24	TN	3024	1.6	1.9	ST	–	1k
	00.6	TH 34006R2Y	R2Y	1	2	0	0	101	22	BL	2800	1.8	2.1	ST	–	–
	00.7	HS 007RY32	R2Y	1	2	2	-1	101	22	BL	2417	1.3	1.9	ST	–	1c,1k
	00.5	Gray R2	R2Y	1	3	1	0	98	30	BL	2712	1.9	1.9	ST	–	1c
	00.3	LS Maidan	R2Y	1	1	1	–	98	10	Y	2938	1.4	2.2	ST	–	–
	00.4	NSC Tilston RR2Y	R2Y	1	4	1	-1	97	34	BL	3120	1.7	1.8	ST	–	–
	00.6	HS 006RYS24	R2Y	1	4	2	-2	97	35	BL	2650	2.1	1.7	T	SCN	–
	00.4	Hero R2	R2Y	1	3	1	0	103	24	BL	2300	1.9	2.2	ST	–	1c
	00.8	P008T22R2	R2Y	1	3	1	1	103	24	BL	2736	1.5	1.6	T	–	1c
	000	Kosmo R2	R2Y	1	1	–	–	89	5	IY	2268	1.6	2.1	ST	–	–
	00.3	TH 33003R2Y	R2Y	2	3	2	-1	98	37	BR	3000	2.2	2.1	ST	–	1c
	00.6	PRO 2525R2	R2Y	2	4	3	0	104	17	BL	2525	1.8	1.7	T	–	1c
	00.7	NSC Richer RR2Y	R2Y	2	4	2	1	103	32	BL	2895	1.8	1.6	T	–	1c
	00.5	24-12RY	R2Y	2	2	–	–	103	5	BL	2772	1.9	2.0	ST	–	–
	Experimental lines that are being tested / proposed for registration in Canada															
	00.4	CW1410185	R2Y	-1	-1	–	–	104	5	BR	3174	1.2	1.9	ST	–	1c
	00.2	LS SOLAIRE	R2Y	0	0	–	–	93	5	BL	2579	1.2	2.4	S	–	–
Long Season Zone	00.5	TAMULA R2	R2Y	3	3	–	–	102	5	Y	3220	1.6	2.6	S	–	
	00.5	LS 005R22	R2Y	3	7	3	1	97	27	BL	2938	2.2	1.8	ST	–	1k,1c
	00.8	Currie R2	R2Y	4	5	3	3	102	33	BL	2651	1.6	1.8	ST	–	1k
	00.6	DS0067Z1	R2Y	4	4	–	–	113	5	BL	2500	1.6	1.7	T	–	–
	00.5	LS Eclipse	R2Y	4	5	3	–	102	10	BL	2841	2.0	2.2	ST	SCN	1k,1c
	00.7	PS 0074 R2	R2Y	4	6	3	3	105	27	BR	2900	2.8	1.7	T	–	–
	00.8	Podaga R2	R2Y	4	6	4	3	97	16	Y	2204	1.8	2.0	ST	–	1k
	0.1	HYDRA R2	R2Y	5	7	5	3	99	16	BL	2270	2.0	2.1	ST	–	1k
	00.8	Astro R2	R2Y	6	7	5	4	108	32	BL	2700	1.8	1.7	T	–	1k
	00.7	TH 36007R2Y	R2Y	7	8	5	–	96	10	Bl	2550	2.6	2.4	S	–	–
	00.9	PRO 2535R2	R2Y	7	10	6	6	104	16	BL	2299	2.1	1.8	ST	–	1k
	Experimental lines that are being tested / proposed for registration in Canada															
	00.4	EXP TH 37004R2Y	R2Y	3	3	–	–	103	5	BL	2600	1.8	2.0	ST	–	–
	00.4	LS MISTRAL	R2Y	5	5	–	–	113	4	BL	2366	1.4	1.6	T	–	1c
	00.7	AR1215342	R2Y	5	5	–	–	106	4	BR	2698	1.7	2.0	ST	–	–
	00.9	NSC Jordan RR2Y	R2Y	6	6	–	–	105	4	BL	2789	1.6	2.2	ST	–	–
CHECK CHARACTERISTICS																
24-10RY				116	118	113	118	53	48							
				days to maturity				bu/acre	site years							

[1] R2Y Indicates Genuity Roundup Ready 2 Yield™ Soybeans
[2] Maturity ratings for 2016 are averaged across Morris and St. Adolphe
[3] Lodging ratings are averaged across St. Adolphe, Morris
[4] Iron Deficiency Chlorosis (IDC) Ratings – 1 = Green, 3 = Interveinal Chlorosis, Groupings – T = Tolerant, ST = Semi-Torerant, S = Suceptible
[5] SCN – Soybean Cyst Nematode Resistance
[6] PRR – Indicates resistance genes for Phytophthora Root Rot

EASTERN MANITOBA ROUNDUP READY SOYBEAN TRIALS – YIELD BY LOCATION

Manitoba Variety Zone	Company Maturity Grouping	Variety	2016 Yield: % of 24-10RY						
			Early Sites			Core Sites		Late Sites	
			Arborg	Beausejour	Stonewall	Morris	St. Adolphe	Morden	Rosebank
Very Early Season Zone	000.6	NSC LEROY RR2Y	95	82	92	68	77	–	–
	00.2	P002T04R	95	81	95	93	88	–	–
	000.9	22-60RY	96	89	102	84	83	–	–
	000.9	S0009-M2	91	91	90	83	86	–	–
	000.8	NSC Watson RR2Y	81	78	93	88	87	–	–
Early Season Zone	00.1	NSC Reston RR2Y	101	74	93	86	89	–	–
	00.2	LS Northwester	99	71	89	83	89	–	–
	00.2	Bishop R2	98	96	89	85	85	–	–
	000.9	23-11RY	106	97	103	97	96	–	–
	00.1	Notus R2	102	91	104	85	91	–	–
	00.3	Mahony R2	100	102	105	100	91	–	–
	00.1	S001-B1	98	96	103	94	99	–	–
	00.3	McLeod R2	95	92	96	98	87	–	–
	00.5	S007-Y4	112	106	114	92	94	–	–
	000	Torro R2 PR1418113R2	96	99	97	84	88	–	–
	00.2	23-60RY	98	109	109	98	95	–	–
	00.3	S003-L3	96	101	103	96	96	–	–
	00.6	P006T78R	101	88	105	95	107	–	–
	00.3	PS 0035 NR2	95	114	106	99	104	–	–
	00.3	NSC Austin RR2Y	111	100	99	88	96	–	–
	00.4	TH 32004R2Y	105	117	106	106	87	–	–
		Experimental lines that are being tested / proposed for registration in Canada							
	000	CFS16.3.01R2	88	105	94	93	81	–	–
	000.9	EXP 000917R2	98	–	94	59	90	–	–
Mid Season Zone	00.4	PS 0055 R2	110	90	98	97	99	–	–
	00.3	Akras R2	113	118	111	91	105	–	–
	00.3	NSC Gladstone RR2Y	100	114	101	109	99	–	–
	00.2	TH 35002R2Y	95	114	97	100	88	–	–
	00.2	LS 002R24N	104	117	108	106	101	–	–
	00.6	P006T46R	108	107	110	94	96	–	–
	00.6	Chadburn R2	108	107	110	106	94	–	–
	00.6	S006-W5	–	–	–	108	117	110	112
	00.3	LS 003R24N	–	–	–	108	101	102	106
	00.5	Lono R2	108	114	112	89	102	–	–
	00.5	P005T13R	92	84	99	86	95	–	–
	00.5	TH 33005R2Y	–	–	–	98	98	102	104
	00.5	24-10RY	100	100	100	100	100	100	100
	00.8	P008T70R	104	80	102	88	87	–	–
	00.6	TH 34006R2Y	–	–	–	116	99	107	104
	00.7	HS 007RY32	–	–	–	110	99	106	105
	00.5	Gray R2	98	110	110	113	108	–	–
	00.3	LS Maidan	–	–	–	106	94	102	99
	00.4	NSC Tilston RR2Y	108	108	99	93	97	–	–
	00.6	HS 006RYS24	103	105	99	106	101	–	–
	00.4	Hero R2	121	104	110	100	108	–	–
	00.8	P008T22R2	112	110	112	109	100	–	–
	000	Kosmo R2	98	88	94	75	88	–	–
	00.3	TH 33003R2Y	111	107	108	105	98	95	96
	00.6	PRO 2525R2	–	–	–	106	98	99	103
	00.7	NSC Richer RR2Y	–	–	–	111	93	106	110
	00.5	24-12RY	98	99	104	117	96	–	–
		Experimental lines that are being tested / proposed for registration in Canada							
	00.4	CW1410185	112	116	104	94	95	–	–
	00.2	LS SOLAIRE	101	87	100	88	91	–	–
Long Season Zone	00.5	TAMULA R2	112	101	103	90	104		
	00.5	LS 005R22	–	–	–	109	93	94	105
	00.8	Currie R2	–	–	–	107	100	104	100
	00.6	DS0067Z1	107	121	115	119	104	–	–
	00.5	LS Eclipse	–	–	–	121	91	93	107
	00.7	PS 0074 R2	–	–	–	107	103	103	112
	00.8	Podaga R2	–	–	–	97	104	92	102
	0.1	HYDRA R2	–	–	–	109	101	101	99
	00.8	Astro R2	–	–	–	124	102	113	115
	00.7	TH 36007R2Y	–	–	–	103	104	87	109
	00.9	PRO 2535R2	–	–	–	110	99	100	107
		Experimental lines that are being tested / proposed for registration in Canada							
	00.4	EXP TH 37004R2Y	100	106	99	105	103	–	–
	00.4	LS MISTRAL	–	–	–	109	110	115	117
	00.7	AR1215342	–	–	–	102	107	108	106
	00.9	NSC Jordan RR2Y	–	–	–	93	114	108	105
CHECK CHARACTERISTICS		24-10RY (bu/acre)	63	52	59	62	59	58	53
		CV%	7	10	6	7	5	7	4
		LSD	11	17	10	11	8	12	7
		Sign Dif	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Seeding Date	24-May	19-May	24-May	24-May	17-May	30-May	24-May
		Harvest Date	13-Oct	14-Oct	29-Sep	13-Oct	28-Sep	03-Oct	28-Sep

WESTERN MANITOBA ROUNDUP READY SOYBEAN TRIALS

In 2016, trials were located at Boissevain, Dauphin, Carberry, Hamiota, Melita

MATURITY & YIELD BY LOCATION

Company Maturity Grouping	Variety	Yield % Check	Site Years Tested	Relative Days to Maturity [1] + / - of Check				2016 Yield % of NSC Reston RR2Y				
				Average	2016	2015	2014	Boissevain	Carberry	Dauphin	Hamiota	Melita
000.6	NSC LEROY RR2Y	83	5	-7	-7	–	–	69	77	85	89	90
00.2	P002T04R	92	14	-4	-3	-3	-5	98	79	84	75	107
000.9	S009-M2	101	10	-3	-1	-5	–	67	80	108	98	119
000.8	NSC Watson RR2Y	99	10	-2	0	-4	–	98	82	105	103	126
000.9	22-60 RY	96	14	-1	-1	-1	-1	65	86	97	91	110
00.1	S001-B1	104	5	-1	-1	–	–	113	94	100	100	120
00.1	NSC Reston RR2Y	100	20	0	0	0	0	100	100	100	100	100
00.2	LS NorthWester	98	14	0	2	0	-1	88	82	94	87	98
00.2	23-60RY	105	19	1	4	2	-4	108	97	99	98	119
000.9	23-11 RY	99	14	2	1	1	3	89	90	100	94	109
00.3	NSC AUSTIN RR2Y	99	5	2	2	–	–	108	93	90	96	119
00.2	Bishop R2	99	20	2	2	3	1	90	79	98	86	122
00.2	22-61RY	95	5	3	3	–	–	99	77	97	102	101
00.2	LS 002R24N	107	19	3	6	3	0	96	102	99	101	131
00.3	Mahony R2	108	14	3	3	3	3	85	93	101	107	124
00.6	P006T78R	107	10	3	4	2	–	103	99	99	92	144
00.3	McLeod R2	107	20	3	4	3	2	108	104	95	89	130
00.4	PS 0055 R2	98	5	3	3	–	–	89	90	100	103	107
00.5	S007-Y4	112	14	4	6	3	2	102	104	99	101	143
00.2	TH 35002R2Y	99	14	4	4	4	3	107	112	86	90	141
00.4	TH 32004R2Y	111	20	4	6	4	1	106	89	93	94	167
00.3	S003-L3	104	5	4	4	–	–	92	91	100	107	137
00.3	Akras R2	107	14	4	4	5	3	87	100	106	99	136
00.3	TH 33003R2Y	104	20	4	7	5	1	106	86	96	93	140
00.3	PS 0035 NR2	103	19	4	7	5	1	102	87	98	98	139
00.6	S006-W5	109	5	4	4	–	–	111	112	102	98	132
00.3	NSC Gladstone RR2Y	106	19	5	7	6	2	102	98	93	91	146
00.4	NSC Tilston RR2Y	105	20	5	7	5	3	96	84	93	89	137
00.5	Lono R2	109	14	6	7	5	5	108	106	108	110	130
00.4	Hero R2	111	14	6	7	6	4	122	102	108	92	184
00.5	TH 33005R2Y	105	19	6	7	6	5	100	86	102	89	153
00.6	P006T46R	109	5	6	6	–	–	115	93	105	96	155
00.6	HS 006RYS24	101	15	7	10	6	4	90	91	100	99	144
00.5	P005T13R	94	5	7	7	–	–	102	68	94	90	130
00.5	TAMULA R2	107	5	8	8	–	–	94	107	102	108	132
	Experimental lines that are being tested / proposed for registration in Canada											
000	CFS16.3.01R2	97	5	0	0	–	–	104	81	94	96	120
000.9	EXP 000917 R2	92	5	0	0	–	–	88	75	102	93	98
00.4	EXP TH 37004R2Y	110	5	7	7	–	–	125	93	104	96	150
00.2	LS SOLAIRE	101	5	9	9	–	–	95	88	99	91	150
CHECK CHARACTERISTICS												
NSC Reston RR2Y		52 bu/acre	20 site years	123	123	118	129 days to maturity	44	54	69	66	38
							CV%	7	10	5	7	7
							LSD	12	16	7	11	12
							Sign Diff	Yes	Yes	Yes	Yes	Yes
							Seeding Date	21-May	17-May	18-May	20-May	18-May
							Harvest Date	15-Oct	18-Oct	19-Oct	12-Oct	27-Sep

[1] Maturity based on data from Boissevain, Dauphin, Melita

ROUNDUP READY SOYBEANS

New varieties for 2017

Variety	Previous Code	Distributor
HYDRA R2	CFS13.3.01 R2	Brett Young
TAMULA R2	TAMULA R2	Brett Young
DS0067Z1	DS0067Z1	Dow Seeds
24-12RY	24-12RY	DEKALB
P005T13R	P005T13R	DuPont Pioneer
P006T46R	P006T46R	DuPont Pioneer
NSC Austin RR2Y	AR1310870	Northstar Genetics Manitoba

Variety	Previous Code	Distributor
NSC LEROY RR2Y	NSC LEROY RR2Y	Northstar Genetics Manitoba
NSC Watson RR2Y	NSC Watson RR2Y	Northstar Genetics Manitoba
S001-B1	CW1410087	Syngenta Canada
S003-L3	AR1215503	Syngenta Canada
S006-W5	AR1210501	Syngenta Canada
Torro R2	PR1418113R2	Quarry Seed Ltd.
Kosmo R2	PR9010RR2Y.43	Quarry Seed Ltd.

CONVENTIONAL SOYBEANS – VARIETY DESCRIPTIONS

Manitoba Variety Zone	Company Maturity Grouping	Variety	Relative Days to Maturity [1] +/- of Check Average	2016	2015	2014	Yield % Check	Site Years Tested	Hilum Colour	Relative Seeds/ lb	Lodging [2]	IDC [3] Rating (1–5)	IDC [3] Grouping
Early Season Zone	00.3	AAC Edward	-3	-4	-1	-4	103	22	IY	3122	1.3	1.8	ST
	000.9	AAC Halli	-2	-1	-1	-3	99	15	Y	2340	2.4	2.5	S
	00.2	AAC Springfield	-1	0	-1	-2	90	15	Y	2930	1.8	1.8	ST
	Experimental lines that are being tested / proposed for registration in Canada											–	–
	000	GS 1001	-6	-5	-6	–	79	9	CL	2500	1.5	2.4	S
	000	SVX17T000S1	-3	-3	–	–	91	3	IY	2150	1.6	–	–
Mid–Long Season Zone	00.3	OAC Prudence	0	0	0	0	100	108	Y	2515	2.9	1.6	T
	00.3	AAC Mandor	4	4	2	4	109	35	Y	2250	1.9	2.3	ST
	00.5	OAC Morden	4	4	2	5	106	30	Y	3077	1.5	2.0	ST
	Experimental lines that are being tested / proposed for registration in Canada												
	00.2	SVX17T00S13	1	1	–	–	105	3	BF	2500	3.4	–	–
	00.5	OT13-08	4	5	4	3	105	16	IY	2340	2.0	2.6	S
	00.3	SVX16T00S2	4	4	5	–	109	9	IY	2500	2.1	2.3	S
	00.2	SVX17T00S21	5	5	–	–	117	3	BR	2150	1.0	–	–
	00.6	Bravado	7	7	–	–	121	4	CL	3600	2.3	2.4	S
	00.6	SR006HP	7	7	–	–	103	4	CL	2650	1.8	3.3	S
	0.1	JARI	8	10	7	8	108	16	IY	2236	2.1	2.2	ST
	00.9	OT13-04	9	10	8	9	107	16	Y	2735	2.6	2.9	S
	00.8	DH404	9	9	–	–	88	13	IY	2250	1.8	–	–
	00.6	DH863	9	9	–	–	92	13	IY	2250	1.9	–	–
	00.7	OAC 11-02C	10	12	–	8	111	11	Y	2686	2.3	–	–
	00.9	OAC 13-05C	10	10	–	–	126	7	IY	2225	1.9	3.5	S
	0.1	OT15-02	10	10	–	–	109	4	IY	1932	2.3	2.5	S
	00.8	SVX15T00S2	11	11	–	–	99	3	IY	2000	1.9	–	–
	00.9	EXPSR009G	16	16	–	–	90	4	CL	4500	2.9	2.9	S
CHECK CHARACTERISTICS													
OAC Prudence			113	117	108	115	49	108					
				days to maturity			bu/acre	site years					

[1] Maturity ratings for 2016 are average across Morris, St. Adolphe [2] Lodging ratings are average across Morris and St. Adolphe sites
[3] Iron Deficiency Chlorosis (IDC) Ratings – 1 = Green, 3 = Interveinal Chlorosis, Groupings – T = Tolerant, ST = Semi-Torerant, S = Suceptible

EASTERN MANITOBA CONVENTIONAL SOYBEAN TRIALS – YIELD BY LOCATION

Manitoba Variety Zone	Variety	2016 Yield: % of OAC Prudence Early Sites Beausejour	Core Sites Morris	Core Sites St. Adolphe	Late Sites Morden	Late Sites Rosebank
Early Season Zone	AAC Edward	95	80	100	–	–
	AAC Halli	122	64	98	–	–
	AAC Springfield	96	85	94	–	–
	Experimental lines that are being tested / proposed for registration in Canada					
	GS 1001	77	78	92	–	–
	SVX17T000S1	104	71	101	–	–
Mid–Long Season Zone	OAC Prudence	100	100	100	100	100
	AAC Mandor	135	103	114	–	–
	OAC Morden	–	105	113	105	109
	Experimental lines that are being tested / proposed for registration in Canada					
	SVX17T00S13	111	100	106	–	–
	OT13-08	–	99	107	124	117
	SVX16T00S2	119	99	105	–	–
	SVX17T00S21	115	110	126	–	–
	Bravado	–	123	116	114	135
	SR006HP	–	95	109	97	113
	JARI	–	98	112	107	123
	OT13-04	–	95	104	112	112
	DH404	127	80	107	–	–
	DH863	129	77	113	–	–
	OAC 11-02C	125	109	105	–	–
	OAC 13-05C	–	117	113	119	134
	OT15-02	–	105	111	103	117
	SVX15T00S2	126	68	108	–	–
	EXPSR009G	–	85	78	89	115
CHECK CHARACTERISTICS	OAC Prudence (bu/acre)	49	57	54	50	42
	CV%	5	9	6	8	5
	LSD	9	14	9	13	8
	Sign Diff	Yes	Yes	Yes	Yes	Yes
	Seeding Date	20-May	24-May	17-May	30-May	24-May
	Harvest Date	14-Oct	13-Oct	28-Sep	03-Oct	28-Sep

WESTERN MANITOBA CONVENTIONAL SOYBEAN TRIALS

In 2016, trials were located at Melita

MATURITY & YIELD BY LOCATION

Manitoba Variety Zone	Company Maturity Grouping	Variety	Hilum Colour	Relative Days to Maturity [1] + / - of Check 2016	2016 Yield % of OAC Prudence Melita
Early Season Zone	000.9	AAC Halli	Y	-2	120
	00.4	AAC Edward	IY	-1	129
	Experimental lines that are being tested / proposed for registration in Canada				
	000	PR110530Z041	IY	-7	81
	000	PR100530Z038	IY	-4	113
	000	GS1001	CL	-2	106
Mid – Long Season Zone	000	FJORD	IY	0	112
	00.3	OAC Prudence	Y	0	100
	00.3	AAC MANDOR	Y	2	156
	000	ANSER	IY	5	128
	00	KEBEK	Y	6	179
	Experimental lines that are being tested / proposed for registration in Canada				
	000	PR110524Z023	IY	2	132
	000	PR100370Z006	IY	4	102
CHECK CHARACTERISTICS OAC Prudence				107 days to maturity	29 bu/acre
				CV%	13
				LSD	24
				Sign Diff	Yes
				Seeding Date	30-May
				Harvest Date	01-Oct

[1] Maturity based on data from Melita

NOTES FOR ALL DRY BEAN TABLES

Yield % Check – This value indicates the average yield across all site years has been tested relative to the check.

Yield (lbs/ac) – Indicates yield from the current year by site. The LSD can be used to compare statistical yield differences between varieties.

Site Years Tested – This value indicates the total number of individual site years that a variety has been tested at. For example, if a variety was tested at five sites in two years, the total site years would be 10. The higher the number, the more environments the variety has been tested in. Typically, a variety is tested in two to five sites per year.

Days to Maturity (DTM) – Number of days to when 90% of plants ready to combine. In Variety Description tables, it is reported as average +/- number of days relative to the check variety across all site years tested.

Plant Height (HT) – Plant height in cm, rated at flowering.

Lodging (LDG) is rated at maturity; 1 = upright, 5 = flat on the ground.

Pod Height (PD HT) is a visual estimated of the % of pods above 5 cm from the ground.

Seed Weight (TKW) – Grams per 1000 seeds.

Common Bacterial Blight Severity (CBB Sever) – Visual rating of individual plants:
0 = No observable lesions or other signs of infection
1 = < 5% of plant area (leaf and stem-hypocotyls) diseased
2 = 5–10% of plant area diseased
3 = 10–25% of plant area diseased
4 = 25–50% of plant area diseased
5 = 50–100% of plant area diseased or death of seedling

Common Bacterial Blight Incidence (CBB Incid) – Visual plot rating of % leaf tissue infected.

White Mould incidence (WM Incid) – Visual plot rating of % of plants affected by Sclerotinia white mould.

Coefficient of Variation (CV) is the statistical measure of random variation in a trial. A CV less than 15% generally indicates a uniform trial and conclusive data.

Least Significant Difference (LSD) is the numerical value that two varieties must differ before it can be said with 95% confidence that a true yield difference exists.

VARIETY RELEASE PROGRAM

The Variety Release Program (VRP) is a seed distribution program managed by the Saskatchewan Pulse Growers (SPG) where Select Status seed growers can access Breeder seed of new varieties developed by plant breeders at the Crop Development Centre (CDC) at the University of Saskatchewan.

The program's purpose is to facilitate rapid uptake and acceptance of new and improved pulse varieties. Any Canadian Seed Grower Association (CSGA) certified Select Status seed grower whose provincial pulse grower organization has an agreement with SPG is eligible to apply for Breeder seed through this program.

Manitoba Pulse and Soybean Growers (MPSG) will subscribe to the VRP in 2017.

Manitoba Select seed growers who are members in good standing with MPSG have the opportunity to purchase Breeder pea (yellow, green, maple, forage) and faba bean seed from CDC. Manitoba seed growers who request a refund of their levy submitted to MPSG are unable to participate in the VRP.

Applications will be sent to eligible CSGA Select Status seed growers for 2017 seed allocations in January.

For more information, contact Laryssa Grenkow (MPSG) at **laryssa@manitobapulse.ca** or 204.745.6488 ext. 6

SASKATCHEWAN pulse Growers

UNIVERSITY OF SASKATCHEWAN
Crop Development Centre
COLLEGE OF AGRICULTURE AND BIORESOURCES
AGBIO.USASK.CA

MANITOBA Pulse Soybean GROWERS

WIDE ROW DRY BEAN TRIALS – SMALL SEED SIZE – YIELD BY LOCATION

MARKET CLASS/Variety	Days to Maturity	Yield (lbs/ac) Carman	Morden	Winkler
BLACK				
Eclipse	92	–	2811	2403
13489	88	–	2862	2737
CDC Blackstrap	84	–	2178	1996
CDC Jet	89	–	2272	1643
CDC SuperJet	88	–	2399	1713
Mean	88	–	2504	2099
NAVY				
Envoy	90	–	1323	1869
DS105W0	95	–	2326	2053
Fathom	94	–	2594	2282
GNS 2884-4	97	–	1904	1999
Indi	92	–	2457	2191
Lightning	90	–	1951	1650
NA196	95	–	2628	2442
Nautica	94	–	2415	2286
Portage	90	–	2741	1194
SV1893GH	97	–	1672	1707
T9903	94	–	3192	2533
T9905	93	–	2310	2243
Mean	93	–	2293	2037
Overall Trial Mean	**92**	**–**	**2355**	**2055**
CV%		–	8	13
LSD		–	302	452
Seeding Date			30-May	06-Jun
Harvest Date			13-Sep	23-Sep

SMALL SEED SIZE – VARIETY DESCRIPTIONS

MARKET CLASS/Variety	Yield	Site Years Tested	Days to Maturity	3-Year Average HT cm	LDG (1–5)	PD HT % >5cm	TKW g	CBB Sever 0–5	CBB Incid %	WM Incid %
BLACK	% of Eclipse		+/-Eclipse							
Eclipse	100	31	0	53	1	83	190	2	7	0
13489	107	2	1	48	2	85	204	2	6	2
CDC Blackstrap	81	5	-5	44	1	86	211	2	4	1
CDC Jet	88	31	-3	48	1	82	199	2	7	1
CDC SuperJet	86	19	0	46	1	81	195	2	7	1
NAVY	% of Envoy		+/-Envoy							
Envoy	100	66	0	42	2	79	194	2	18	1
DS105W0	134	5	6	52	2	76	204	2	20	0
Fathom	133	5	3	53	2	86	208	2	6	1
GNS 2884-4	113	5	8	53	2	86	223	2	12	3
Indi	129	14	2	54	1	87	172	2	6	0
Lightning	119	26	1	51	1	76	194	2	14	0
NA196	159	2	0	53	3	78	194	2	8	2
Nautica	124	6	4	49	1	87	165	2	9	0
Portage	120	22	1	44	1	81	193	2	10	0
SV1893GH	115	9	4	49	1	80	212	2	8	1
T9903	119	42	1	52	1	81	210	2	9	0
T9905	132	22	4	54	2	81	203	2	12	2
CHECK CHARACTERISTICS										
Eclipse – Black	2382	31	100							
Envoy – Navy	2008	66	100							
	lbs/ac	site years	days to maturity							

WIDE ROW DRY BEAN TRIALS – MEDIUM SEED SIZE – YIELD BY LOCATION

MARKET CLASS/Variety	Days to Maturity	Yield (lbs/ac) Carman	Morden	Winkler
PINK				
GNS 13-796	95	2769	2319	2726
Pink Floyd	91	1929	2151	3217
Rosetta	98	3348	2835	2463
Mean	95	2682	2435	2802
PINTO				
11278	93	3548	2614	3238
CDC WM-2	95	1852	1839	2129
DCL-2016	91	3317	2775	2707
El-Diablo FU	91	2759	–	2845
GNS 1173-1	93	2228	2173	2361
GNS 12-11	97	1965	1372	2177
GNS 12-441	90	2419	1943	2333
GNS 1259-60	94	1829	1216	2092
GTS 907	90	3240	–	2607
Monterrey	95	3577	2720	3092
Radiant 12324	91	3104	2353	3053
SV6139GR	90	3404	2790	2711
Torreon	93	3111	2737	2779
Vibrant	93	3145	2616	2773
Windbreaker	92	3303	2803	2854
Mean	92	2853	2304	2650
YELLOW				
CDC Sol	89	1482	1228	1595
Overall Trial Mean	**93**	**2754**	**2264**	**2619**
CV%		9	9	7
LSD		415	346	322
Seeding Date		30-May	30-May	06-Jun
Harvest Date		28-Sep	13-Sep	23-Sep

MEDIUM SEED SIZE – VARIETY DESCRIPTIONS

MARKET CLASS/Variety	Yield	Site Years Tested	Days to Maturity	3-Year Average HT cm	LDG (1–5)	PD HT % >5cm	TKW g	CBB Sever 0–5	CBB Incid %	WM Incid %
PINK	% of Windbreaker		+/-Windbreaker							
GNS 13-796	86	6	3	59	2.7	81	360	2	7	1
Pink Floyd	91	19	-4	48	2.7	78	343	3	17	7
Rosetta	104	7	6	54	1.7	78	346	2	8	1
PINTO	% of Windbreaker		+/-Windbreaker							
Windbreaker	100	45	0	52	2.7	66	272	2	10	1
11278	104	6	-1	64	2.7	73	362	2	11	3
CDC WM-2	80	15	-2	51	2.3	74	365	2	11	3
DCL-2016	98	3	1	56	2.7	80	399	2	9	5
El-Diablo FU	92	5	-1	50	2.0	86	389	2	4	0
GNS 1173-1	79	6	0	54	2.3	76	424	2	12	1
GNS 12-11	62	3	-8	44	3.0	79	399	3	18	4
GNS 12-441	80	6	1	52	2.5	75	372	2	13	4
GNS 1259-60	67	6	-3	48	3.0	71	396	2	16	4
GTS 907	100	15	0	54	1.0	89	385	2	9	1
Monterrey	104	10	2	52	2.0	82	361	2	9	4
Radiant 12324	95	3	-3	57	2.7	85	347	2	13	13
SV6139GR	100	15	-3	54	1.3	78	341	2	11	2
Torreon	96	6	0	55	2.2	79	355	2	9	2
Vibrant	99	6	-1	60	2.2	83	357	2	11	6
YELLOW	% of Windbreaker		+/-Windbreaker							
CDC Sol	74	21	2	43	1.7	72	409	2	16	0
CHECK CHARACTERISTICS										
Windbreaker – Pinto	2645 lbs/ac	45 site years	97 days to maturity							

WIDE ROW DRY BEAN TRIALS – LARGE SEED SIZE – YIELD BY LOCATION

MARKET CLASS/Variety	Days to Maturity	Yield (lbs/ac) Carman	Morden	Winkler
CRANBERRY				
Cran 09	90	–	736	1035
CR312-8	93	–	1340	1047
CR318-6	98	–	1369	1582
Etna	93	–	842	974
Krimson	97	–	1326	1191
Mean	87		1123	1166
LIGHT RED KIDNEY				
Pink Panther	96	–	1606	1140
09357	88	–	1524	1254
09363	89	–	1494	903
09378	94	–	1650	1305
Big Red	94	–	1639	1102
Clouseau	96	–	1513	967
Mean	93	–	1571	1112
GREAT NORTHERN				
Aries	97	–	2389	2340
Overall Trial Mean	**92**	**–**	**1452**	**1237**
CV%		–	13	12
LSD		–	322	264
Seeding Date			30-May	06-Jun
Harvest Date			13-Sep	23-Sep

LARGE SEED SIZE – VARIETY DESCRIPTIONS

MARKET CLASS/Variety	Yield	Site Years Tested	Days to Maturity	3-Year Average HT cm	LDG (1–5)	PD HT % >5cm	TKW g	CBB Sever 0–5	CBB Incid %	WM Incid %
CRANBERRY	% of Cran 09		+/-Cran 09							
Cran 09	**100**	**55**	**0**	**45**	**2**	**71**	**455**	**2**	**43**	**1**
CR312-8	135	2	3	44	1	74	492	2	32	1
CR318-6	112	6	5	47	1	76	502	2	24	0
Etna	99	47	2	45	1	73	490	3	40	0
Krimson	91	10	4	47	1	66	523	2	27	1
LIGHT RED KIDNEY	% of Pink Panther		+/-Pink Panther							
Pink Panther	100	45	0	47	1	72	524	2	38	0
09357	100	9	-4	47	1	73	526	2	37	1
09363	87	2	-2	45	1	76	505	3	30	1
09378	95	9	-3	45	1	66	539	2	35	0
Big Red	101	13	-2	46	1	73	510	2	28	1
Clouseau	98	14	0	48	1	73	515	2	40	1
GREAT NORTHERN	% of Pink Panther		+/-Pink Panther							
Aries	139	8	1	56	2	77	354	2	25	1
CHECK CHARACTERISTICS										
Cran 09 – Cranberry	1853	55	99							
Pink Panther – Light Red Kidney	1946 lbs/ac	45 site years	100 days to maturity							

NARROW ROW DRY BEAN TRIALS – VARIETY DESCRIPTIONS & YIELD BY LOCATION

Variety	Bean Class	Yield	Site Years Tested	Days to Maturity [1]	Plant Type [2]	3-Year Average PD HT % >5cm	3-Year Average LDG 1–5	Morden Yield (lbs/ac)	Stonewall Yield (lbs/ac)
SMALL SEEDED TYPES		% Envoy		+/-Envoy					
Envoy	Navy	100	46	0	I	47	2	3146	1705
3458-7	Navy	106	10	-2	II	44	1	3571	1805
2918-25	Navy	122	11	-3	II	60	1	3661	2518
Bolt	Navy	104	4	2	II	53	2	3736	2091
Lightning	Navy	106	12	2	II	56	1	3004	1876
Portage	Navy	94	13	3	II	44	1	3780	2076
DS105W0	Navy	98	2	7	II	52	2	3475	1632
SV1893GH	Navy	113	2	9	II	42	2	3110	2788
Fathom	Navy	114	2	6	II	47	1	3951	2009
Nautica	Navy	118	2	9	II	65	1	4157	2022
T9905	Navy	98	2	6	II	53	2	3539	1594
T9903	Navy	108	9	3	II	42	2	3984	2637
NA6-27-2	Navy	113	2	5	II	52	1	4094	1803
							Mean	3631	2043
CDC Blackstrap	Black	119	13	1	II	46	1	2946	2174
CDC Jet	Black	107	37	2	II	57	1	3539	1654
CDC SuperJet	Black	114	16	1	II	55	1	3986	2410
							Mean	3491	2079
LARGE SEEDED TYPES		% CDC Pintium		+/- CDC Pintium					
CDC Pintium	Pinto	100	46	0	I	52	1	2275	2095
AC Island	Pinto	118	10	2	II	46	2	3907	1857
CDC Marmot	Pinto	113	16	1	I	45	2	2837	1655
CDC WM-2	Pinto	119	18	4	II	40	2	3961	2013
Medicine Hat	Pinto	110	10	5	II	49	1	3636	2121
SV6139GR	Pinto	176	2	1	II	60	1	–	3039
SV6533GR	Pinto	159	2	0	II	48	1	–	3132
							Overall Trial Mean	**3538**	**2118**
							CV%	8	14
							LSD	463	474
							Sign Diff	Yes	Yes
CHECK CHARACTERISTICS									
Envoy – *small seeded type*		1961	46	100					
CDD Pintium – *large seeded type*		2075	46	96					
		lbs/ac	site years	days to maturity					

[1] Maturity data provided to compare relative differences among varieties – actual maturity will vary depending on seasonal growing conditions.

[2] Growth Habit: I – determinate bush, II – indeterminate bush, III – indeterminate vine

LENTILS

The lentil variety trial is coordinated with the Saskatchewan Regional Variety testing program, therefore the seed source is the same as used in Saskatchewan trials.

The lentil variety trial was tested by MCVET and partially sponsored by the Manitoba Pulse & Soybean Growers.

Clearfield lentils are tolerant to the herbicide Odyssey. These varieties are easily identified by the "CL" designation at the end of the name.

VARIETY DESCRIPTIONS & YIELD BY LOCATION

MARKET CLASS/Variety	Yield % Check	Site Years Tested	Maturity Rating [1]	Resistance Level: Ascochyta Blight	Resistance Level: Anthracnose Race 1	Seed Wt (TKW)	Cotyledon Colour	2016 Yield: % of CDC Maxim: Hamiota
SMALL GREEN								
CDC Asterix	91	6	Early	G	F	26	Yellow	74
CDC Imvincible Cl	80	15	Early	G	G	35	Yellow	99
CDC Milestone	80	10	Early	G	VP	37	Yellow	–
Eston	82	7	Early	VP	VP	33	Yellow	–
MEDIUM GREEN								
CDC Imigreen CL	63	11	Medium	G	F	63	Yellow	–
CDC Impress CL	68	11	Medium	G	P	52	Yellow	–
CDC Richlea	76	7	Medium	VP	VP	51	Yellow	–
LARGE GREEN								
CDC Greenland	63	10	Med/Late	G	VP	64	Yellow	–
CDC Greenstar	88	4	Med/Late	G	F	73	Yellow	58
CDC Impower Cl	65	9	Medium	G	P	74	Yellow	50
CDC Improve CL	70	11	Medium	F	VP	67	Yellow	–
CDC Plato	61	11	Med/Late	G	P	62	Yellow	–
Laird	54	7	Very Late	VP	VP	67	Yellow	–
FRENCH GREEN								
CDC Peridot CL	78	11	Early	G	P	40	Yellow	–
CDC Marble	105	6	Early/Med	F	G	32	Yellow	67
CDC QG-2	80	4	Early/Med	F	G	33	Yellow	59
EXTRA SMALL RED								
CDC Robin	78	10	Early	G	G	30	Red	–
CDC Impala CL	81	11	Early	G	G	31	Red	–
CDC Imperial CL	77	11	Early	G	G	30	Red	–
CDC Redbow	84	8	Early/Med	G	G	42	Red	–
CDC Rosebud	87	10	Early	G	G	29	Red	–
CDC Rosie	87	6	Early/Med	G	G	30	Red	74
CDC Rosetown	88	11	Early	G	G	31	Red	–
CDC Ruby	92	2	Early	G	G	29	Red	–
SMALL RED								
CDC Dazil	96	7	Early/Med	G	F	35	Red	72
CDC Imax CL	82	15	Medium	G	G	50	Red	82
CDC Impact CL	78	10	Early	G	P	34	Red	–
CDC Maxim CL	100	17	Early/Med	G	G	40	Red	100
CDC Red Rider	83	2	Early/Med	G	F	45	Red	–
CDC Redberry	97	11	Early/Med	G	G	42	Red	–
CDC Redcoat	78	8	Early	G	G	40	Red	–
CDC Proclaim CL	81	1	Early/Med	G	G	40	Red	81
CDC Redmoon	112	1	Early/Med	G	G	41	Red	112
CDC Scarlet	104	6	Early/Med	G	F	36	Red	97
LARGE RED								
CDC-KR I	79	12	Medium	G	G	56	Red	71

CHECK CHARACTERISTICS				
CDC Maxim	3177 lbs/ac	17 site years	CDC Maxim (lbs/ac)	1997
			CV%	14
			LSD	24
			Sign Diff	Yes

[1] Ratings determined in Saskatchewan and may not be accurate under wetter growing conditions present in Manitoba.

Seeding Date	09-May
Harvest Date	16-Sep

FIELD PEAS

The Field Pea variety trial is coordinated with the Saskatchewan Regional Variety testing program, therefore the seed source is the same as used in Saskatchewan trials.

New varieties for 2017

Variety	Code	Breeder	Distributor	Seed Availability
AAC Carver	MP1920	AAFC Lacombe	Canterra Seeds	2016

VARIETY DESCRIPTIONS

MARKET CLASS/Variety	Site Years Tested	Yield (bu/acre)	Relative Maturity	Relative Vine Length	Seed Size (TSW)	Resistance Level: Green Seed Coats [1]	Lodging	Powdery Mildew	Mycos-phaerella blight	Fusarium Wilt [2]	Bleaching	Seed Coat Breakage	Seed Coat Dimpling [3]
YELLOW													
AAC Ardill	10	70	M	M	240	n/a	G	VG	F	G	n/a	G	n/a
AAC Carver	4	73	M	L	240	n/a	G	VG	F	F	n/a	G	n/a
AAC Lacombe	8	71	M	L	270	F	G	VG	F	F	n/a	G	G
Abarth	10	72	E	M	280	G	VG	VG	F	F	n/a	F	G
AC Earlystar	6	71	E	M	210	G	G	VG	F	F	n/a	F	G
Agassiz	47	73	M	M	230	G	G	VG	F	F	n/a	G	F
Argus	14	68	M	M	230	G	G	VG	F	F	n/a	F	F
CDC Amarillo	10	73	M	M	230	G	VG	VG	F	G	n/a	F	F
CDC Centennial	20	72	E	S	270	F	F	VG	F	F	n/a	G	G
CDC Golden	52	67	M	M	230	G	G	VG	F	F	n/a	G	G
CDC Hornet	30	69	M	M	220	G	G	VG	F	F	n/a	F	G
CDC Inca	8	75	M	L	230	F	G	VG	F	F	n/a	G	G
CDC Meadow	60	72	E	M	220	G	G	VG	F	F	n/a	G	G
CDC Saffron	24	72	M	M	250	G	G	VG	F	F	n/a	G	F
CDC Treasure	37	69	E	M	210	G	G	VG	F	G	n/a	F	F
Cutlass	65	67	M*	M*	220	G	G	VG	F	F	n/a	F	F
Polstead	35	69	M	M	280	F	G	VG	P	P	n/a	F	F
Reward	20	70	M	L	240	F	G	VG	F	F	n/a	G	G
SW MIDAS	29	69	E	M	220	G	G	VG	F	F	n/a	G	G
GREEN													
AAC Radius	10	61	M	M	230	n/a	G	VG	F	G	VG	VG	G
AAC Royce	8	69	M	M	250	n/a	F	VG	F	F	G	G	n/a
CDC Greenwater	10	71	L	M	220	n/a	G	VG	F	G	G	VG	G
CDC Limerick	10	70	L	M	210	n/a	VG	VG	F	F	G	VG	G
CDC Patrick	46	66	M	M	190	n/a	G	VG	F	G	G	G	G
CDC Raezer	11	66	M	M	220	n/a	VG	VG	F	G	G	G	G
CDC Striker	65	65	M	M	230	n/a	VG	P	F	G	G	VG	G
CDC Tetris	25	68	L	M	210	n/a	G	VG	F	G	G	G	G
COOPER	47	68	L	M	270	n/a	G	VG	F	F	G	F	G
OTHER PEA TYPES													
CDC Dakota (Dun)	19	75	M	M	205	n/a	VG	VG	F	n/a	n/a	G	VG
CDC Horizon (Silage)	17	62	M	L	170	G	G	VG	F	n/a	n/a	G	G
CDC Leroy (Silage)	20	61	M	L	150	G	F	VG	F	n/a	n/a	G	G
CDC Mosaic (Maple)	17	59	L	M	180	n/a	G	VG	F	n/a	n/a	G	VG
CDC Rocket (Maple)	19	63	M	M	210	n/a	F	VG	F	n/a	n/a	G	VG
CDC Tucker (Silage)	21	63	M	L	170	F	G	VG	F	n/a	n/a	G	G
Stella (Silage)	14	57	L	L	220	n/a	G	VG	F	n/a	n/a	G	n/a
Overall Mean		**64**											
LSD		4											

[1] Green seed coats: G = 0–10%; F = 11–25%

[2] Varieties which show good disease tolerance to one strain of Fusarium wilt may be susceptible to other strains.

[3] Seed coat dimpling rating: VG = 0–5%; G = 6–20%; F = 21–50%

* The relative maturity of the variety Cutlass is 99 days (Medium). Please add 3–4 days for each rating beyond Medium. The relative vine length for Cutlass is 34 inches (Medium).

YIELD BY LOCATION – FIELD PEAS

MARKET CLASS/Variety	2016 Yield (bu/acre) Arborg	Hamiota	Melita	Morden
YELLOW				
AAC Ardill	41	42	69	47
AAC Carver 91	41	46	74	50
AAC Lacombe	35	42	68	56
Abarth	38	54	69	51
Agassiz	43	46	60	46
CDC Amarillo	42	44	64	47
CDC Golden	38	35	57	48
CDC Inca	42	48	58	58
CDC Meadow	39	43	65	43
CDC Saffron	46	43	68	51
GREEN				
AAC Radius	36	44	45	36
AAC Royce	42	45	64	44
CDC Greenwater	41	34	61	50
CDC Limerick	40	37	59	52
CDC Patrick	39	35	52	41
CDC Striker	34	48	68	48
Overall Mean (bu/acre)	**40**	**43**	**63**	**48**
CV%	11	9	6	8
LSD	8	6	9	7
Sign Diff	No	Yes	Yes	Yes
Seeding Date	10-May	09-May	02-May	02-May
Harvest Date	18-Aug	31-Aug	10-Aug	17-Aug

FABA BEANS

The faba bean variety trial was tested by MCVET and partially sponsored by the Manitoba Pulse & Soybean Growers.

Traditionally, tannin faba bean with tan-coloured seed coats and coloured flowers contain tannins and can't be fed directly to livestock. Zero tannin faba beans have white seed coats and flowers and can be fed directly to livestock.

VARIETY DESCRIPTIONS & YIELD BY LOCATION

MARKET CLASS/Variety	Yield (lbs/ac)	Site Years Tested	Seed Size TKW (g)	Maturity* (days)		2016 Yield% Check Variety Arborg
Coloured Flower (Tannins)						
CDC Fatima	4032	34	520	105	100	–
CDC SSNS-1	5579	11	335	105	–	–
Florent	5196	8	660	107	–	–
Taboar	4689	13	480	107	–	–
Fabelle	5118	1	533	105	107	–
CHECK CHARACTERISTICS						
CDC Fatima (tannin)	4032	34			CDC Fatima (lbs/ac)	4779
					CV%	6
					LSD	10
					Sign Diff	Yes
White Flower (Zero Tannin)						
Snowbird	5246	13	495	104	100	100
CDC Snowdrop	5028	10	335	104	81	95
Tabasco	5152	8	530	106	–	96
CHECK CHARACTERISTICS						
Snowbird (zero Tannin)	5028	10			Snowbird (lbs/ac)	4033
					CV%	9
					LSD	15
					Sign Diff	Yes
					Seeding Date	10-May
					Harvest Date	16-Sep

* Maturity ratings are based on days until swathing, but will vary depending on seeding date

MANITOBA PULSE & SOYBEAN BUYER LIST – NOVEMBER 2016

COMPANY	EDIBLE BEANS	FABA BEANS	LENTILS	PEAS	SOYBEANS	PHONE	LOCATION	CGC REGULATED
Agassiz Global Trading	✓				✓	204-745-6655	Homewood, MB	
Agri-Tel Grain Ltd.				✓	✓	204-268-1415	Beausejour, MB	✓
AGT Foods	✓		✓	✓	✓	306-525-4490	Regina, SK	✓
• SaskCan Pulse Trading – Parent Division	✓		✓	✓	✓	204-737-2625	St. Joseph, MB	✓
All Commodities			✓	✓		204-339-8001	Winnipeg, MB	✓
B.P. & Sons Grain and Storage Inc.					✓	204-822-4815	Morden, MB	✓
Belle Pulses Ltd.				✓		306-423-5202	Bellevue, SK	✓
Besco Grain Ltd.	✓	✓	✓	✓	✓	204-745-3662	Carman, MB	✓
Best Cooking Pulses Inc.			✓	✓		204-857-4451	Portage la Prairie, MB	✓
Brett-Young Seeds				✓	✓	204-261-7932	Winnipeg, MB	
BroadGrain Commodities Inc.	✓	✓	✓	✓	✓	416-504-0070	Toronto, ON	✓
C.B. Constantini				✓		604-669-1212	Vancouver, BC	✓
Canadian Grain Inc.	✓	✓	✓	✓	✓	905-257-6200	Oakville, ON	✓
Cargill Ltd.				✓	✓	204-947-6219	Winnipeg, MB	✓
Delmar Commodities				✓	✓	204-331-3696	Winkler, MB	✓
Farmer Direct Co-operative Ltd.	✓	✓	✓	✓		306-352-2444	Regina, SK	
Fill-More Seeds Inc.			✓	✓		306-722-3353	Filmore, SK	✓
G3 Canada Limited				✓		204-983-0239	Winnipeg, MB	✓
Gavilon Grain LLC					✓	816-584-2210	Omaha, NB	✓
Global Grain Canada	✓					204-829-3641	Plum Coulee, MB	✓
Hensall District Co-op	✓					204-295-3938	Winnipeg, MB	✓
Horizon Agro					✓	204-746-2026	Morris, MB	
ILTA Grain Inc.	✓	✓	✓	✓	✓	604-597-5060	Surrey, BC	✓
J.K. Milling Canada Ltd.				✓		306-586-6111	Regina, SK	✓
Knight Seeds			✓	✓		204-764-2450	Hamiota, MB	
Kalshea Commodities Inc.				✓		204-272-3773	Winnipeg, MB	✓
Lansing Olam Canada Commodities ULC					✓	877-747-7599	Chatum, ON	✓
Linear Grain	✓			✓	✓	204-745-6747	Carman, MB	✓
Louis Dreyfus Company Canada ULC					✓	403-205-3322	Calgary, AB	✓
Masterfeeds				✓		403-327-2555	Lethbridge, AB	
Maviga NA., Inc.		✓	✓	✓		306-721-8900	Regina, SK	✓
Monsanto					✓	–	Winnipeg, MB	
Natural Proteins					✓	204-355-5040	Blumenort, MB	✓
North American Food Ingredients					✓	204-272-5510	Winnipeg, MB	✓
Nutri-Pea Ltd.				✓		204-239-5995	Portage la Prairie, MB	
Nu-Vision Commodities	✓					204-758-3401	St. Jean Baptiste, MB	
Parrish & Heimbecker Ltd.					✓	204-987-4320	Winnipeg, MB	✓
Paterson Grain				✓	✓	204-956-2090	Winnipeg, MB	✓
• FeedMax Corp.				✓		204-523-0682	Killarney, MB	✓
Providence Grain Group	✓	✓	✓	✓	✓	780-997-0211	Fort Saskatchewan, AB	✓
Quarry Seed					✓	204-467-8877	Stonewall, MB	
Remillard Seed Farm					✓	204-737-2376	St. Joseph, MB	
Richardson International				✓		204-934-5627	Winnipeg, MB	✓
• Richardson Pioneer Ltd.				✓	✓	204-934-5627	Winnipeg, MB	✓
• Tri Lake Agri				✓		204-523-5380	Killarney, MB	✓
S.S. Johnson Seeds	✓			✓		204-376-5228	Arborg, MB	✓
Seed-Ex Inc.					✓	204-737-2000	Letellier, MB	✓
Scoular Canada Ltd.	✓	✓	✓	✓	✓	403-720-9050	Calgary, AB	✓
Shafer Commodities					✓	204-822-6275	Morden, MB	✓
Simpson Seeds			✓			306-693-2132	Moose Jaw, SK	✓
Southland Pulse				✓		306-634-8008	Estevan, SK	✓
Sunrich LLC					✓	507-446-5642	Hope, MN	
Thompsons Limited	✓		✓	✓		519-676-5411	Blenheim, ON	✓
Vanderveen Commodity Services					✓	204-745-6444	Carman, MB	✓
Viterra Inc.	✓	✓	✓	✓	✓	Contact your local Viterra sales representative		✓
Walhalla Bean Co. (Canada Ltd.)	✓					701-549-3721	Walhalla, ND	✓
• Winkler Receiving	✓					204-325-0767	Winkler, MB	✓
Wilbur Ellis	✓		✓	✓		204-867-8163	Minnedosa, MB	✓
Zeghers Seeds Inc.			✓	✓		204-526-2145	Holland, MB	✓

The Canada Grain Act requires some elevators and grain dealers to have a Canadian Grain Commission (CGC) license and post-security to cover their liabilities – what they owe to farmers. Grain dealers and operators of primary, terminal and process elevators in Western Canada are licensed by the CGC. Seed cleaning plants that do not purchase grain and feed mills do not have to be licensed. The pulse and soybean crop buyers listing includes only companies that are licensed and secured by the CGC (or exempted by regulation), and who are registered to submit check-off to MPSG. **It is the responsibility of the farmer to ensure the company they are dealing with is reliable**. Questions regarding licensing and security should be directed to the CGC at 1-800-853-6705 or 204-983-2770. To be included on MPSG's pulse and soybean crop buyers list, contact the MPSG office at 204-745-6488 for the buyers registration package.