2020 PULSE AND SOYBEAN VARIETY GUIDE



The independent evaluation of soybean, dry bean, field pea and faba bean varieties found within this publication were made possible by your continued support through the Manitoba Pulse & Soybean Growers (MPSG) check-off. The objective of these trials is to provide the Manitoba pulse and soybean industry with independent, scientific information on variety performance and agronomic characteristics.

Field pea variety evaluations were coordinated with the Saskatchewan Regional Variety Testing Program. Field pea and faba bean variety evaluations were conducted by MCVET and partially sponsored by MPSG.

SOYBEANS

Herbicide tolerant soybean varieties were evaluated at 12 locations in 2020, reported by eastern and western regions in Manitoba. In eastern Manitoba, there are short-, mid- and long-season locations.

Mid- to long-season sites included Carman, Morris, Portage la Prairie and St. Adolphe. These sites are also referred to as core sites due to testing of all varieties at these locations. Shortseason sites included Arborg, Beausejour and Stonewall, where early- and midseason varieties were tested. In western Manitoba, sites included Boissevain, Dauphin, Hamiota, Melita and Swan River.

Herbicide tolerant first-year entry trials were also carried out at six of the 12 sites, including Boissevain, Carman, Hamiota, Melita, Morris and St. Adolphe.

This publication features the results from MPSG-sponsored trials.

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Conventional (non-GM) soybean varieties were tested at all sites listed for eastern Manitoba and at Melita and Swan River.

All soybean varieties are reported by very early-, early-, mid- and long-season maturity zones. Western Manitoba trials do not host long-season varieties, as they are generally ill-suited to the region.

DRY BEANS

Variety evaluations were conducted under wide- (>24 inches) and narrow-row (<12 inches) trials, and are reported separately in this guide.

Wide-row trials were conducted at five locations — Carman, Morden, Melita, Portage la Prairie and Winkler.

Narrow-row trials were conducted at four locations — Melita, Minto, Morden and Portage la Prairie.

Dry bean varieties are also reported by market class. These include navy, black, pinto, pink, Great Northern, dark red kidney, light red kidney and cranberry.

LENTILS

No lentil trials were conducted in Manitoba due to a lack of seed supply in the spring of 2020.

FIELD PEAS

Trials were conducted at eight locations in Manitoba, including Arborg, Boissevain, Carberry, Hamiota, Melita, Morden, Roblin and Swan River. Field pea varieties are reported by yellow, green, maple and forage market classes.

FABA BEANS

Registration trials were conducted at Roblin and Stonewall. Registered varieties

from these trials are reported by tannin and zero-tannin types.

USING THIS GUIDE

There are two types of data tables found in this guide — *Variety Descriptions* and *Yields by Location*. Variety description tables summarize long-term data, including maturity, yield and agronomic characteristics (e.g., disease resistance, lodging score). Yields by location tables summarize yield data from the current year at each location.

All variety trials were randomized with three replicates to allow for statistical analysis.

Statistical yield differences can be evaluated using only single-site year data, found in all *Yields by Location* tables. To compare yields, look at the least significant difference (LSD) value at the bottom of these tables. The LSD value represents the yield quantity (%) by which two varieties must differ, to conclude with 95% confidence that a true yield difference exists due to genetics.

For more information on how to use these tables, refer to the variety table keys in each section.

We acknowledge the contributions of all companies that submitted varieties and partners involved in planting, maintenance, note-taking, harvesting and data organization. Special thanks to staff at Manitoba Agriculture and Resource Development, AAFC, WADO, PCDF, PESAI, CMCDC and the private research companies that play an integral role in making this publication possible.

Key for All Variety Tables

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

Site Years Tested – The total number of individual site years that a variety has been tested. For example, if a variety was tested at five sites for two years, the total site years would be 10. The greater the number, the more a variety has been tested under a greater range of environments. A variety is typically tested at two to five sites per year.

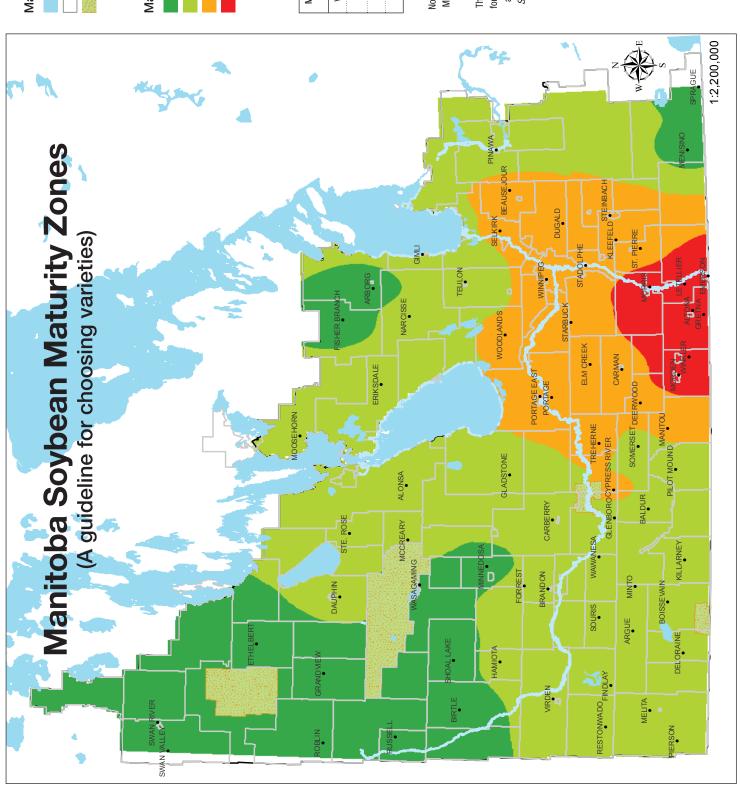
TSW (g/1000 seeds) – The thousand seed weight, referring to the seed weight in grams per 1000 seeds.

Resistance Rating – VG = very good G = good F = fair P = poor VP = very poor

CV % – The coefficient of variation (CV) is the statistical measure of random variation in a research trial. A CV of less than 15% generally indicates a more uniform trial and conclusive data.

 $\pmb{\mathsf{LSD}}$ % – The least significant difference (LSD) is the quantity by which two varieties must differ to conclude with 95% confidence that a true difference exists due to genetics.

Sign. Diff. – The indication of whether significant differences were found between varieties. Yes = at least one variety is significantly different from another within one site. No = varieties are not significantly different within one site.

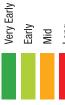


Map Elements



Prov/Nat. Parks

Maturity Zones





Maturity Zone	СНО	FFP (days)	Maturity Group
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

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

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

Key for Soybean Variety Tables

Manitoba Maturity Zone – Soybean varieties are organized into four maturity zones – very early-, early-, mid- and long-season. These categories reflect the *Manitoba Soybean Maturity Zones* map (page 2), based on long-term heat unit and frost-free period data. Varieties fit into respective zones based on average relative days to maturity. Each zone indicates the longest season varieties that should be selected for a given region.

Company Maturity Group – The maturity ranking provided by seed suppliers, indicating growing season length. Triple zero (000) and double zero (000) soybean varieties are best suited to Manitoba. Varieties currently tested in Manitoba range from 000 (earliest) to 0.1 (longest).

Туре

E3 = Enlist E3* soybeans with 2,4-D choline, glyphosate and glufosinate herbicide tolerance.

RR1 = Roundup Ready 1 soybeans with glyphosate herbicide tolerance. R2Y = Genuity® Roundup Ready 2 Yield® soybeans with glyphosate herbicide tolerance.

 $\mbox{R2X} = \mbox{Roundup Ready 2 Xtend} \mbox{$^{\circ}$}$ soybeans with dicamba and glyphosate herbicide tolerance.

DTM +/- Check – The number of days from planting to full maturity (R8 or 95% brown pod). It is expressed as + or – days relative to the check variety. Actual days to maturity (DTM) for the check variety is found in the shaded area at the bottom of the table. Average DTM is calculated from multiple site years. It is important to use long-term data for variety selection, as maturity can vary by year.

Hilum Colour – The hilum is the area of a soybean seed that was previously attached to the pod. Hilum colour is a marketing factor that varies among soybean varieties. Hilum colour can be clear (CL), yellow (Y), imperfect yellow (IY), grey (GR), light brown (LB), brown (BR), tan (TN), imperfect black (IB) or black (BL).

IDC Rating and Group – The iron deficiency chlorosis (IDC) rating is the severity of IDC expressed in a given variety on a 1–5 scale. The IDC group indicates the overall level of tolerance. Each year, ratings are conducted during the V2 to V3 stages at a site near Winnipeg that is prone to IDC. If a field is at moderate to high risk of IDC (Table 1), select a variety with a low (tolerant) rating.

IDC Ratings

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

Table 1. Field risk of IDC based on carbonate and soluble salt soil test levels.

Soluble Salt		Carbonate (%)			
(mmhos/cm)	0 to 2.5	2.6 to 5	>5.0		
0 to 0.25	Low	Low	Moderate		
0.26 to 0.50	Low	Moderate	High		
0.50 to 1.0	Moderate	High	Very high		
>1.0	High	Very high	Extreme		

Source: Agvise Laboratories

IDC Groups

T = tolerant ST = semi-tolerant S = susceptible

SCN – Variety resistance to soybean cyst nematode (SCN). The presence of SCN was confirmed for the first time in Manitoba in 2019. For full details of SCN findings, visit manitobapulse.ca.

PRR – Phytophthora root rot (PRR) race-specific resistance genes for each variety. Resistance genes that correspond with prevalent races in Manitoba are listed in Table 2. A new pathotype was most prevalent in Manitoba in 2018, according to Agriculture and Agri-Food Canada research. Soybean varieties with the rps 6 gene are resistant to this new pathotype.

Table 2. Resistance to *Phytopthora sojae* (rps) genes currently available in Manitoba for control of Phytophthora root rot.

Race of			Rps Gene		
P. sojae	1a	1c	1k	3a	6
New Pathotype	S	S	S	S	R
25	S	S	S	R	R
4	S	S	R	R	R
28	S	R	S	R	R
3	S	R	R	R	R

S = susceptible R = resistant

Source: Debra McLaren, AAFC



IDC Rating 1



IDC Rating 1.7



IDC Rating 2.1



IDC Rating 2.5



IDC Rating 3.5



IDC Rating 4.0

HERBICIDE TOLERANT SOYBEANS • VARIETY DESCRIPTIONS • EASTERN MANITOBA

Manitoba	Company)C	Resis	stance
Maturity Zone	Maturitý Group	Variety	Туре	DTM +/- Check†	Yield % Check	Site Years Tested	Hilum Colour	Rating (1–5)	Group	SCN	PRR
	000.7	Fresco R2X	R2X	-10	79	6	BL	2.2	ST	_	
ery Early-	00.1	B0011RX	R2X	-9	83	6	TN	1.7	T	_	1k
Season	000.5	NSC Wynyard RR2X	R2X	-9	78	6	BL	2.3	S	_	1a
Zone	00.1	S001-D8X	R2X	-6	95	6	IY	2.0	ST	-	1c
	00.2	Devo R2X	R2X	-6	90	17	BR	1.9	ST	_	-
	000.9	SI 000919XT	R2X	-5	89	6	BL	1.7	T	_	_
	00.1	Torro R2	R2Y	-5	96	15	BL	2.2	ST	_	_
	000.9	RX000918	R2X	-5	97	11	BL	1.8	ST	yes	1c
	00.1	P001A48X	R2X	-4	96	11	TN	1.7	T	_	1c
	00.4	NSC Culross RR2X	R2X	-4	100	11	BL	1.7	T	_	1c
	00.2	NSC Redvers RR2X	R2X	-4	94	11	BL	1.9	ST	yes	10
Early-	00.1	SI 001XTN	R2X	-3	102	17	BL	1.7	T	yes	1k
Season	00.1	Prince R2X	R2X	-3	92	17	BL	1.8	ST	_	1k
Zone	00.3	Akras R2	R2Y	-3	102	21	BL	1.7	T	_	10
	00.4	TH89004 R2X	R2X	-3	89	11	BR	1.8	ST	_	10
	00.5	S007-Y4	R2Y	-2	105	21	IY	2.0	ST	_	10
	00.6	S006-M4X	R2X	-2	98	11	IY	1.9	ST		10
	00.6	S003-Z4X	R2X	-2 -2	102	6	BF	1.9	ST	_	10
	00.3	Renuka R2X*	R2X	-2 -2	102	6	LB	1.7	T	yes	10
	00.5	P005A83X	R2X	- <u>-</u> 2 -1	102	11	BL	1.8	ST	yes	10
	00.5	S005-C9X	R2X	-1	100	6	BL	2.3	S S	yes –	10
	00.5	RX Acron	R2X	-1 -1	102	8	BL	1.8	ST	yes	-
	00.6	B0030L1	R2X R2Y	-1 -1	95	11	BR	1.8	ST	yes –	
	00.3	Sunna R2X	R2X	0	103	17	GR	1.7	T		10
	00.3	Bourke R2X	R2X	0	103	17	BL	1.7	ST	yes –	1k
	00.4	Merritt R2X	R2X	0	103	6	BI	1.9	ST		1c,
	00.4	Foote R2	R2X	0	96	21	IY	1.8	ST	yes –	10,
	00.5	P005A27X	R2X	0	101	17	BR	1.9	ST		10
	00.7	P007A90R*	RR1	0	100	22	BL	1.7	T	yes	10
	00.6	PS 0068 XR	R2X	0	104	12	BL	1.8	ST	- -	10
	00.6	NSC Sperling RR2Y	R2Y	0	107	17	IY	1.7	T		1a, :
	00.6	P006A37X	R2X	0	109	17	BR	1.8	ST		10,
Mid-	00.3	DKB003-29	R2X	0	98	21	BL	1.7	T	yes	-
Season	00.2	DKB003-29	R2X	0	103	6	BR	1.9	ST	yes	1k
Zone	00.6	NSC Cartier RR2X	R2X	1 1	105	6	BL	2.0	ST	- yes	3a
	00.4	B0040L1	R2Y		96	17	BR	1.7	T	_	_
	00.5	Barker R2X	R2X		103	17	BL	1.8	ST	yes	1k
	00.3	TH 87003 R2X	R2X	1	96	21	BL	1.8	ST	yes	10
	00.4	PV 16s004 R2X	R2X	1	101	17	BL	1.9	ST	yes	11
	00.6	PV 19s006R2X	R2X	1	92	10	IB	2.0	ST	yes	10
	00.5	DKB005-52	R2X	2	103	22	BL	1.8	ST	yes	10
	00.7	S007-A2XS	R2X	2	110	6	GR	1.9	ST	- -	_
	00.6	Kudo R2X	R2X	2	105	4	BL	1.7	T	_	_
	00.7	P007A08X	R2X	2	110	5	GR	1.8	ST	_	10
	00.6	B0066L1	R2Y	2	98	9	Y	1.9	ST	yes	11
	00.7	Elmo E3	E3	2	107	4	BR	1.8	ST	yes	-
	00.7	RX00797	R2X	2	97	20	BL	1.7	T	yes	10
	00.7	PS 0074 R2	R2Y	3	107	17	BR	1.7		- -	-
	00.7	TH 88007R2X	R2X	3	102	18	BL	1.9	ST	_	10
	00.7	PV 12s007 R2X	R2X	3	101	21	BL	1.9	ST	_	-
	00.7	TH 88005R2XN	R2X	3	100	18	BL	1.8	ST	yes	10
	00.9	P00A49X	R2X	4	105	12	BR	1.7	T	yes	10
Long-	00.7	SI 007XTN	R2X	4	106	14	BL	1.8	ST	yes	10
Long- Season	00.7	DKB006-29	R2X	5	104	18	BL	1.7	T	yes -	11
Zone	00.8	NSC Winkler RR2X	R2X	5	104	12	BL	1.8	ST	yes	10
	00.5	PV 10s005 RR2	R2Y	5	107	15	BL	1.9	ST	yes –	-
	00.5	NSC Aubigny RR2X	R2X	6	98	4	BL	1.6	T	yes	- 1k
	00.9	TH89009 R2XN	R2X	6	108	8	BL	1.6	T	yes	1 k
	00.9	Astro R2	R2Y	7	110	8	BL	1.7	T	yes –	1 k
	00.8	Vidar R2X	R2X	8	104	14	BL	1.7	Ť	yes	10
IECK CHVI	RACTERISTICS	VIGUI NZA	114/	U	104	17	DL	1./		усэ	10
ILCK CHAI	MACTERISTICS	P007A90R		114	43	22					
		1 007 A30N		114	40	22					

 $^{\ \, \}text{† Maturity ratings were averaged across the Carman, Morris, Portage and St. Adolphe core sites over multiple years.}$

^{*} ndicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

HERBICIDE TOLERANT SOYBEANS ◆ YIELDS BY LOCATION ◆ EASTERN MANITOBA

2020 Yield % Check

						d % Check		
Manitoba		DTM =	Early	Sites		Core	Sites	
Maturity Zone	Variety	DTM – +/- Check†	Beausejour	Stonewall	Carman	Morris	Portage	St. Adolph
ZOTIC	Fresco R2X	-10	78	83	94	74	71	75
	B0011RX	-10	63	97	109	67	74	102
ery Early-		-9 -9	74	80	91	72	79	73
Season Zone	NSC Wynyard RR2X S001-D8X	-9 -6	91	90	104	88	101	73 97
20116				87	96		89	
	Devo R2X	-6 -5	86			77		90
	SI 000919XT		64	83	116	85	98	90
	RX000918	-5	80	102	121	89	99	92
	P001A48X	-4	91	99	107	92	88	103
	NSC Culross RR2X	-4	94	99	101	102	104	113
Early-	NSC Redvers RR2X	-4	87	97	114	102	92	95
Season =	SI 001XTN	-3	83	108	123	99	100	111
Zone	Prince R2X	-3	80	93	111	92	85	97
	Akras R2	-3	89	94	99	72	96	110
	TH89004 R2X	-3	72	92	108	89	91	82
	S007-Y4	-2	87	115	122	106	109	122
	S003-Z4X	-2	79	106	122	102	107	102
	Renuka R2X*	-2	91	102	118	98	108	96
	P005A83X	-1	79	97	115	104	98	113
	S005-C9X	-1	84	111	125	99	99	96
	RX Acron	-1	-	-	110	103	104	112
	B0030L1	-1	80	95	118	95	95	99
	Sunna R2X	0	84	107	113	104	112	103
	Bourke R2X	0	82	103	112	101	99	115
	Merritt R2X	0	98	108	109	98	102	118
	Foote R2	0	83	103	107	106	99	101
	P005A27X	0	106	88	100	95	99	107
	P007A90R	0	100	100	100	100	100	100
	PS 0068 XR	0	-	-	112	111	87	93
	NSC Sperling RR2Y	0	105	115	117	101	106	106
Mid-	P006A37X	0	109	122	123	113	117	112
Season	DKB003-29	0	97	95	115	94	94	103
Zone	DKB002-32	0	93	104	106	107	99	110
	NSC Cartier RR2X	1	99	105	123	107	93	103
	B0040L1	1	88	97	124	103	107	111
	Barker R2X	1	-	-	122	109	96	114
	TH87003 R2X	1	86	90	98	88	87	99
	PV 16s004 R2X	1	86	105	109	105	104	111
	PV 19s006R2X	1	93	101	100	89	98	97
	DKB005-52	2	100	104	129	107	105	113
	S007-A2XS	2	103	112	119	97	117	120
	Kudo R2X	2	-	-	104	99	107	111
	B0066L1	2	_		110	101	94	102
	Elmo E3	2			107	101	114	102
	RX00797							
		2	78	95	108	91	93	99
	PS 0074 R2	3	-	-	106	114	111	113
	TH 88007R2X	3	87	104	112	102	97	102
	PV 12s007 R2X	3	92	98	112	103	93	104
Long-	TH 88005R2XN	3	95	99	122	104	92	92
Season =	P00A49X	4	-	-	120	99	111	106
Zone –	SI 007XTN	4	81	98	131	104	91	103
	DKB006-29	5	-		127	103	108	107
	NSC Winkler RR2X	5	-	-	114	102	93	113
	TH89009 R2XN	6	-	-	105	95	105	109
	Vidar R2X	8	-	-	112	100	105	97
IECK CHAR	ACTERISTICS							
	P007A90R	114	55	43	48	58	54	32
		DTM				/ac		
		CV %	9.1	6.6	6.9	5.5	7.4	7.8
		LSD %	13	11	12	9	12	13
		Sign. Diff.	yes	yes	yes	yes	yes	yes
		Seeding Date	May 19	May 23	May 26	May 22	Jun 3	May 20
			,					, 20

 $[\]dagger$ Maturity ratings were averaged across the core sites over multiple years.

^{*} ndicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

HERBICIDE TOLERANT SOYBEANS ◆ VARIETY DESCRIPTIONS & YIELDS BY LOCATION ◆ WESTERN MANITOBA

Manitoba	Company				_	II	OC	Resis	tance		202	0 Yield % Ch	eck	
Maturity Zone	Maturity Group	Variety	DTM +/- Check†	Yield % Check	Site Years Tested	Rating (1—5)	Group	SCN	PRR	Boissevain	Dauphin	Hamiota	Melita	Swan Rive
	000.7	B00071RX	-13	85	7	1.7	Т	-	1k	78	77	104	96	85
	000.5	Amirani R2*	-9	90	7	1.8	ST	-	1k	90	91	109	94	80
	00.2	DKB002-32	-7	104	5	1.9	ST	yes	1k	99	103	118	103	94
Very Early-	000.7	Fresco R2X	-7	92	7	2.2	ST	-	-	80	86	115	94	103
Season	000.8	NSC Watson RR2Y	-6	94	27	2.1	ST	-	6	100	91	126	102	105
Zone	00.1	B0011RX	-6	108	5	1.7	Т	-	1k	112	88	134	96	108
	000.5	NSC Wynyard RR2X	-5	95	5	2.3	S	-	1a	94	83	118	85	96
	8.000	NocomaR2*	-5	85	17	2.0	ST	-	1c	67	78	81	81	74
	000.9	S0009-M2	-5	95	27	2.0	ST	-	6	104	94	122	96	104
	000.9	RX000918	-3	96	12	1.8	ST	yes	1c	111	94	127	105	78
	000.5	DKB0005-44	-3	91	12	1.9	ST	yes	1c	93	83	107	98	93
	000.9	Fisher R2X	-3	97	7	1.8	ST	yes	1k	106	97	126	103	72
	00.4	TH89004 R2X	-2	101	7	1.8	ST	-	1c	114	95	115	96	96
	00.1	S001-D8X	-2	108	5	2.0	ST	-	1c	106	97	116	101	124
	00.1	Torro R2	-1	95	17	2.2	ST	-	-	107	90	116	101	95
	000.9	PV 15s0009 R2X	-1	99	11	2.1	ST	yes	1c	104	97	123	97	109
	00.3	P003A97X	-1	98	7	1.9	ST	yes	1k	90	100	120	97	88
	00.3	S003-Z4X	-1	107	7	1.9	ST	-	1c	100	102	134	104	106
	00.1	P001A48X	-1	100	7	1.7	Т	-	1c	96	98	124	93	108
Early-	00.3	Mahony R2	-1	100	29	2.9	S	=	-	106	96	123	101	-
Season	00.1	SI 001XTN	-1	97	12	1.7	Т	yes	1k	85	104	116	106	79
Zone	00.5	S007-Y4	-1	102	30	2.0	ST	1 -1	1c	107	112	136	103	_
	00.1	Prince R2X	-1	97	11	1.8	ST	7-7	1k	98	95	129	102	107
	00.2	Devo R2X	-1	89	7	1.8	ST		-	84	80	112	93	78
	00.3	Renuka R2X*	0	106	6	1.7	Т		1c	106	100	129	105	-
	00.5	TH 88005R2XN	0	95	9	1.8	ST	yes	1c	100	103	98	100	_
	00.5	P005A83X	0	106	7	1.8	ST	yes	1c	104	105	126	100	112
	00.2	NSC Redvers RR2X	0	97	10	1.9	ST	yes	1c	118	92	125	106	_
	00.3	Akras R2	0	100	31	1.7	Т		1c	100	100	100	100	100
	000.9	SI 000919XT	0	100	5	1.7	Т	_	_	91	89	122	104	89
	000.9	DKB0009-89	0	99	12	1.9	ST	yes	1c, 1k	113	101	117	106	98
	00.3	NSC Newton RR2X	0	86	15	2.0	ST		_	93	85	103	92	_
	00.3	Sunna R2X	1	102	10	1.7	Т	yes	1c	98	104	135	106	_
	00.5	S005-C9X	1	112	4	2.3	S	_	1c	112	98	130	106	_
	00.3	TH 87003 R2X	1	95	18	1.8	ST	yes	1c	84	86	96	99	74
	00.3	B0030L1	2	94	7	1.9	ST		_	88	93	111	95	83
	00.4	Bourke R2X	2	103	6	1.9	ST	_	1k	104	107	116	101	_
Mid- Season	00.6	P006A37X	2	108	11	1.8	ST	_	1c	107	112	124	107	110
Zone	00.6	PS 0068 XR	3	110	4	1.8	ST	_	1c	114	94	120	108	_
	00.5	P005A27X	3	100	12	1.9	ST	_	1c	85	98	111	103	102
	00.4	Merritt R2X	3	106	4	1.9	ST	yes	1c, 1k	91	103	120	108	-
	00.4	PV 16s004 R2X	3	99	10	1.8	ST	yes	1k	109	100	116	95	_
	00.5	Kudo R2X	3	102	6	1.7	T	- -	-	110	99	116	97	_
HECK CHAF	RACTERISTICS				<u> </u>		· ·							
		Akras R2	124 DTM	54 bu/ac	31 site years					48	45	55 bu/ac	66	44
									CV %	13	4.3	4.4	3.8	8.2
								٠.	LSD %	21	7	8	6	13
									gn. Diff. ng Date	yes May 28	yes May 15	yes May 16	yes May 19	yes May 25
									st Date	Sep 26	Oct 2	Oct 1	Sep 18	Oct 13

 $^{\ \, 1\,} Maturity\ ratings\ were\ averaged\ across\ the\ western\ sites\ over\ multiple\ years.$

^{*} Indicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

HERBICIDE TOLERANT SOYBEANS ◆ YIELDS BY LOCATION ◆ EASTERN FIRST YEAR ENTRY LEVEL

Manitoba				2020 Yield % Check	
Maturity		DTM			
Zone	Variety	+/- Check†	Carman	Morris	St. Adolphe
	Halo R2X	-7	96	72	86
Very Early-	Aveta R2X	-6	113	77	60
Season Zone	Experimental lines that a	re being tested/proposed for registra	ation in Canada		
Zonc	CFS20.1.R2	-9	86	58	70
	SI 000920XT	-5	117	86	92
	Young R2X	-5	121	91	90
	Hart R2X	-3	131	109	98
Zone	Mikado R2X	-2	106	99	80
	PV 22S002 R2X	-1	116	99	101
	P007A90R	0	100	100	100
Mid-	Mao R2X	2	122	108	101
Early-Season Zone Mid-Season Zone Long-Season Zone	Experimental lines that a	re being tested/proposed for registra	ation in Canada		
	CFS20.2.R2	-1	106	80	98
	PV EXP 20-S4	0	130	103	107
	EXP00520XR	2	122	97	95
	SI 00820XTN	3	126	105	92
	NSC EXP004X	3	131	103	80
	SI 0220XT	4	110	91	109
	TH81007 R2XN	4	121	99	88
	Bronco R2X	4	102	86	100
Zone	SI 0120XTN	5	119	108	85
	Experimental lines that a	re being tested/proposed for registra	ation in Canada		
	TH79009E	3	127	108	104
CHECK CHAR	ACTERISTICS	- 2 1			
	P007A90R	115	43	59	35
		DTM		bu/ac	
		CV %	7.2	5.3	6.5
		LSD % Sign. Diff.	14	8	10
	1//	Seeding Date	yes May 26	yes May 22	yes May 20
		Harvest Date	Oct 1	Sep 30	Sep 22

[†] Maturity ratings were averaged across the Carman, Morris and St. Adolphe sites.

HERBICIDE TOLERANT SOYBEANS * YIELDS BY LOCATION * WESTERN FIRST YEAR ENTRY LEVEL

		2020 Yield	% Check
Variety	DTM +/- Check†	Hamiota	Melita
DKB0003-24	-6	115	91
Mynarski R2X	-6	118	97
Halo R2X	-5	119	90
Experimental lines that are	being tested/proposed for registration	in Canada	
PV EXP 20-S2	-5	123	93
PV EXP 20-S1	-4	113	95
NSC Watson RR2Y	-2	111	96
Inferno R2X	-2	106	62
S0009-F2X	-2	122	100
SI 000920XT	-2	116	88
Aveta R2X	-1	108	90
Major R2X	0	128	95
Akras	0	100	100
Experimental lines that are	being tested/proposed for registration	in Canada	
CFS20.1.R2	-1	86	86
CFS20.2.R2	-1	108	90
Hart R2X	2	135	101
DKB0008-87	3	128	104
Mikado R2X	3	118	103
PV 22S002 R2X	3	103	95
	DKB0003-24 Mynarski R2X Halo R2X Experimental lines that are PV EXP 20-S2 PV EXP 20-S1 NSC Watson RR2Y Inferno R2X S0009-F2X SI 000920XT Aveta R2X Major R2X Akras Experimental lines that are CFS20.1.R2 CFS20.2.R2 Hart R2X DKB0008-87 Mikado R2X	Variety +/- Check† DKB0003-24 -6 Mynarski R2X -6 Halo R2X -5 Experimental lines that are being tested/proposed for registration PV EXP 20-S2 -5 PV EXP 20-S1 -4 NSC Watson RR2Y -2 Inferno R2X -2 S0009-F2X -2 SI 000920XT -2 Aveta R2X -1 Major R2X 0 Akras 0 Experimental lines that are being tested/proposed for registration CFS20.1.R2 -1 CFS20.2.R2 -1 Hart R2X 2 DKB0008-87 3 Mikado R2X 3	Variety +/- Check† Hamiota DKB0003-24 -6 115 Mynarski R2X -6 118 Halo R2X -5 119 Experimental lines that are being tested/proposed for registration in Canada PV EXP 20-S2 -5 123 PV EXP 20-S1 -4 113 NSC Watson RR2Y -2 111 Inferno R2X -2 106 S0009-F2X -2 122 SI 000920XT -2 116 Aveta R2X -1 108 Major R2X 0 128 Akras 0 100 Experimental lines that are being tested/proposed for registration in Canada CFS20.1.R2 -1 86 CFS20.2.R2 -1 108 Hart R2X 2 135 DK80008-87 3 128 Mikado R2X 3 118

HERBICIDE TOLERANT SSOYBEANS • YIELDS BY LOCATION • WESTERN FIRST YEAR ENTRY LEVEL continued

Manitoha	Young R2X 3 Bronco R2X 6 Experimental lines that are being tested/proposed for registration in Canada CFS20.3 R2 3 PV EXP 20-S4 5 EXP00520XR 5 EXP00520X	2020	Yield % Check	
Maturity				
Zone	Variety	+/- Check [†]	Hamiota	Melita
	Young R2X	3	114	98
	Bronco R2X	6	88	86
	Experimental lines th	at are being tested/proposed for registration	in Canada	
	CFS20.3 R2	3	111	100
Zone	PV EXP 20-S4	5	106	100
	EXP00520XR	5	109	96
CHECK CHAR	ACTERISTICS			
	Akras R2	108	52	64
		DTM		bu/ac
		CV %	5.8	4.4
		LSD %	11	7
		Sign. Diff.	yes	yes
		Seeding Date	May 16	May 19
		Harvest Date	Oct 1	Sep 18

 $[\]dagger$ Maturity ratings were averaged across the Hamiota and Melita sites.

CONVENTIONAL SOYBEANS ◆ VARIETY DESCRIPTIONS

Manitoba	Company						10	OC					
Maturity Zone	Maturity Group	Variety	DTM +/- Check†	Yield % Check	Site Years Tested	Hilum Colour	Rating (1–5)	Group					
	8.000	Norfolk	-6	94	20	IY	2.3	S					
Early-	000.7	Fjord	-4	95	12	IY	1.9	ST					
Season Zone	000.9	AAC Halli*	-3	101	39	Υ	2.1	ST					
Zone	00.2	Siberia	-2	110	11	IY	1.9	ST					
	00.3	OAC Prudence	0	100	136	Υ	1.6	Т					
	00.3	Maxus	0	99	18	IY	2.0	ST					
	00.3	Reynolds	2	107	17	IY	2.3	S					
	00.4	Liska*	4	118	6	IY	2.3	S					
	00.6	Kebek	6	100	17	Υ	1.8	ST					
Mid-	00.7	Abaca	6	127	3	IY	1.8	ST					
Mid- Season Zone	00.9	DH863	6	96	25	IY	2.3	S					
	Experiment	Experimental lines that are being tested/proposed for registration in Canada											
	000	SVX21T000S1	1	110	6	IY	2.1	ST					
	00	SVX21T00S2	3	108	6	IY	1.7	Т					
	00.7	CER10-11.97	5	101	6	IY	1.9	ST					
	8.00	CER14-640	5	106	6	IY	2.1	ST					
	00.3	PR130167Z1-02	6	111	3	BR	1.8	ST					
	00.8	Meteor	7	100	17	IY	2.3	S					
	8.00	Aurelina	8	116	3	IY	1.9	ST					
	00.6	Maya*	9	101	3	IY	1.7	Т					
Long-	00	Stanley	10	113	6	IY	2.1	ST					
Season Zone	0.3	Astor	12	114	12	Υ	2.0	ST					
Zone	Experiment	al lines that are being test	ed/proposed for regis	tration in Canada									
	00.7	CER14-142	9	111	6	Υ	2.1	ST					
	00.9	DL18.3004	11	117	6	Υ	2.1	ST					
HECK CHAI	RACTERISTICS												
		OAC Prudence	112	47	136								
			DTM	bu/ac	site years								

[†] Maturity ratings were averaged across the core sites over multiple years.

^{* 🕅} Indicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.



CONVENTIONAL SOYBEANS • YIELDS BY LOCATION • EASTERN MANITOBA

2020 Yield % Check

Manitoba		_		Early Sites			Core Sites	
Maturity Zone	Variety	DTM +/- Check†	Arborg	Beausejour	Stonewall	Carman	Morris	Portage
	Norfolk	-6	84	63	85	97	95	106
Early-	Fjord	-4	92	87	87	111	100	92
Season Zone	AAC Halli*	-3	90	89	113	100	98	103
Zone	Siberia	-2	106	97	95	121	116	115
	OAC Prudence	0	100	100	100	100	100	100
	Maxus	0	-	-	-	106	103	98
	Reynolds	2	94	94	109	107	107	100
	Liska*	4	-	-	-	121	118	110
	Kebek	6	99	87	92	111	118	107
Mid-	Abaca	6	-	-	-	133	134	117
Season	DH863	6	-	-	-	99	99	87
Zone	Experimental lines	that are being tested/	proposed for reg	istration in Canada				
	SVX21T000S1	1	112	97	104	132	103	112
	SVX21T00S2	3	105	108	105	126	105	103
	CER10-11.97	5	104	103	99	99	108	91
	CER14-640	5	103	110	105	103	112	100
	PR130167Z1-02	6	-	-	-	124	110	103
	Meteor	7	100	102	99	96	97	88
	Aurelina	8	-	-	-	127	117	108
	Maya*	9	-	_	_	105	102	96
Long-	Stanley	10	-	-	-	109	112	91
Season	Astor	12	_	_	-	104	110	97
Zone	Experimental lines	that are being tested/	proposed for reg	istration in Canada				
	CER14-142	9	110	116	116	110	121	95
	DL18.3004	11	-	_		114	112	99
HECK CHAR	ACTERISTICS		0 B					
	OAC Prudence	112	44	52	32	40	51	52
		DTM			bu	/ac		
		CV %	7.1	9.8	6.6	8.8	4.4	6.9
		LSD %	12	16	-11	16	8	11
		Sign. Diff.	yes	yes	yes	yes	yes	yes
		Seeding Date	May 15	May 20	May 23	May 26	May 22	Jun 3
		Harvest Date	Sep 29	Oct 7	Sep 24	Oct 1	Sep 29	Oct 6

[†] Maturity ratings were averaged across the core sites over multiple years.

^{*} Molicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

	CONVE	NTIONAL SOYBE	ANS + YIELD	S BY LOCATION	• WESTERN M	ANITOBA	
Manitoba		DT14	Nr. 1.107	Ci. V		2020 Yiel	ld % Check
Maturity Zone	Variety	DTM +/- Check†	Yield % Check	Site Years Tested	Hilum Colour	Melita	Swan River
Early-	Ambella	-9	98	2	BR	95	103
Season	AAC Halli*	-3	93	6	Υ	103	82
Zone	Fjord	-3	95	6	IY	95	105
	Siberia	-2	103	4	IY	102	109
	Liska*	-1	111	2	IY	100	112
	OAC Prudence	0	100	9	Υ	100	100
Mid- Season	Maxus	0	95	6	Υ	93	100
Zone	Maya*	4	97	2	IY	88	89
ZOTIC	Experimental lines th	hat are being tested/pr					
	PR130933Z-05	-1	92	2	Υ	95	89
	PR130167Z1-02	4	90	2	BR	98	81
HECK CHAR	ACTERISTICS						
	OAC Prudence	118	36	9		39	31
		DTM	bu/ac	site years		bu	ı/ac
					CV %	4.1	9.2
					LSD %	7	15
					Sign. Diff.	yes	yes
					Seeding Date	May 21	Jun 4
					Harvest Date	Sep 17	Oct 13

[†] Maturity ratings were averaged across the Melita and Swan River sites over multiple years.

^{*} ndicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

Key for Field Pea Variety Tables

Maturity Ratings – early = -3 days relative to the check mid = -2 to -1 days abcdot = 0 to +3 days

Relative Vine Length – S = short M = medium L = long VL = very long

Green Seed Coats – G = 0-10% green seed coats F = 11-25% green seed coats

Seed Coat Dimpling – VG = 0-5% of seeds dimpled G = 6-20% of seeds dimpled F = 21-50% of seeds dimpled

Bleaching – The resistance rating of green pea to bleaching. Bleaching does not apply to other market classes of peas, indicated by n/a

Mycosphaerella Blight – All pea varieties listed have "fair" resistance to Mycosphaerella (Ascochyta) blight.

Fusarium Wilt – Varieties with good resistance to one strain of fusarium wilt may be susceptible to other strains.

FIELD PEAS ◆ VARIETY DESCRIPTIONS

									Resistance			
Market Class/Variety	Maturity Rating†	Yield % Check	Site Years Tested	Relative Vine Length	TSW (g/1000 seeds)	Green Seed Coats	Seed Coat Breakage	Seed Coat Dimpling	Seed Coat Bleaching	Lodging	Powdery Mildew	Fusarium Wilt
YELLOW												
AAC Ardill	mid	99	35	M	240	G	G	G	n/a	G	VG	G
AAC Asher*	mid	102	12	S	260	G	F	F	n/a	G	VG	F
AAC Carver*	early	104	29	L	240	G	G	G	n/a	G	VG	F
AAC Chrome*	long	108	25	M	240	G	G	G	n/a	G	VG	F
AAC Delhi*	mid	102	13	M	290	G	F	F	n/a	G	VG	F
AAC Lacombe**	long	100	33	L	270	F	F	G	n/a	G	VG	F
AAC Profit*	long	101	12	M	230	G	F	G	n/a	G	VG	F
CDC Amarillo	long	100	35	M	230	G	F	F	n/a	VG	VG	G
CDC Athabasca*	long	96	19	L	300	G	F	F	n/a	VG	VG	G
CDC Canary*	early	98	19	L	230	F	G	F	n/a	VG	VG	F
CDC Inca*	mid	104	33	L	230	F	G	G	n/a	G	VG	F
CDC Lewochko*	mid	103	19		230	G	G	G	n/a	VG	VG	F
CDC Meadow	early	97	85	М	220	G	G	G	n/a	G	VG	F
CDC Saffron	mid	97	49	М	250	G	G	F	n/a	G	VG	F
CDC Spectrum*	long	95	19	L	240	G	G	G	n/a	VG	G	F
GREEN	Λ											
AAC Comfort*	long	97	24	M	260	n/a	G	G	G	G	VG	F
Blueman*	long	96	6	M	230	n/a	VG	G	F	G	VG	F
CDC Forest*	long	101	19	L	230	n/a	G	G	G	G	VG	F
CDC Greenwater	mid	97	34	M	220	n/a	VG	G	G	G	VG	G
CDC Limerick	long	96	34	M	210	n/a	VG	G	G	VG	VG	F
CDC Spruce*	long	98	19	L	240	n/a	F	F	G	G	VG	F
CDC Striker	early	87	89	M	230	n/a	VG	G	G	VG	Р	G
MAPLE												
AAC Liscard	early	93	24	М	180	n/a	_	_	n/a	G	VG	_
FORAGE	,											
DL Delicious	long	73	6	VL	220	_	VG	F	n/a	F	_	_
DL Goldeye*	long	69	13	VL	160	G	VG	VG	n/a	VP	-	-
DL Lacross	mid	86	13	VL	190	F	VG	G	n/a	G	_	_
CHECK CHARACTERIST												
CDC Amarillo	94	76	35									
	DTM	bu/ac	site years									

† Maturity ratings were averaged across Hamiota, Melita, Morden and Swan River. * Indicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991. ** Indicates a variety that is protected by Plant Breeder's Rights legislation that complies with UPOV 1978.

FIELD PEAS • YIELDS BY LOCATION

2020 Yield % Check

	2020 Held /0 CHECK									
Market Class/Variety	Carberry	Hamiota	Melita	Morden	Roblin	Swan River				
YELLOW										
AAC Ardill	112	101	98	109	125	109				
AAC Asher	106	88	108	118	100	109				
AAC Carver*	107	91	100	110	116	102				
AAC Chrome*	116	85	107	121	113	114				
AAC Delhi*	95	94	105	117	111	110				
AAC Lacombe**	109	90	98	122	106	109				
AAC Profit*	112	93	98	100	111	109				
CDC Amarillo	100	100	100	100	100	100				

continued >

FIELD PEAS • YIELDS BY LOCATION continued

2020	Vi۵	NO PV	Char	·l

Market Class/Variety	Carberry	Hamiota	Melita	Morden	Roblin	Swan River
CDC Athabasca*	110	94	97	90	101	103
CDC Canary*	113	99	91	102	115	102
CDC Inca*	118	106	101	112	104	111
CDC Lewochko*	100	116	98	99	107	108
CDC Meadow	100	97	100	108	88	106
CDC Saffron	109	89	91	106	99	101
CDC Spectrum*	89	90	94	98	95	104
GREEN						
AAC Comfort*	122	89	101	97	115	107
Blueman*	98	85	95	94	121	107
CDC Forest*	112	102	101	86	102	107
CDC Greenwater	107	98	93	101	95	105
CDC Limerick	97	101	96	97	88	98
CDC Spruce*	88	88	97	100	113	107
CDC Striker	99	81	89	96	105	93
MAPLE						
AAC Liscard	97	89	96	101	100	96
FORAGE						
DL Delicious	95	66	67	89	78	70
DL Goldeye*	82	71	57	61	85	66
DL Lacross	98	86	95	103	93	71
CHECK CHARACTERISTICS						
CDC Amarillo	94	67	94	78	72	92
			bι	ı/ac		
CV %	10.2	4.5	7.2	6.8	11.0	4.8
LSD %	17	7	11	11	19	8
Sign. Diff.	yes	yes	yes	yes	yes	yes
Seeding Date	May 6	May 7	May 6	May 19	May 7	May 14
Harvest Date	Aug 24	Aug 25	Aug 17	Aug 24	Aug 27	Aug 27

^{*} Indicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

Key for Faba Bean Variety Table

Tannin vs. Zero-Tannin Varieties – Tannin varieties with coloured flowers and tan-coloured seed coats cannot be fed directly to livestock. Zero-tannin varieties with white flowers and seed coats can be fed directly to livestock.

DTM – The number of days from planting to swathing. Days to maturity (DTM) may vary depending on the planting date.

FABA BEANS * VARIETY DESCRIPTIONS AND YIELDS BY LOCATION

				_	2020 Yie	ld % Check
Market Class/ Variety	DTM +/- Check	Yield % Check	Site Years Tested	TSW (g/1000 seeds)	Roblin	Stonewall
COLOURED FLOWER (TANNIN)						
Fabelle*	0	100	1	533	100	100
CHECK CHARACTERISTICS						
-abelle	105	3852	5		3768	4118
	DTM	lbs/ac	site years		lb	s/ac
WHITE FLOWER (ZERO TANNIN)						
Snowbird**	0	100	16	495	-	100
DL Rico*	5	89	3	566	-	93
DL Tesoro*	6	109	3	511	-	103
CHECK CHARACTERISTICS						
Snowbird	104	4824	16		-	3748
	DTM	lbs/ac	site years	_	lb	s/ac
				CV %	-	5.1
				LSD %	-	8
				Sign. Diff.	-	yes
				Seeding Date	May 7	May 17
				Harvest Date	Sep 10	Sep 8

^{*} Indicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

^{**} Indicates a variety that is protected by Plant Breeder's Rights legislation that complies with UPOV 1978.

^{** 🛞} Indicates a variety that is protected by Plant Breeder's Rights legislation that complies with UPOV 1978.

Key for Dry Bean Variety Tables

DTM +/- Check – The number of days from planting to full maturity (90% of plants ready for harvest). It is expressed as + or – days relative to the check variety. Actual days to maturity (DTM) for the check variety is found in the shaded area at the bottom of the table.

Lodging (1–5) – The lodging rating at harvest on a scale of one to five. The greater the value, the more lodged the crop. For example, 1 = standing upright, 5 = flat on the ground.

Plant Height (cm) – The distance measured from the soil surface to the top of the plant at flowering.

Pod Height (% >5 cm) – The visual estimation of the % of pods greater than 5 cm from the soil surface at harvest.

CBB Severity (0–5) – The average visual rating of common bacterial blight (CBB) on 10 plants per plot at the yellow pod (R7) stage.

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

CBB Incidence (%) – The average visual rating of % leaf tissue infected by CBB on 10 plants per plot at the R7 stage.

WM Incidence (%) – The average visual rating of the % of plants infected by white mould (WM) on 10 plants per plot at full maturity (R9).

		DRY	BEANS •	VARIETY	DESCRIE	PTIONS				
Market Class/Variety	DTM +/- Check	Yield % Check	Site Years Tested	TSW (g/1000 seeds)	Lodging (1–5)	Plant Height (cm)	Pod Height (% > 5 cm)	CBB Severity (0—5)	CBB Incidence (%)	WM Incidence (%)
NAVY	+/- T9905	% T9905			(. 5)	(4)	(/0/ 5 cm)	(0 0)	(70)	(,,,
AAC Shock	+/- 19903 -2	⁷⁰ 19903 97	8	209	2	52	90	2	21	0
Bolt	-2	93	19	204	1	53	90	2	19	0
Indi	-2	101	28	172	1	55	92	3	19	0
AAC Argosy	-1	104	12	193	2	54	91	2	18	0
Armada	0	97	4	187	2	58	88	2	17	0
Nautica	0	89	18	163	2	52	93	2	20	0
T9905	0	100	36	199	2	53	90	2	15	0
HMS Medalist	1	99	6	192	2	57	88	3	17	0
SV1893GH*	10	95	13	194	2	55	88	1	10	0
Varieties that are registe						33	00		10	O .
S09-27C	-4	86	2	228	2	54	90	3	15	0
15094	-1	103	6	204	2	56	89	2	16	0
15095	3	101	6	204	3	58	88	3	25	0
CHECK CHARACTERISTI T9905	100 DTM	2366 lbs/ac	36 site years	1,4						
BLACK	+/- Eclipse	% Eclipse	,							
CDC Blackstrap*	-5	94	17	209	1	44	89	2	13	0
Ace	-2	99	6	195	2	55	92	3	17	0
CDC Jet	-1	89	43	192	1	50	95	2	15	0
CDC Superjet	-1	88	31	198	2	50	92	2	15	0
Black Tails	0	98	6	197	2	55	90	3	25	0
Eclipse**	0	100	45	192	1	54	93	3	20	0
Zenith	3	96	6	220	1	51	93	3	33	0
Varieties that are registe	ered in the US or bei	ing tested or propos	ed for registra							
W11-02-152	0	83	2	234	2	58	88	3	25	0
CHECK CHARACTERISTI	cs									
Eclipse	96	2449	45							
	DTM	lbs/ac	site years							
PINK	+/- Floyd	% Floyd								
Floyd	0	100	27	340	4	46	63	3	42	0
CHECK CHARACTERISTI	CS									
Floyd	92	2400	27							
	DTM	lbs/ac	site years							
PINTO	+/- Windbreaker	% Windbreaker								
SV6139GR*	-2	104	24	332	2	54	87	3	20	0
Vibrant	-2	108	17	327	2	63	86	3	27	0
SV6533GR*	-1	97	9	423	3	55	78	3	22	0
Windbreaker	0	100	52	359	3	50	81	3	22	0
Cowboy*	0	108	6	375	2	63	88	3	23	0
Monterrey	2	106	20	350	3	65	87	3	18	0

Market Class/Variety	DTM +/- Check	Yield % Check	Site Years Tested	TSW (g/1000 seeds)	Lodging (1–5)	Plant Height (cm)	Pod Height (% > 5 cm)	CBB Severity (0—5)	CBB Incidence (%)	WM Incidenc (%)
La Paz	4	99	21	320	3	61	86	3	26	0
Varieties that are regis	stered in the US or be	ing tested or propos	ed for registrat	ion in Canad	a					
16-NP1	4	86	4	323	3	64	88	2	20	0
19-382	5	89	4	431	3	53	86	2	20	0
ND Palomino*	5	106	6	387	4	59	82	3	23	0
19-279	7	96	4	396	3	66	87	2	17	0
CHECK CHARACTERIS										
Windbreaker	93	2657	56							
	DTM	lbs/ac	site years							
GREAT NORTHERN	+/- Pink Panther	% Pink Panther								
Aries	-2	135	13	370	3	50	87	3	30	0
Varieties that are regis			_			47	0.4		25	2
Powderhorn	-3	133	8	363	3	47	84	3	25	3
DARK RED KIDNEY Red Hawk	+/- Pink Panther	% Pink Panther 65	15	525	2	36	86	3	28	0
	4									
Dynasty	6	96	6	509	3	61	84	3	26	0
Montcalm	6	81	5	460	2	47	86	4	32	0
Varieties that are regis	stered in the US or be	ing tested or propos 74	ed for registrat 3			Г1	0.5	3	24	2
161164				383	3	51	85		24	0
Red Rover LIGHT RED KIDNEY	5	56 % Pink Panther	6	428	3	51	82	3	27	0
Big Red	+/- Pink Panther O	% PHIK Palltiler 99	24	503	2	45	86	3	27	0
Pink Panther	0	100	56	513	2	50	88	3	30	0
Varieties that are regis						50	88	3	30	U
varieties that are regis Red Dawn	-9	99	eu ior registrat 8	511	a 1	48	84	3	23	0
CHECK CHARACTERIS		99	•	311	1	40	04	3	23	
CHECK CHARACTERIS Pink Panther	99	1981	56							
i ilik i diferici	DTM	lbs/ac	site years							
CRANBERRY	+/- Etna	% Etna	, , , , , , , , , , , , , , , , , , , ,							
OAC Racer	-1	110	3	478	1	48	85	3	30	0
Etna	0	100	58	509	1	44	84	3	34	0
OAC Candycane	4	134	3	501	1	52	88	2	13	0
AAC Scotty	5	111	14	526	3 93	41	85	3	26	0
Varieties that are regis	stered in the US or be	ing tested or propos	ed for registrat	ion in Canad	a					
SV3709GC	-4	109	6	568	1	39	87	4	47	0
Amaranto	-3	101	3	459	1	47	87	3	30	0
CR10875	-1	92	2	524	1	37	90	3	43	0
Krimson	-1	103	21	520	3	45	81	3	25	0
AGT01	1	76	3	499	1	44	82	3	33	0
CHECK CHARACTERIS	TICS									
Etna	99	1759	58							
	DTM	lbs/ac	site years							

This long-term data is based on results from wide row trials. * Indicates a variety that is protected by, or has been applied for and pending, Plant Breeder's Rights legislation that complies with UPOV 1991.

** Indicates a variety that is protected by Plant Breeder's Rights legislation that complies with UPOV 1978.

DRY BEANS • YIELDS BY LOCATION • WIDE ROW 2020 Yield % Check Morden Market Class/ Variety DTM +/- Check Winkler Carman Portage NAVY +/- T9905 % T9905 **AAC Shock** -2 Bolt -2 Indi -2 AAC Argosy -1 Armada Nautica T9905 **HMS Medalist** SV1893GH*

2020 Yield	% Check
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			2020 (18)	u /o Circck	
Market Class/ Variety	DTM +/- Check	Carman	Morden	Portage	Winkler
•	ne US or being tested or propose	d for registration in Cana	ıda		
15094	-1	99	102	92	116
15095	3	90	96	69	118
HECK CHARACTERISTICS					
9905	100	2139	1735	1717	3131
	DTM		lbs	/ac	
	CV %	9.1	11.2	11.7	7.7
	LSD %	14	18	18	14
	Sign. Diff.	yes	yes	yes	yes
	Seeding Date	Jun 6	Jun 3	Jun 5	Jun 5
	Harvest Date	Sep 29	Sep 14	Oct 8	Oct 15
BLACK	+/- Eclipse		% Ec	lipse	
DC Blackstrap	-5 '	133	109	133	94
Ace	-2	120	103	125	98
DC Jet	-1	103	98	92	94
DC Super Jet	-1	97	76	107	86
lack Tails	0	98	107	110	102
clipse**	0	100	100	100	100
HECK CHARACTERISTICS					
clipse	96	1800	1613	1476	3604
	DTM		lbs	/ac	
	CV %	9.1	11.2	11.7	7.7
	LSD %	16	20	21	12
	Sign. Diff.	yes	yes	yes	yes
	Seeding Date	Jun 6	Jun 3	Jun 5	Jun 5
	Harvest Date	Sep 29	Sep 14	Oct 8	Oct 15
PINTO	+/- of Windbreaker		% of Win	dbreaker	
V6139GR*	-2	116	109	103	103
ibrant ibrant	-1	122	119	102	114
Vindbreaker	0	100	100	100	100
Cowboy*	3	117	109	105	107
Monterrey	3	100	106	101	110
a Paz	5	113	116	95	101
	ne US or being tested or propose				
6-NP1	4	90	90	80	86
9-382	5	94	94	81	89
ID Palomino*	5	108	100	103	100
9-279	7	100	99	90	97
CHECK CHARACTERISTICS					<u> </u>
Vindbreaker	93	2038	2303	2899	3680
	DTM			/ac	
	CV %	10.9	6.9	9.3	12.7
	LSD %	20	12	16	-
	Sign. Diff.	yes	yes	yes	no
	Seeding Date	Jun 6	Jun 3	Jun 5	Jun 5
	Harvest Date	Sep 29	Sep 15	Oct 8	Oct 15
GREAT NORTHERN	+/- Pink Panther	3cp 23		Panther	00015
Aries	+/- FIIIK FAIIUIEI -2	130	119		118
		130		Danthor	110
DARK RED KIDNEY Dynasty	+/- Pink Panther –	100	% PINK 83	Panther _	87
	ne US or being tested or propose				J/
61164	5	80	63		77
Red Rover	5	54	57		55
IGHT RED KIDNEY	+/- Pink Panther	JT		– Panther	JJ
Right RED KIDNET	+/- PINK Panther O	104	% PIIIK 99	- ranuner	85
ink Panther	0	100	100	_	100
	ne US or being tested or propose				100
ed Dawn	-9	111	89	_	107
HECK CHARACTERISTICS	,		0,		107
ink Panther	99	1699	1924	_	2787
iiix i difulci	DTM	1000			2707
	CV %	13.9	9.6	/ac _	11.9
	LSD %			-	
		24	14	-	18
	Sign. Diff.	yes Jun 6	yes	lue 5	yes Jun 5
	Seeding Date Harvest Date	Sep 29	Jun 3 Sep 21	Jun 5 Oct 8	Oct 15

DRY BEANS • YIELDS BY LOCATION • WIDE ROW continued

			2020 Yield	d % Check	
Market Class/ Variety	DTM +/- Check	Carman	Morden	Portage	Winkler
CRANBERRY	+/- Etna		% E	tna	
OAC Racer	-1	125	119	-	95
Etna	0	100	100	-	100
OAC Candycane	4	128	123	_	146
Varieties that are registered in the	US or being tested or propose	ed for registration in Car	nada		
Amaranto	-3	108	96	-	99
Krimson	-1	140	132	-	95
AGT01	1	98	79	-	61
CHECK CHARACTERISTICS					
Etna	99	1507	1520	-	2401
	DTM		lbs	/ac	
	CV %	13.9	9.6	-	11.9
	LSD %	27	18	-	21
	Sign. Diff.	yes	yes	-	yes
	Seeding Date	Jun 6	Jun 3	Jun 5	Jun 5
	Harvest Date	Sep 29	Sep 21	Oct 8	Oct 15

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^{**} Indicates a variety that is protected by Plant Breeder's Rights legislation that complies with UPOV 1978.

	DRYE	SEANS + YIELD	S BY LOCATION •	NAKKOW K	OW	
					2020 Yield % Check	
Market Class/ Variety	DTM +/- Check	Yield % Check	Site Years Tested	Melita	Morden	Portage
NAVY	+/- CDC Blackstrap	% CDC Blackstrap			% CDC Blackstrap	
HMS Medalist	3	78	3	91	57	86
SV1893GH*	4	88	5	85	75	67
Indi	5	94	7	102	105	88
AAC Argosy	7	90	5	99	93	82
Bolt	7	81	14	102	72	57
AAC Shock	8	84	10	101	81	72
T9905	8	86	12	107	80	67
Nautica	10	85	7	99	57	57
BLACK	+/- CDC Blackstrap	% CDC Blackstrap			% CDC Blackstrap	
CDC Blackstrap*	0	100	23	100	100	100
CDC Jet	5	88	23	110	84	75
CDC Superjet	5	95	23	102	81	80
Eclipse**	6	101	11	114	91	86
CHECK CHARACTERISTICS						
CDC Blackstrap	93	2780	23	3048	3438	3827
	DTM	lbs/ac	site years		lbs/ac	
			CV %	7.7	8.4	9.2
			LSD %	13	12	12
			Sign. Diff.	yes	yes	yes
			Seeding Date	May 19	Jun 3	Jun 5
			Harvest Date	Sep 9	Sep 21	Oct 8
PINTO	+/- Windbreaker	% Windbreaker			% Windbreaker	
SV6139GR*	0	109	8	111	108	130
Windbreaker	0	100	15	100	100	100
Varieties that are registered i	in the US or being tested	d or proposed for regist	ration in Canada			
ND Palomino*	1	102	3	111	98	98
CHECK CHARACTERISTICS						
Windbreaker	98	2505	15	3007	3516	2883
	DTM	lbs/ac	site years		lbs/ac	
			CV %	7.7	8.4	9.2
			LSD %	13	12	16
			Sign. Diff.	yes	yes	yes
			Seeding Date	May 19	Jun 3	Jun 5
			Harvest Date	Sep 9	Sep 21	Oct 8

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Manitoba Pulse and Soybean Buyer List – November 2020

•								
	EDIBLE BEANS	BEANS			Ş			
	BLE B	'A BE.	LENTILS	SI	S OY BEANS			CGC
COMPANY		FABA	EN	PEAS	S0Y	PHONE	LOCATION	REGULATED
Alliance Pulse Processors Inc. dba AGT Foods Canada	/	/	/	✓	/	306-525-4490	Regina, SK	/
AGT Foods St. Joseph	✓		✓	✓	/	204-737-2625	St. Joseph, MB	✓
All Commodities (AC) Trading Ltd.			✓	✓		204-339-8001	Winnipeg, MB	✓
Avena Foods Ltd. dba Best Booking Pulses Inc			1	✓		204-857-4451	Portage la Prairie, MB	✓
Belle Pulses Ltd.		✓		✓		306-423-5202	Bellevue, SK	✓
Besco Grain Ltd.		✓		✓		204-745-3662	Carman, MB	✓
Brett-Young Seeds				✓	✓	204-261-7932	Winnipeg, MB	
BroadGrain Commodities Inc.	✓	/	1	1	✓	416-504-0070	Toronto, ON	✓
C.B. Constantini Ltd.				✓		604-669-1212	Vancouver, BC	✓
Cargill Ltd.					✓	204-947-6219	Winnipeg, MB	✓
Columbia Grain Inc. (CGI) (Walhalla Bean Co.)	✓					701-549-3721	Walhalla, ND	✓
Delmar Commodities Ltd.	✓		✓	✓	✓	204-331-3696	Winkler, MB	✓
ETG Commodities	✓	✓	✓	✓	✓	416-900-4148	Mississauga, ON	✓
G3 Canada Limited				✓		204-983-0239	Winnipeg, MB	✓
Gavilon Grain LLC					✓	816-584-2210	Omaha, NB	✓
Global Food and Ingredients Inc.		✓	✓	✓		416-840-8590	Toronto, ON	✓
Global Grain Canada Ltd.	✓					204-829-3641	Plum Coulee, MB	
Hensall District Co-op	✓	:		✓		204-295-3938	Winnipeg, MB	✓
Horizon Agro Inc.					✓	204-746-2026	Morris, MB	
Kalshea Commodities Inc.		:	✓	✓		204-272-3773	Winnipeg, MB	✓
Knight Seeds			✓	✓		204-764-2450	Hamiota, MB	
inear Grain Inc.	✓	✓		✓	✓	204-745-6747	Carman, MB	✓
ouis Dreyfus Company Canada ULC				✓	✓	403-205-3322	Calgary, AB	✓
Marina Commodities Inc.			✓	✓		204-937-2300	Roblin, MB	✓
Masterfeeds		✓		✓		403-327-2555	Lethbridge, AB	
McDougall Acres Ltd.	✓	✓	✓	✓	✓	306-693-3649	Moose Jaw, SK	
Monsanto					✓	-	Winnipeg, MB	
Natural Proteins Inc.					✓	204-355-5040	Blumenort, MB	
Nu-Vision Commodities	✓		ļ	✓	✓	204-758-3401	St. Jean Baptiste, MB	
Parrheim Foods				✓		306-931-1655	Saskatoon, SK	✓
Parrish & Heimbecker Ltd.				✓	✓	204-987-4320	Winnipeg, MB	✓
Paterson Grain	✓			✓	✓	204-956-2090	Winnipeg, MB	✓
• FeedMax Corp.		-		✓		204-523-0682	Killarney, MB	√
Pipeline Foods, ULC				✓	✓	204-594-8750	Winnipeg, MB	✓
Prairie Fava Ltd.	<u> </u>	✓			:	204-721-4715	Glenboro, MB	
Providence Grain Group			✓	✓	✓	780-997-0211	Fort Saskatchewan, AB	✓
PS International, LLC DBA Seaboard Special Crops		✓	✓	✓	<u>:</u>	306-565-3934	Regina, SK	✓
Richardson International Ltd.				/		204-934-5627	Winnipeg, MB	✓
Richardson Pioneer Limited				√	✓	204-934-5627	Winnipeg, MB	✓
Tri Lake Agri Limited				✓		204-523-5380	Killarney, MB	✓
Roquette Canada Ltd.	•		:	✓	:	204-428-3722	Portage la Prairie, MB	√
Rudy Agro Ltd.	✓		✓	✓	<u> </u>	306-867-8667	Outlook, SK	✓
Scoular Canada Ltd.	✓	✓	✓	✓	:	403-720-9050	Calgary, AB	√
Seed-Ex Inc.	<u> </u>	<u> </u>	<u> </u>	✓	✓	204-737-2000	Letellier, MB	✓
Semences Prograin Inc.					✓	450-469-5744	Saint-Césaire, QC	
Shafer Commodities Inc.	✓	✓	√	✓	✓	204-822-6275	Morden, MB	√
Simpson Seeds Inc.			√			306-693-2132	Moose Jaw, SK	/
Southland Pulse Inc.			V	/		306-634-8008	Estevan, SK	/
The Andersons Inc.			✓	✓	:	419-891-6464	Maumee, OH	√
/andaele Seeds Ltd.		✓		✓	<u>:</u>	204-665-2384	Medora, MB	✓
Vanderveen Commodity Services Ltd.				√	√	204-745-6444	Carman, MB	√
Viterra Inc.	✓	:	✓	✓	✓	:	rra sales representative	✓
Western Harvest Bean ULC	✓					204-515-7331	Winnipeg, MB	
Wilbur Ellis Company of Canada Ltd.	✓		✓	✓	:	204-867-8163	Minnedosa, MB	√
XPT Grain Inc.	✓	:	:	✓		306-525-0205	Regina, SK	✓

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, which do not purchase grain, and feed mills do not have to be licensed.

It is the responsibility of farmers to satisfy themselves that any company they deal with is financially sound. Questions regarding licencing and security should be directed to the CGC at 800-853-6705 or 204-983-2770.

MPSG's pulse crop buyers list contains the names of companies that have registered with MPSG and are actively purchasing pulse and soybean crops in Manitoba. The word registered does not imply endorsement. The complete list is available on our website manitobapulse.ca.