



# Pulse Variety Evaluation in 2009

*This publication features the results from MPGA sponsored trials.*

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## Trial location and design

The evaluation was conducted at four locations (Morden, Winkler, Carman, and Portage la Prairie), under wide row (60 cm) conditions. At each location, the cultivars were repeated three times. There were 59 entries in the evaluation, separated into small- (navy, black), medium- (pinto, small red, pink, great northern), and large-seeded (cranberry, kidney). **Planting dates:** Winkler (May 28), Morden (June 3),

Portage (June 6), and Carman (June 12).

**Harvest dates:** Winkler (September 15), Morden (September 24), Portage (September 24), Carman (October 13).

## Is one variety better than another?

Look at the CV (Coefficient of Variation) and LSD (Least Significant Difference) that are printed within each trial. Coefficient of Variation is a measurement describing the amount of variation caused by factors unrelated with cultivars, such as un-uniform field spots, loss of plants, various water and fertilizer conditions, human errors, etc. Lower CVs (less than 15%) indicate a more uniform trial that will demonstrate the true differences between varieties. For all wide row edible bean trials the LSD represents the amount of beans (in lbs/acre) that two varieties must differ before you can say with a 95% chance of certainty that a difference exists for those varieties in the same trial. For example, the Morden wide row small bean trial has an overall mean yield of 2768 lb/acre, a CV of 7%, and LSD of 245 lb/acre.

The low CV indicates the trial has very little experimental errors and the LSD indicates that varieties yields that vary by more than 240 lb/acre are truly different.

In each table, **check varieties are bolded** for easier comparison with other varieties. The best way to determine the suitability of a variety in your area is to see it in pairs with the checks, and in as many different settings and even years as possible. Some new cultivars or advanced breeding lines are included in the 2009 evaluation. But most entries have been tested in multiple years. The evaluation data from previous years are maintained and accessible at the MPGA website [http://www.manitobapulse.ca/production-variety\\_results.htm](http://www.manitobapulse.ca/production-variety_results.htm).

*We appreciate the hard work of the staff at Agriculture and Agri-Food Canada, Morden Research Station for conducting the Wide Row Screening Trials and providing crop yield, disease and seed quality data. In addition, we acknowledge the contributions of all the other contractors who plant, monitor and harvest the plots.* 

## KEY – APPLICABLE TO ALL EDIBLE BEAN CHARTS

Agronomic Traits		Disease Traits
<b>Yield</b>	lb/acre	
<b>Maturity</b>	Number of days to when 90% of plants ready to combine	
<b>Plant Type (1-3)</b>	1 = Determinate bush 2 = Indeterminate bush, erect stem and branches 2a: Without guides 2b: With guides and ability to climb 3 = Indeterminate bush with weak and prostrate stem and branches 3a: Short guides with no ability to climb 3b: Long guides with ability to climb	<b>Field Rating:</b> <b>Bacterial Blight Severity (0-5)</b> 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
<b>Plant Height</b>	Plant height in cm, rated at maturity	
<b>Lodging (1-5)</b>	Rated at maturity	
	1 = upright      5 = flat on the ground	
<b>Pod Ht (&gt; 5 cm)</b>	% of pods above 5 cm from the ground	
<b>Seed Weight</b>	Grams per 1000 seeds	
<b>Seed Quality (1-5)</b>	Based on size, shape, colour and wrinkle-free seed coat	
	1 = very good      5 = very poor	
		<b>Bacterial Blight Incidence</b> – % leaf tissue infected
		<b>Anthracnose Incidence</b> – % plant tissue infected
		<b>Rust Incidence</b> – % plant tissue infected
		<b>White Mould Incidence</b> – % plant tissue infected

## KEY – APPLICABLE TO ALL CHARTS

<b>CV</b>	Coefficient of Variation. The statistical measure of random variation in a trial. CV less than 15% generally indicates more uniform trial and conclusive data.
<b>LSD</b>	Least Significant Difference. The amount (lb/acre or %) that two varieties must differ before it can be said with a 95% chance of certainty that a true difference exists.
<b>Check</b>	Cultivar used in a trial as standard for statistical comparison. Selected based on popularity or superior performance of a cultivar in a market class.











**LARGE SEED SIZE continued**
**Portage**

MARKET CLASS/Variety	Yield lb/acre	Days to Maturity	Plant Type 1-3	Ht cm	Ldg 1-5	Pod Ht %>5cm	CBB Sever 0-5	CBB Incid %	Anth Incid %	Rust %	WM Incid %	TKW g	Qual 1-5
<b>CRANBERRY</b>													
<b>Cran 09</b>	<b>2104</b>	<b>103</b>	<b>1</b>	<b>48</b>	<b>2.7</b>	<b>75</b>	<b>3</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>519</b>	<b>3.0</b>
Etna	2229	105	1	45	1.7	72	3	27	0	0	12	548	2.7
BD1003	2192	105	1	52	2.7	78	3	2	0	0	32	553	3.3
Mean	2175	104	-	48	2.4	75	3	21	0	0	24	540	3.0
<b>LIGHT KIDNEY</b>													
<b>Pink Panther</b>	<b>2692</b>	<b>106</b>	<b>1</b>	<b>48</b>	<b>1.3</b>	<b>82</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>561</b>	<b>3.3</b>
Foxfire	2838	104	1	55	1.3	87	3	8	0	0	7	533	2.7
Mean	2765	105	-	52	1.3	85	3	8	0	0	11	547	3.0
<b>WHITE/DARK KIDNEY</b>													
<b>GTS 402</b>	<b>2235</b>	<b>103</b>	<b>1</b>	<b>43</b>	<b>2.3</b>	<b>83</b>	<b>3</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>493</b>	<b>2.7</b>
GTS 401	2532	106	1	50	2.7	83	3	2	0	0	7	434	1.7
R0G 802 (DK)	1965	104	1	48	1.7	85	3	5	0	0	9	503	1.7
Mean	2244	104	-	47	2.2	84	3	8	0	0	11	477	2.0
<b>Overall Trial Mean</b>	<b>2348</b>	<b>105</b>	-	<b>49</b>	<b>2.1</b>	<b>81</b>	<b>3</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>518</b>	<b>2.6</b>
CV%	15												
LSD	517												

*See page 8 for Summary of Long Season Wide Row Dry Bean Regional Trials*
**2009 DRY BEAN REGIONAL NARROW ROW – THORNHILL**

MARKET CLASS/Variety	Yield lb/acre	Days to Maturity	Plant Type 1-3	Ht cm	Ldg 1-5	Pod Ht %>5cm	CBB Sever 0-5	CBB Incid %	Anth Incid %	Rust %	WM Incid %	TKW g	Qual 1-5
<b>NAVY</b>													
<b>Envoy</b>	<b>627</b>	<b>103</b>	<b>1</b>	<b>43</b>	<b>1.0</b>	<b>73</b>	<b>3</b>	<b>22</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>186</b>	<b>2.7</b>
OAC 05-1	1207	109	1	37	2.0	63	3	23	0	10	3	174	3.0
OAC Lightning	461	109	2a	40	2.0	72	3	20	0	0	5	187	3.7
Skyline	432	108	1	30	1.0	65	3	18	0	0	4	184	2.0
H96204	1049	107	1	40	1.3	77	3	20	0	0	1	190	3.3
Mean	755	107	-	38	1.5	70	3	21	0	2	3	184	2.9
<b>BLACK</b>													
<b>CDC Jet</b>	<b>2393</b>	<b>105</b>	<b>2a</b>	<b>45</b>	<b>2.0</b>	<b>73</b>	<b>3</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>191</b>	<b>2.0</b>
BK05-009	2659	106	1	42	1.0	83	3	25	0	11	2	202	2.7
1681a-6	2142	109	1	43	1.7	78	3	22	0	0	10	211	2.3
Mean	2398	107	-	43	1.6	78	3	21	0	4	4	201	2.3
<b>PINTO</b>													
<b>CDC Pintium</b>	<b>1784</b>	<b>107</b>	<b>1</b>	<b>43</b>	<b>1.3</b>	<b>67</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>378</b>	<b>3.3</b>
AC Ole	2823	108	2a	63	2.0	62	3	15	0	0	5	355	3.7
Island	2023	110	2a	70	2.0	67	3	22	0	0	2	363	3.0
Winmor	2453	109	2b	68	2.3	67	3	22	0	0	6	370	3.3
Winchester	2695	110	2a	58	2.3	70	3	22	0	0	1	363	3.0
CDC WM-2	1906	110	2a	53	1.7	70	3	13	0	2	3	370	3.0
CDC WM-1	1829	108	2a	43	2.0	72	3	17	0	0	12	333	3.7
Mean	2216	109	-	57	1.9	68	3	19	0	0	6	362	3.3
<b>GREAT NORTHERN</b>													
1702-17	2103	108	1	67	2.0	75	3	22	0	3	4	345	3.3
<b>Overall Trial Mean</b>	<b>1787</b>	<b>108</b>	-	<b>49</b>	<b>1.7</b>	<b>71</b>	<b>3</b>	<b>20</b>	<b>0</b>	<b>1.8</b>	<b>5</b>	<b>275</b>	<b>3.0</b>
CV%	7												
LSD	177												



## LENTILS

**New for 2010**

Variety	Previous Code	Market Class	Special Note	Distributor	Seed Availability
CDC Imax CL	IBC-187	Medium red	Clearfield tolerant	Sask Pulse Growers	2010 – limited
CDC Imigreen CL	IBC-145	Medium green	Clearfield tolerant	Sask Pulse Growers	2010 – limited
CDC Impower CL	IBC-194	Large green	Clearfield tolerant	Sask Pulse Growers	2010 – limited
CDC Invincible CL	IBC-112	Small green	Clearfield tolerant	Sask Pulse Growers	2010 – limited
CDC Peridot CL	IBC-188	French green	Clearfield tolerant	Sask Pulse Growers	2010 – limited
CDC Redbow	1894T-1	Extra small red	–	Sask Pulse Growers	2010 – limited
CDC Redcoat	2154S-4	Small red	–	Sask Pulse Growers	2010 – limited
CDC Rosebud	1788S-4	Extra small red	–	Sask Pulse Growers	2010 – limited

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

Market Class	Variety	Yield % Check	Maturity Rating <sup>1</sup>	Resistance to <sup>1</sup>		Seed <sup>1</sup> Weight (TKW)	Cotyledon Colour	2009 Yield: % of CDC Milestone			
				Ascochyta Blight	Anthracnose Race 1			Bôssevain	Hamota	Melita	Robin
				G	G			Yellow	82	105	87
Small green	CDC Invincible CL	91	Early	G	G	35	Yellow	82	105	87	73
	CDC Milestone	100	Early	G	VP	37	Yellow	100	100	100	100
Medium green	CDC Imigreen CL	76	Medium	G	F	63	Yellow	76	90	64	65
	CDC Impress CL	83	Medium	G	P	52	Yellow	73	84	92	73
Large green	CDC Greenland	85	Med/Late	G	VP	64	Yellow	86	76	79	71
	CDC Impower CL	70	Medium	G	P	74	Yellow	88	85	66	49
	CDC Improve CL	88	Medium	F	VP	67	Yellow	89	108	81	57
	CDC Plato	96	Med/Late	G	P	62	Yellow	95	66	84	42
French green	CDC Peridot CL	99	Early	G	P	40	Yellow	83	116	93	105
Extra small red	CDC Robin	101	Early	G	G	30	Red	93	85	95	87
	CDC Impala CL	102	Early	G	G	31	Red	83	103	76	107
	CDC Imperial CL	94	Early	G	G	30	Red	92	101	90	76
	CDC Redbow	105	Early/Med	G	G	42	Red	105	80	94	103
	CDC Rosebud	110	Early	G	G	29	Red	115	85	95	123
	CDC Rosetown	108	Early	G	G	31	Red	103	108	99	105
Small red	CDC Impact CL	92	Early	G	P	34	Red	70	83	82	92
	CDC Maxim CL	124	Early/Med	G	G	40	Red	127	120	102	117
	CDC Red Rider	91	Early/Med	G	F	45	Red	–	–	–	–
Medium red	CDC Redberry	113	Early/Med	G	G	42	Red	130	101	93	132
	CDC Redcoat	99	Early	G	G	40	Red	120	98	96	97
Medium red	CDC Imax CL	104	Medium	G	G	50	Red	104	127	93	82
<b>CHECK CHARACTERISTICS</b>				CDC Milestone (lb/acre)				2279	2762	3910	3286
CDC Milestone				CV%				12.8	14.8	6.8	13.1
lb/acre				LSD%				21	24	11	22
				Sign Diff				Yes	Yes	Yes	Yes

<sup>1</sup> Ratings determined in Saskatchewan and may not be accurate under wetter growing conditions present in Manitoba.

## NATTO SOYBEANS

OAC Prudence is **not a natto type soybean**; it is used as a check to determine the yield potential of natto type soybeans compared to conventional soybeans.

### VARIETY DESCRIPTIONS

Manitoba Variety Zone	Company Heat Unit	Variety	Relative Days to Maturity + / - of Check				Yield % Check	Site Years Tested	Lodging	Seeds/lb	IDC Rating	2009 Yield: % of OAC Prudence						
			Average	2009	2008	2007						Aborg	Stonewall	Homewood	Portage	St Adolphe		
short season	2375	QGC 10N	-8	-8	-8	-7	78	35	2	5400	1.8	87	68	66	95	62		
	2375	QGC 12N	-8	-8	-9	-7	77	35	2	5100	2.6	94	68	52	89	66		
mid season	2475	OAC Prudence	0	0	0	0	100		1	2450	1.3	100	100	100	100	100		
		OT07-02	-1		-1	–	80	8	1	4165								
late season	2550	AC Colibri	2		2	–	83	16	2	7100								
<b>CHECK CHARACTERISTICS</b>				OAC Prudence (bu/acre)				28	51	53	53	37						
OAC Prudence				120	125	122	114	47	35				CV%	14.8	4.5	8.2	5.6	7.4
				days to maturity				bu/acre	site years				LSD%	26	8	14	9	13
				years									Sign Diff	Yes	Yes	Yes	Yes	Yes



**YIELD BY LOCATION – ROUNDUP READY SOYBEANS**

		2009 Yield: % of NSC Portage RR							
Manitoba Variety Zone	Variety	2009 Average Yield	Site Years Tested	Arborg	Stonewall	Homewood	Portage	Morden	Rosebank
short season zone	NSC Warren RR	97	4	116	101	87	94		
	Apollo RR	92	4	85	97	97	87		
	Drako RR	95	4	80	107	94	93		
	RR Rosco	94	4	92	96	98	89		
	IsisRR	101	4	116	112	89	95		
mid season zone	29002RR	83	4	96	83	75	82		
	LS 0028RR	97	4	96	99	86	104		
	RR Regis	90	4	93	91	95	83		
	LS 0036RR	93	6	103	93	89	99	95	84
	S00-W3	102	4	117	105	92	99		
	RR Russell	91	4	85	94	102	81		
	25-04 R	103	6	116	112	112	96	89	106
	Montcalm	86	4			95	88	81	82
	S00-H7	92	4			101	94	90	85
	LS 0045RR	88	4			94	93	85	84
	NSC Portage RR	100	6	100	100	100	100	100	100
	NSC Carey RR	97	4	89	105	98	93		
	90A06	95	6	98	97	96	101	85	97
	26006RR	88	4			87	98	85	84
	PS 0027 RR	111	4	127	109	118	100		
	27005RR	92	4			84	96	96	88
	26005RR	85	4			85	93	80	84
	LS 0065RR	97	4			111	98	89	95
	PRO 2515R	106	4			115	98	100	115
long season zone	NSC 2011 RR	99	4	111	99	102	89		
	NSC 2007 RR	95	4	109	100	93	87		
	90M01	96	4			90	99	84	116
	NSC Coulee RR	93	4			103	99	86	89
	HS 005R04	90	4	86	92	80	97		
	<b>Experimental lines that have been supported for registration in Canada</b>								
	NSC 2701 RR	92	4	111	100	70	94		
	NSC 2707 RR	108	4	108	112	106	105		
	OlexRR	92	4			114	90	85	85
	24-52 R	94	4			97	93	88	102
long season zone	OAC Peak	101	4			108	98	97	106
	30005RR	103	4			101	97	100	118
	PS 46 RR	93	4			113	91	81	93
	HS 02R28	92	4			101	96	80	99
	29006RR	95	4			98	97	85	107
	29008RR	99	4			103	96	94	106
	LynxRR	92	4			110	102	70	96
	<b>Experimental lines that have been supported for registration in Canada</b>								
CFS203RR		99	4			102	99	100	95
<b>CHECK YIELD</b>		NSC Portage RR (bu/acre)	31	49	51	61	60	54	
		CV%	11	9.1	9.0	5.6	7.3	7.0	
		LSD%	17	15	15	9	12	12	
		Sign Diff	Yes	Yes	Yes	Yes	Yes	Yes	Yes

## CONVENTIONAL SOYBEANS

Manitoba Variety Zone	Company Heat Unit	Variety	Relative Days to Maturity + / - of Check				Yield % Check	Site Years Tested	Hilum* Colour	Relative Seeds/lb	Seed <sup>1</sup> Protein	Lodging* 1-5	IDC	
			Average	2009	2008	2007							Rating 1-5	Grouping
short season zone	2375	Tundra	-7	-7	-6	-7	92	23	IY	2522	Normal	1.0	1.3	Tolerant
		GS 1001	-6	-8			81	16	IY	2450	Normal	1.2		
	<b>Experimental lines are being tested/proposed for registration in Canada</b>													
		OT08-04	-7	-7			85	5	Y	3000	Normal	1.0		
		OT08-05	-3	-3			86	5	Y	4300	Medium	2.0		
mid season zone		S00-V8	-2		-3		96	10	IY	2350	High		2.1	Semi Tolerant
	2450	OAC Prudence	0	0	0	0	100		Y	2454	Normal	1.3	1.3	Tolerant
	<b>Experimental lines are being tested/proposed for registration in Canada</b>													
		OAC 07-06C	3	3			88	5	IY	3209	Normal	1.7		
		OAC 05-02	1	1			102	17	IY	3374	Normal	1.3		
long season zone		Secan 07-01C	2	2			104	5	IY	2718	Medium	1.5		
		CFS08.3.00	3	3			110	5	IY	2102		1.7		
		OAC 07-03C	3	3			95	5	IY	3262	Medium	2.0		
	2575	QGC 16T	5	3	3	14	93	17	Y	3000	High	2.2	2.3	Susceptible
		OAC Erin	7		4	8	112	30	Y	3300	Normal		2.1	Semi Tolerant
<b>Experimental lines are being tested/proposed for registration in Canada</b>														
short season zone		OT06-08	4	4	4	3	101	17	Y	2026	Normal	2.7		
		OT05-18	5	2	4	10	110	17	IY	2454	Normal	2.2	1.5	Tolerant
		OT07-04	6	6			94	5	Y	2083	High	2.0		
		Secan 08-01C**	6	6			112	5	IY	2543		2.2		
		S184040**	7	7			112	5	IY	2400		3.3		
<b>CHECK CHARACTERISTICS</b>														
OAC Prudence			121	125	121	116	49	63	Y	2454				
days to maturity				bu/acre	site years				seeds/lb					

<sup>1</sup> On a whole seed content, Seed Protein in normal soybeans can range from 36% to 42%. Lower protein is usually an indication of poor nodulation during the growing season. Normal type soybeans (most conventional and Roundup Ready soybeans currently grown in Manitoba) have a whole seed protein around 40%, mid-level types around 42.5% and high protein types around 45%.

\* Lodging rating from Homewood 2009 location only

\*\* Variety did not fully mature at 1 or more sites

## YIELD BY LOCATION – CONVENTIONAL SOYBEANS

Manitoba Variety Zone	Variety	2009 Average Yield	Site Years Tested	2009 Yield: % of OAC Prudence							
				Arborg	Stonewall	Homewood	Portage	St Adolphe	Rosebank	Morden	
short season zone	Tundra	81	5	41	94	65	106	81			
	GS 1001	68	5	41	77	59	89	62			
	<b>Experimental lines are being tested/proposed for registration in Canada</b>										
	OT08-04	85	5	58	82	88	106	74			
	OT08-05	86	5			84	100	73	88	83	
mid season zone	OAC Prudence	100	7	100	100	100	100	100	100	100	100
	<b>Experimental lines are being tested/proposed for registration in Canada</b>										
	OAC 07-06C	88	5			108	95	91	83	70	
	OAC 05-02	88	5			95	99	88	86	77	
	Secan 07-01C	104	5	128	95	116	97	91			
long season zone	CFS08.3.00	110	5			121	107	108	107	108	
	OAC 07-03C	95	5			106	102	98	93	81	
	QGC 16T	92	5			113	92	90	85	82	
	<b>Experimental lines are being tested/proposed for registration in Canada</b>										
	OT06-08	102	5			112	101	97	100	98	
zone	OT05-18	112	5			134	119	102	105	102	
	OT07-04	94	5			99	103	86	99	85	
	Secan 08-01C	112	5			123	116	108	110	103	
	S184040	112	5			124	107	122	109	103	
<b>CHECK YIELD</b>		OAC Prudence (bu/acre)		28	51	53	53	37	52	71	
		CV%		14.8	4.5	8.2	5.6	7.4	6.0	10.1	
		LSD%		26	8	14	9	13	10	17	
		Sign Diff		Yes	Yes	Yes	Yes	Yes	Yes	Yes	

## NOTES – APPLICABLE TO ROUNDUP READY AND CONVENTIONAL SOYBEAN CHARTS ONLY

### **MATURITY NOTES – always use more than one criteria to gauge maturity**

1 Soybean varieties have been organized into three maturity zones – short-, mid- and long-season areas. Although there are no variety restrictions, the short-season grouping is meant to be a starting point for new growers in the outer production areas. The long-season group is targeted for the southern Manitoba generally south of highway 23, with the mid-season grouping making up the bulk of the production area in between the short- and long-season area.

2 Company Crop Heat Unit ratings are assigned to assist growers select varieties suitable for their area. Unfortunately Company Heat Unit ratings do not always reflect the actual maturity in Manitoba. Growers should never rely on just one criteria for judging maturity. Experimental lines are not assigned a HU rating until they become registered.

3 Relative days to maturity (dtm) is the number of days from seeding to plant maturity (95% of the pods on the plant are mature with seeds rattling in the pods when plant is shaken) and is expressed as + or - days from the check. For 2009, 2008 and 2007 the dtm have been calculated from four common sites (Portage, Homewood, St Adolphe, Morris) only. Because of this change, dtm numbers for 2009 and 2008 seasons may be slightly different than was published in previous seed guides which were based on all sites a variety was tested at. Actual days to maturity for the check is found in the grey Check box at the bottom of the table.

### **GENERAL NOTES**

1 Roundup Ready, Conventional and soybean varieties are evaluated separately from Roundup Ready type varieties, meaning direct comparison of varieties between different tables is not possible. All trials are solid seeded at 210,000 plants/acre.

2 Hilum colour can range from Yellow (Y), Imperfect Yellow (IY), Grey (G), Brown (BR), Buff (BF) or Black (BL) and is solely a marketing issue. The hilum is the point on the soybean seed where it attaches to the pod.

3 Relative Seeds/lb – these were the seed numbers of the varieties entered into the trial. Soybean seed size can vary greatly between varieties and even from seed lot to seed lot of the same variety. Growers should use the seed size for their seed lot when calculating seeding rates.

4 Lodging is rated at harvest; 1 = standing upright, 5 = flat along the ground. A rating of 3 or more can promote white mould within the crop canopy.

5 Iron Deficiency Chlorosis (IDC) rating scores 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 were taken from four sites prone to iron chlorosis over the last two years. IDC tolerant varieties are varieties with lower IDC scores and perform better on soils prone to iron deficiency chlorosis.

6 Iron Deficiency Chlorosis (IDC) grouping is used because varieties will have different visual rating scores from year to year. Numerical ratings which are close but are in different groupings will show similar symptoms. Both numerical and groupings should be considered together when judging IDC. Tolerant = leaves stayed green, Semi Tolerant = leaves when yellow then turned green, Susceptible = leaves went chlorotic and had dead patches on their leaves and were often stunted.

7 Soybeans are not eligible for MASC Production Insurance in all parts of the province – consult your local agent for more details.

## WESTERN MANITOBA SOYBEAN ADAPTATION TRIAL

Soybeans do not qualify for MASC Production Insurance at Roblin or Hamiota.

### **VARIETY DESCRIPTIONS**

Variety	Company Heat Unit	2009	Yield % Check	Site Years Tested	Lodging 1–5	2009 Yield: % RR Rosco					
						Wawanesa	Melfa	Roblin	Boissevain	Hamiota	
NSC Warren RR	2350	-1	105	5	1	102	96	105	107	123	
Apollo RR	2450	0	93	5	2	86	94	96	92	108	
RR Rosco	2450	0	100	5	2	100	100	100	100	100	
NSC Argyle RR	2450	0	100	5	1	101	99	75	98	143	
IsisRR	2400	2	96	5	2	101	101	38	112	145	
Montcalm	2450	2	82	5	3	82	94	25	105	120	
LS 0036	2425	3	99	5	1	106	114	48	109	118	
RR Russell	2550	3	90	5	2	89	97	73	95	102	
LS 0028	2375	4	97	5	1	104	116	46	104	124	
25-04 R	2450	6	92	5	2	88	94	37	125	136	
24-52 R	2500	7	88	5	2	71	111	35	121	133	
90A06	2450	8	79	5	2	91	100	7	94	108	
<b>CHECK CHARACTERISTICS</b>						RR Rosco (bu/acre)	67	42	43	40	27
RR Rosco						CV%	13.4	7.7	8.5	13.4	8.1
						LSD%	23	13	14	23	13
						Sign Diff	Yes	Yes	Yes	Yes	Yes
						days to maturity	43 bu/acre				

## FIELD PEAS

New for 2010

Variety	Code	Type	Co-op Test Yield		Distributor	Seed Availability
			% Yellow CK	% Green CK		
CDC Treasure	CDC 1410-15	Yellow	108		Sask Pulse Growers	2012
Varieties or lines being tested for the first time in 2009	IN4188	Yellow	100			

**NEW Check** – For 2010, the Field Pea check has been changed from Eclipse to Cutlass.

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

### VARIETY DESCRIPTIONS

Variety	Yield % Check	Site Years Tested	Maturity Rating	Vine Length	Seed Size	Resistance to							
						Green <sup>1</sup> Seed Coats	Lodging	Powdery Mildew	Mycosphaerella Blight	Fusarium <sup>2</sup> Wilt	Bleaching	Seed Coat Breakage	Seed Coat Dimpling
<b>Yellow</b>													
Agassiz	110	19	M	M	M	n/a	G	VG	F	F	n/a	G	n/a
Canstar	105	18	E	M	M	n/a	G	VG	P	G	n/a	G	n/a
CDC Bronco	92	21	M	M	M	G	G	VG	F	F	n/a	G	G
CDC Centennial	107	16	E	M	L	F	F	VG	F	F	n/a	G	G
CDC Golden	101	25	M	M	M	G	G	VG	F	F	n/a	G	G
CDC Meadow	109	28	E	M	M	G	G	VG	F	F	n/a	G	G
CDC Minuet	96	5	M	M	S	F	F	VG	F	F	n/a	F	G
CDC Mozart	108	17	M	S	M	F	F	VG	F	F	n/a	G	G
CDC Prosper	92	19	E	M	S	G	G	VG	F	G	n/a	G	F
CDC Treasure	105	19	E	M	M	G	G	VG	F	G	n/a	F	F
Cutlass	100		M	M	M	G	G	VG	F	F	n/a	F	F
DS-Admiral	105	7	E	M	M	G	G	VG	F	F	n/a	G	G
Eclipse	106	38	M	M	L	G	G	VG	F	F	n/a	G	F
FUSION	99	18	M	M	L	n/a	G	VG	P	P	n/a	F	n/a
Miser	96	6	M	M	S	G	F	VG	F	F	n/a	G	G
Noble	94	12	M	M	L	n/a	G	VG	F	F	n/a	F	n/a
Polstead	103	24	M	S	L	n/a	G	VG	P	P	n/a	F	n/a
Reward	103	18	M	M	L	n/a	G	VG	F	F	n/a	G	n/a
SW Benefit	87	11	E	M	M	n/a	F	VG	P	F	n/a	F	n/a
SW Carousel	102	16	E	M	L	G	G	VG	F	F	n/a	F	G
SW Cartier	98	11	E	M	M	n/a	F	VG	P	G	n/a	F	n/a
SW Marquee	96	15	E	M	M	G	G	VG	P	F	n/a	G	G
SW MIDAS	103	24	E	M	M	G	G	VG	F	F	n/a	G	G
SW SALUTE	100	11	M	M	M	F	F	VG	F	P	n/a	F	F
Sorento	102	14	M	M	L	n/a	F	VG	F	F	n/a	G	n/a
Thunderbird	106	19	M	M	M	n/a	G	VG	F	F	n/a	G	n/a
Topeka	96	12	M	S	M	G	F	VG	F	P	n/a	G	G
Tudor	101	16	M	M	L	F	G	VG	P	F	n/a	F	G
<i>Varieties that are being tested or proposed for registration</i>													
APCM 97107	97	12	E	M	L	G	F	VG	F	F	n/a	G	F
IN4188	113	6	M	M	M	n/a	G	VG	F	F	n/a	F	n/a
<b>Green</b>													
BLUEBIRD	90	15	E	S	M	n/a	F	VG	P	P	n/a	n/a	n/a
Camry	101	16	M	S	L	n/a	G	VG	F	F	F	G	F
CDC Montero	104	4	L	M	M	n/a	F	VG	F	F	F	G	F
CDC Patrick	101	18	M	M	M	n/a	G	VG	F	G	G	G	F
CDC Sage	85	16	M	M	M	n/a	G	VG	F	G	G	G	F
CDC Striker	93	41	M	M	M	n/a	G	P	F	G	G	VG	G
COOPER	103	34	L	M	L	n/a	G	VG	F	F	G	F	G
Nitouche	98	10	M	M	L	n/a	G	P	P	P	G	F	F
Stratus	100	15	M	S	L	n/a	F	VG	F	P	P	G	G
SW PARADE	101	6	M	S	S	n/a	F	VG	P	G	F	G	G
SW Sergeant	93	15	M	M	S	n/a	G	VG	F	F	G	G	F
TAMORA	90	18	M	M	L	n/a	G	VG	F	P	F	F	n/a
Vortex	91	10	E	M	M	n/a	F	P	F	F	G	F	F
<b>Other Pea types</b>													
CDC Rocket (Maple)	92	18	M	M	M	G	F	VG	F	n/a	n/a	n/a	G
CDC Leroy (Silage)	89	19	M	M	S	F	G	VG	n/a	n/a	n/a	n/a	G
CDC Tucker (Silage)	93	18	M	M	S	F	G	VG	n/a	n/a	n/a	n/a	G
40-10 (Silage)	69	14	L	T	S	n/a	P	P	P	n/a	n/a	n/a	G

### CHECK CHARACTERISTICS

Cutlass	71 bu/ acre	44 site years	99 days	34 inches	220 (g) per 1000 seeds
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<sup>1</sup> Green seed coats: G=0-10%; F=11-25%

<sup>2</sup> Varieties which show good disease tolerance to one strain of Fusarium wilt may be susceptible to other strains.

<sup>3</sup> Seed coat dimpling rating : VG=0-5%; G=6-20%; F=21-50%

## YIELD BY LOCATION – FIELD PEAS

Manitoba Variety	2009 Average Yield	Site Years Tested	2009 Yield: % of Cutlass					
			Boisbœuf	Dauphin	Hamiota	Melita	Morden	Thornhill
<b>Yellow</b>								
Agassiz	113	7	122	117	110	106	129	99
CDC Bronco	86	6	101	66	92	92	80	95
CDC Golden	95	7	95	105	95	100	87	91
CDC Meadow	109	6	119	105	116	111	105	101
CDC Prosper	96	6	98	94	104	91	89	103
CDC Treasure	108	6	125	112	96	104	112	98
Cutlass	100	7	100	100	100	100	100	100
DS Admiral	107	6	116	98	98	87	129	107
Eclipse	101	7	107	97	112	83	118	91
Polstead	105	6	115	97	124	97	104	90
Sorento	95	7	107	88	113	93	95	95
Thunderbird	104	7	114	106	112	95	123	105
<i>Varieties that are being tested or proposed for registration</i>								
APCM 97107	96	6	129	91	108	103	73	87
IN4188	113	6	120	107	102	102	137	101
<b>Green</b>								
CDC Patrick	101	6	127	102	106	93	87	98
CDC Striker	97	7	116	101	95	97	98	89
COOPER	102	6	116	95	107	74	112	103
<b>Silage Pea</b>								
40-10	59	7	95	60	72	61	32	64
CDC Leroy	93	7	102	98	103	94	75	107
<b>CHECK YIELD</b>	Cutlass (bu/acre)		63	94	77	61	97	63
	CV%		8.0	7.1	6.0	6.8	13.4	13.0
	LSD%		13	12	10	11	22	21
	Sign Diff		Yes	Yes	Yes	Yes	Yes	Yes

## FABABEANS

### New for 2010

Variety	Code	Type	Breeder	Distributor
Florent	NPZ 3-7080	Zero tannin	DL Seeds	Roy Legumex Inc.

### VARIETY DESCRIPTIONS

Variety	Yield % Check	Site Years Tested	Type <sup>1</sup>	Seed Size TKW (g)	2009 Yield: % of CDC Fatima	
					St. Adolphe	
CDC Blitz	100	22	Tannin			
CDC Fatima	100		Tannin	523		100
Compass	98	5	Tannin			
Florent	101	4	Zero Tannin	523		115
Quattro	100	5	Tannin			
Scirocco	95	8	Tannin			
Snowbird	94	4	Zero Tannin	502		76
Taboar	89	7	Tannin	471		88
<b>CHECK CHARACTERISTICS</b>					CDC Fatima (lb/acre)	3141
CDC Fatima	3387 lb/acre	26 site years			CV%	13.6
					LSD%	22
					Sign Diff	Yes

<sup>1</sup> Traditional tannin fababean tan coloured seed coats that contain tannins and can't be fed directly to livestock. Zero tannin fababeans have white seed coats and can be fed directly to livestock.

# MANITOBA PULSE BUYER LIST – NOVEMBER 2009

B–Beans, F–Fababeans, L–Lentils, P–Peas, S–Soybeans

Company	Commodity	Phone	City/Town	CGC Registered
Agassiz Feeds	P	204-638-5840	Dauphin, MB	N
Agassiz Seed Farm Ltd.	B, S	204-745-6655	Homewood, MB	N
AgriTel Grain Ltd.	P, S	204-268-1415	Beausejour, MB	N
B. B. F. Enterprises Ltd.	S	204-737-2245	Lettellier, MB	N
Belle Pulses Ltd.	P	306-423-5202	Bellevue, SK	Y
Best Cooking Pulses, Inc.	P, L	204-857-4451	Portage la Prairie, MB	Y
B & R Seeds Ltd.	P	204-379-2582	St. Claude, MB	N
Cargill Ltd.	P	204-947-6219	Winnipeg, MB	Y
Central Grain Company	B	204-233-4977	Winnipeg, MB	N
Global Grain Canada	B	204-829-3641	Plum Coulee, MB	Y
H & W Seed Service	B	204-325-7440	Winkler, MB	Y
Hensall District Co-op	B	204-295-3938	Winnipeg, MB	Y
Horizon Agro	P, L, S	204-746-2026	Morris, MB	Y
James Richardson International	P	204-934-5621	Winnipeg, MB	Y
• Pioneer Grain	P	204-934-5961	Winnipeg, MB	Y
• Tri Lake Agri Limited	P	204-523-5380	Killarney, MB	Y
Jordan Mills	S	204-331-3696	Winkler, MB	Y
• Delmar Commodities	S, P	204-331-3696	Winkler, MB	Y
Linear Grain	B, S, P	204-745-6747	Carman, MB	Y
• Portage Bean Station	B	204-274-2223	Macdonald, MB	Y
Louis Dreyfus Canada Ltd				
• Virden Station	P	204-748-6282	Virden, MB	Y
Masterfeeds	F, P	204-638-5840	Dauphin, MB	N
Nutri-Pea Ltd.	P	204-239-5995	Portage la Prairie, MB	N
Parent Seeds Ltd.	B, P, L, S	204-737-2625	St. Joseph, MB	Y
• Adrain Bean Station	B	204-856-9111	Macdonald, MB	Y
Parrish & Heimbecker Ltd	P	204-987-4320	Winnipeg, MB	Y
• Nutri-Pea Limited	P	204-239-5995	Portage la Prairie, MB	N
Paterson & Sons Limited, N. M.	P, S	204-956-2090	Winnipeg, MB	Y
Quarry Grain Commodities	S	204-467-8877	Stonewall, MB	N
Roy Legumex	B, F, L, P, S	204-758-3597	St. Jean Baptiste, MB	Y
• Fisher Seeds Ltd.	F	204-622-8800	Dauphin, MB	Y
• Duncan Seeds	B	204-822-6629	Morden, MB	Y
S. S. Johnson Seeds	P, B	204-376-5228	Arborg, MB	Y
Saskatchewan Wheat Pool – AgPro	P, L	306-569-6104	Regina, SK	Y
Seed-Ex Inc.	S	204-737-2000	Letellier, MB	Y
The Puratone Corporation	P	204-376-5060	Arborg, MB	N
Thompsons Limited	B, P, L	519-676-5411	Blenheim, ON	Y
• Keystone Grain	B, S	204-325-9555	Winkler, MB	Y
• Circle T Agri Services	B	204-723-2164	Treherne, MB	Y
• Y2K Farms	B	204-252-2132	Edwin, MB	Y
TransGlobal Commodities	B, P, S, L	204-975-0803	Winnipeg, MB	N
Vanderveen Commodity Services	S	204-745-6444	Carman, MB	Y
Viterra	P, S	204-954-1528	Winnipeg, MB	Y
Viterra Special Crops	B, F, L, P	204-745-6711	Carman, MB	Y
• Receiving Station	B	204-856-6373	Portage la Prairie, MB	Y
• Plum Coulee	B	204-829-2364	Plum Coulee, MB	Y
• Prairie Mountain Agri Ltd.	P	204-937-6370	Roblin, MB	Y
Walhalla Bean Co. (Canada Ltd)	B	701-549-3721	Walhalla, ND	Y
• Winkler Receiving	B	204-325-0767	Winkler, MB	Y
Walker Seeds Ltd.	P	306-873-3777	Tisdale, SK	Y
West Can Agra	B, S	204-829-3230	Plum Coulee, MB	N
Western Grain Trade Ltd.	P	306-445-4022	North Battleford, SK	Y

To be included on our Manitoba Buyers List, companies should contact the MPGA office at 204-745-6488 to register.

Note: These companies are authorized to deduct and remit levy to MPGA. This list is provided by MPGA as a convenience to our members. MPGA accepts no responsibility or liability for the accuracy of the completeness of the information provided. It is your personal responsibility to satisfy yourself that any company you deal with is financially sound. Questions regarding licensing and security should be directed to the Canadian Grain Commission at 1-800-853-6705 or 1-204-983-2770.