



Pulse Variety Evaluation in 2003

This insert features the results from MPGA sponsored trials.

The evaluation of edible bean (wide and narrow row), pea, soybean, natto soybean, fababeen and lentil varieties found within this publication is made possible with your continued support through the check off levy. Financial assistance was also received from the Federal government's Matching Investment Initiatives (MII). The Manitoba Crop Variety Evaluation Team (MCVET) provided the pea data and cost shared the fababeen and lentil data with the MPGA.

Throughout the different crop types within this report, data from the check varieties are in bold type to make it a little easier to compare the checks to the other varieties. There are also natto soybeans listed in the trial data. Natto soybeans are very tiny. In fact three to four natto beans weigh the same as one soybean. Generally they are grown under an Identity Preserved contract and are exported to Japan.

We would like to acknowledge Ferdinand Kiehn, Agriculture and Agri-Food, Morden Research Station, for conducting the Wide Row Screening Trials and the contractors that plant, monitor and harvest the plots. Thanks also to MPGA directors Bruce Brolley, Pulse Crop Specialist, Manitoba Agriculture, Food and Rural Initiatives, and Dennis Lange, Parent Seed Farms, for compiling the data for this publication.

Variety Evaluation Trials – Notes

The summary tables for soybeans and edible beans look a little different from 2002. This year we decided to use multiple year data to show how a variety will perform over an extended period of time. This will help to eliminate the "one hit wonders" and allow producers to make decisions based on a variety's performance over a number of years.

The next step would be to look at the data from more than the one site nearest your farm. And look at data from more than one year. Before trying a new variety, look at how the variety performs in strip trials in your region and even then try it on only a small percentage of your bean acreage. Try to think of it as your 40-acre bean plot. (You may even want to try it in a field away from a main road in case it doesn't perform as you first thought that it would.) This brings us to a brief discussion of two widely debated topics not often heard around the farm, Coefficient of Variation (CV) and Least Significant Difference (LSD). Coefficient of Variation is a measurement that describes the amount of variation found within the trial. While a small %CV is desirable, trials having a CV of less than 20% indicate valid data. After statistics are run on a trial a LSD for yield is generated. The LSD represents the amount of beans (in lb/acre) that two varieties have to differ before you can say with a 95% chance of certainty that a true difference exists between the two varieties that have been grown in the same trial. For example, the Morden wide row Pinto bean trial has a LSD of 259 lb/acre; the check variety AC Pintoba has a yield of 2948 lb/acre. This means that varieties having a yield greater than 3207 lb/acre (none) would be significantly higher yielding, while varieties having a yield less than 2689 lb/acre (CDC Minto, Topaz) yielded significantly less than the check variety. At the Morden site, all other varieties (Rally, GTS900, EXP08520645, 02yt145) have statistically similar yields to AC Pintoba.

As you review the 2003 bean trials there are things you need to be aware of when reading and interpreting the data. The hot, dry weather in 2003

hastened maturity at a number of site locations and for this reason you should use long-term data when evaluating maturity. Another factor to evaluate is the anthracnose data. Be aware that the ratings were done just prior to harvest and they are percentages of the plants that were infected. (The anthracnose ratings in this report do not identify the race of anthracnose that is present. This work will be done through the winter months and data will be made available in the winter edition of the *Pulse Beat*). So if you planted a variety that was susceptible to Race 73 but Race 73 was not present in the 2003 trials you would not know if the variety would be susceptible in your growing region.

The sclerotinia (or white mould) ratings are another area where clarification is needed in order to interpret the data properly. The ratings were again taken just prior to harvest. Thus there was no attempt to differentiate between midsummer and end of season infections. A variety with a high rating could have had no mould during the summer, but have been devastated with mould at the end of August simply because the plant had branches dragging along the ground and became infected this way.

Remember, the best way to determine the suitability of a variety is to see it in as many different settings and even years as possible. It is good to use industry information sites promoting certain varieties, but make sure you balance this information off against the MPGA sponsored variety plots scattered around the province. Planning to visit these sites in late August or early September may well be the best time you invest in your farm operation next year. ■

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PEAS

Variety	Long Term ¹ Average Yield % of Carneval		2003 Data Only Yield by Test Location – % of Carneval ²				Resistance to ³		Maturity ⁴ Rating	Vine ⁵ Length	Seed ⁶ Size
			Arborg	Boissevain	Dauphin	Hamiota	Powdery	Bleaching			
	Mildew										
Yellow											
Carneval	100	(78)	100	100	100	100	F	n/a	E	M	M
CDC Bronco	126	(5)	143	135	124	117	VG	n/a	M	M	M
CDC Golden	155	(5)	163	200	144	152	VG	n/a	M	M	M
CDC Minuet	114	(19)	144	182	139	130	VG	n/a	M	M	S
Cutlass	136	(6)	160	191	141	136	VG	n/a	M	M	M
DS Stalworth	109	(15)	134	185	140	129	VG	n/a	M	M	M
SW BELFIELD	119	(13)	126	208	123	141	P	n/a	E	M	M
SW CAPRI	118	(14)	147	194	127	138	P	n/a	E	M	M
SW CIRCUS	120	(12)	131	183	128	133	P	n/a	E	M	M
SW PRIZE	112	(12)	151	148	107	126	P	n/a	E	M	M
SW SALUTE	117	(15)	160	189	146	145	P	n/a	M	M	M
Topeka	112	(17)	126	201	140	138	VG	n/a	M	S	M
Green											
CDC Striker	118	(5)	131	168	106	115	P	G	M	M	M
Nessie	131	(5)	141	189	122	116	P	n/a	E	M	L
Stratus	115	(16)	147	187	146	133	VG	n/a	M	S	L
Yield of Carneval (bu/ac)	61		35	40	63	46					
C.V.%			7.00	9.41	6.15	5.09					
LSD			16.6	28.0	13.4	11.1					

¹ Long Term Average Yield is the best indicator of variety performance.

The more site years (numbers in brackets) the confident the data.

² Use single year data with caution.

³ Rating P = poor, F = fair, G = good, VG = very good, n/a is not available.

⁴ Rating E = Early, M = Medium maturity.

⁵ Rating S = Short, M = Medium height

⁶ Rating S = Small, M = Medium, L = Large.

Seed size from the same variety can vary greatly from year to year.

FABABEANS

Variety	Long Term Average Yield % of CDC Fatima ¹		2003 Yield Index % of CDC Fatima		Seed Size
			Arborg	Winnipeg	
CDC Blitz	100	(21)*	96	83	Medium
CDC Fatima	100		100	100	Medium
Quattro	100	(5)	101	101	Medium
Compass	95	(4)	108	48	Large
Scirocco	95	(8)	93	39	Large
New lines tested for first time in 2003					
CMB-00	77	(2)	61	100	n/a
MFB-75	118	(2)	92	155	n/a
Terboar	82	(2)	103	52	n/a
UM214	55	(2)	75	24	n/a
Ceb 02926	110	(1)	110	–	n/a
Yield of CDC Fatima (lbs/acre)			2399	1617	
C.V.%			8.67	18.68	
LSD			14	20	

¹ CDC Fatima average yield 3105 lbs/acre (3480 kg/ha) over 21 site years.

* Number in brackets is actual number of site years in direct comparison to CDC Fatima (in Manitoba trials 1989-2003). The more site-years the more dependable the data.

Manitoba Bean Symposium

February 10 & 11, 2003

Southport Aerospace Centre

The agenda will include bean and soybean topics, harvest equipment demonstrations, tradeshow and the 2004 MPGA annual meeting.

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SOYBEANS

Soybean Yield by Location Averaged Over 1, 2 and 3 Years														2003	
Grouping	Variety	Morden			Carman			Morris			Winnipeg			Data Only	
		2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	oil	protein
2400	GAILLARD	94	95	97	97	97	99	85	86	89	88	102	100	22.7	40.6
	OAC Vision	85	86	90	98	96	98	91	79	82	112	104	98	20.5	44.8
	DKB005-51	75	86	-	99	92	-	77	84	-	89	111	-	22.3	41.8
	Gentleman	87	89	95	112	103	109	87	95	95	100	105	105	23.2	39.8
2450	Costaud	89	90	95	93	91	98	86	88	96	99	92	93	21.7	42.0
	Klaxon	85	86	91	101	96	101	95	92	93	108	101	100	22.4	41.3
	Accord	100	101	-	119	109	-	99	97	-	107	120	-	23.3	41.0
	AC Albatros	96	-	62	86	-	-	93	-	-	101	-	-	22.4	41.3
	S00-J4	99	104	-	80	94	-	102	98	-	89	108	-	21.9	42.3
	OAC Prudence	100	100	100	100	100	100	100	100	100	100	100	100	21.7	41.4
2500	90A07	104	108	110	111	108	113	103	97	102	98	101	107	21.8	42.6
	AC Orford	103	106	102	123	107	111	94	97	100	112	125	117	21.8	41.6
	AC Proteina	89	92	92	116	101	107	83	85	92	101	87	88	18.4	46.3
	25-02R	100	-	-	112	-	-	89	-	-	109	-	-	22.6	39.9
2550	PRO 255	110	100	104	112	110	117	97	-	68	114	113	106	20.0	42.7
	Emerson	97	105	108	124	111	114	99	95	103	124	95	99	22.3	39.9
	Supra	106	90	-	117	96	-	106	-	-	117	88	-	21.2	40.8
	S00-A6	82	79	87	126	100	106	84	83	85	115	78	88	21.8	41.4
2600	Quincy	110	-	-	115	-	-	104	-	-	118	-	-	22.9	40.3
	Albinos	101	95	102	118	99	102	98	-	63	108	94	94	22.3	42.6
	DKB00-99	95	98	-	110	105	-	101	90	-	121	106	-	23.5	38.5
	PRO 25-53	92	100	-	100	94	-	89	94	-	103	105	-	21.4	40.8
	OAC Erin	105	111	-	146	125	-	114	110	-	133	90	-	21.9	40.2
	OAC Atwood	90	93	100	140	121	123	99	100	105	114	103	102	24.0	37.1
	90B11	89	93	100	124	109	114	105	94	95	118	84	87	21.3	39.9
	Carlton	105	107	108	129	101	107	93	87	92	106	98	96	21.4	39.9
	RR Regency	97	-	-	123	-	-	97	-	-	107	-	-	20.9	41.8
	2650	Korada	95	91	99	106	89	104	98	83	92	125	107	106	22.0
Primo RR		95	88	-	118	95	-	90	70	-	101	61	-	20.7	43.7
PS 36		93	95	98	129	116	120	89	91	92	122	125	115	21.7	42.0
Varieties that are registered in the United States or being tested/proposed for registration in Canada															
2400	Jutro	69	77	-	68	73	-	75	77	-	88	100	-	21.1	42.4
	OTROO-15	90	98	-	105	102	-	86	93	-	98	115	-	22.2	42.9
	PR333110RR	88	-	-	111	-	-	86	-	-	97	-	-	22.6	40.6
2450	CS 1301	75	-	-	87	-	-	83	-	-	90	-	-	22.1	42.1
	S00-Z1	107	110	108	123	115	119	97	99	105	116	109	110	21.5	41.7
	PR33121RR	81	-	-	85	-	-	92	-	-	95	-	-	21.9	41.5
	PR33106RR	97	-	-	97	-	-	83	-	-	106	-	-	21.9	40.6
	Giessen	95	-	-	92	-	-	92	-	-	101	-	-	19.7	43.0
	PR33353RR	89	-	-	107	-	-	92	-	-	103	-	-	23.3	40.0
	PR31805RR	95	-	-	112	-	-	104	-	-	112	-	-	21.0	42.5
	2500	Jim	99	94	100	109	114	119	102	102	106	120	108	110	21.0
Polar		94	-	-	124	-	-	95	-	-	103	-	-	22.0	41.9
OT01-04		104	-	-	118	-	-	95	-	-	115	-	-	22.7	40.5
PR33119RR		92	-	-	110	-	-	96	-	-	99	-	-	21.1	43.1
SeCan 02-05		99	-	-	122	-	-	105	-	-	109	-	-	19.9	45.1
NS 0027RR		96	-	-	123	-	-	104	-	-	110	-	-	21.9	42.2
Dolly		93	94	96	110	98	102	93	85	84	102	100	97	21.7	42.2
PR33122RR		118	-	-	129	-	-	97	-	-	108	-	-	21.7	42.7
SeCan 02-09		110	-	-	127	-	-	103	-	-	112	-	-	21.2	41.1
SeCan 02-08		112	-	-	125	-	-	110	-	-	129	-	-	21.7	41.4
2550	T2006	108	-	-	134	-	-	107	-	-	112	-	-	22.7	40.0
	HX 273	98	-	-	120	-	-	103	-	-	105	-	-	21.4	43.0
	CS 1302	90	-	-	101	-	-	94	-	-	105	-	-	22.4	41.4
	SeCan 01-02	108	-	-	131	-	-	117	-	-	130	-	-	21.4	40.7
	X3008R (CL613850)	101	-	-	105	-	-	91	-	-	115	-	-	22.5	40.3
	AM0002A0	90	-	-	110	-	-	97	-	-	117	-	-	22.4	39.6
	T0101	97	-	-	117	-	-	102	-	-	111	-	-	21.3	41.4
	Kievskaya 98	87	-	-	107	-	-	84	-	-	90	-	-	19.5	43.7
	T2004	110	110	-	138	-	-	101	91	-	132	-	-	21.3	41.9
	PR33407RR	89	-	-	113	-	-	91	-	-	108	-	-	21.7	41.5
	Chernataka	83	82	-	115	105	-	86	-	-	108	116	-	21.0	42.3
2600	ATG9026335	101	-	-	135	-	-	105	-	-	115	-	-	21.5	41.8
	SeCan 01-09	111	-	-	128	-	-	106	-	-	125	-	-	23.4	38.0
	SL-0201RR	88	-	-	98	-	-	95	-	-	98	-	-	21.4	39.3
	SXP 326RR	97	-	-	119	-	-	97	-	-	120	-	-	21.9	40.3
2650	NS0018RR	85	-	-	116	-	-	93	-	-	115	-	-	20.8	42.3
	NS0107RR	100	-	-	136	-	-	101	-	-	123	-	-	21.8	41.4
	NS0108RR	93	-	-	141	-	-	102	-	-	117	-	-	22.2	39.7
	PH0302	100	-	-	129	-	-	99	-	-	124	-	-	21.8	39.6
	SL-0202RR	81	-	-	96	-	-	91	-	-	107	-	-	20.7	42.5
CHECK	OAC Prudence bu/acre	85	71	62	34	46	49	52	56	53	47	39	45	Oil and Protein average of all varieties 21.7 41.4	

LENTILS

Market Class ¹	Variety	Long Term ² Manitoba Yield % CDC Milestone	Yield by Test Location ³ % of CDC Milestone			Maturity ⁴ Rating	Resistance to ⁵		Cotyledon ⁶ Colour
			Boissevain	Hamiota	Roblin		Ascochyta		
							Blight	Anthracnose	
Small Red	Crimson	92 (10)	110	76	79	Early	VP	VP	Red
	CDC Blaze	94 (10)	92	89	71	Early	G	P	Red
	CDC Redcap	104 (10)	108	103	50	Early	G	F	Red
	CDC Redwing	84 (7)	–	–	–	Early	G	VP	Red
	CDC Robin	111 (12)	101	80	48	Early	G	G	Red
Small Green	Eston	108 (12)	88	92	91	Early	VP	VP	Yellow
	CDC Milestone	100 (12)	100	100	100	Early	G	VP	Yellow
French Green	CDC LeMay	102 (9)	84	91	78	Early	F	VP	Yellow
	Common	106 (9)	105	89	93	Early	VP	P	Yellow
Medium green	CDC Richlea	119 (12)	76	98	101	Medium	VP	VP	Yellow
	CDC Vantage	108 (12)	73	95	107	Medium	G	VP	Yellow
Large green	Laird	100 (12)	70	84	85	Very Late	VP	VP	Yellow
	CDC Glamis	105 (12)	78	86	74	Very Late	G	VP	Yellow
	CDC Grandora	93 (12)	62	79	87	Very Late	G	VP	Yellow
	CDC Sovereign	105 (12)	76	85	72	Late	G	P	Yellow
	CDC Sedley	105 (10)	89	91	84	Medium	F	VP	Yellow
	CDC Plato	120 (9)	69	104	100	Medium Late	G	P	Yellow
Varieties that are being tested or proposed for registration									
	1254s-1	99 (3)	118	87	95	Early	G	G	Red
	1125-1-5	82 (3)	90	76	80	Early	G	G	Yellow
	1066-E-4	113 (5)	101	93	78	Early	G	G	Yellow
	1048-8R	117 (5)	101	93	83	Early	G	P	Yellow
	1038-L-18	162 (2)	–	–	–	Medium	G	P	Yellow
	1156-2-17	137 (2)	–	–	–	Medium	G	F	Yellow
	CDC Milestone (lb/ac)		2051	2639	1265				
	C.V.%		12.40	12.68	15.49				
	LSD		18.3	18.8	21.2				

¹ Market Class refers to how lentils are sold in the marketplace – seed size and cotyledon colour.

² Trials conducted from 1998-2003.

³ Single year data, use with precaution.

⁴ Under *Saskatchewan* conditions.

⁵ Ratings determined *under Saskatchewan conditions*.

⁶ Colour when seed cut in half.

NATTO SOYBEANS

Heat Unit Rating	Variety	Days to Maturity ¹	2003 Yield % OAC Prudence ¹	2003 Yield by Test Location % of OAC Prudence							Hilum Colour ²	Lodging ³	
				Morden	Carman	Morris	Winnipeg	Arborg	Portage	Beausejour			
2450	OAC Prudence*	115	100 (7)	100	100	100	100	100	100	100	100	Yellow	2
2600	AC Colibri	126	97 (4)	91	100	91	109	–	–	–	–	Yellow	2
Lines that are being tested/proposed for registration in Canada													
2400	OT03-10	108	81 (7)	86	85	86	100	48	79	69	69	Yellow	2
2400	OT03-11	109	84 (7)	78	90	78	103	73	82	80	80	Yellow	2
2400	OT03-12	110	82 (7)	79	86	79	96	64	87	76	76	Yellow	2
2600	Ternat	128	78 (6)	73	84	73	102	79	66	–	–	Brown	5
	OAC Prudence (bu/acre)			53	46	53	40	29	63	38	38		
	C.V.%			6.90	6.80	7.41	9.47	9.71	8.51	6.70	6.70		
	LSD (bu/acre)			9.9	11.2	11.6	17.2	14	13	10	10		

* 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 general soybeans.

¹ Heat Unit rating and Days to Maturity are two ways to determine the suitability of a variety to your area. In general, the higher the Heat Unit rating or the more Days to Maturity a variety has the further south the variety should be grown.

² Hilum colour has no agronomic importance – it is solely a marketing issue. The hilum is the point on the soybean seed where it was once attached to the pod.

³ Lodging is a rating of how well a variety is standing at harvest; 1 = standing upright, 5 = flat on ground. A rating of 3 or greater can promote white mould in crop canopy.

2003 Fieldbean Screening Trials

PINTO BEANS – 2003 WIDE ROW SCREENING TRIALS

CARMAN		Seeded May 26																	
ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
AC Pintoba	50	91	62	7.7	2.3	72	309	2.0	3285										
CDC Minto	48	94	63	6.3	2.0	72	417	1.0	2653										
GTS900	51	96	57	7.3	2.7	62	328	2.0	2856										
Topaz	48	85	42	6.0	2.0	78	354	1.0	2683										
02YT145	52	91	53	7.3	2.0	70	335	1.0	3205										
EX08520645	53	99	60	8.0	3.0	57	363	2.0	3036										
Rally	53	94	57	8.0	2.3	70	348	1.7	2868										
SC11745-3	44	86	48	5.7	3.0	73	353	1.7	2541										
							mean		2891										3033
							C.V.%		7.0										8.4
							LSD		294										370

PORTAGE		Seeded May 23																	
ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
AC Pintoba	57	91	44	5.7	2.7	n/a	295	1.7	2971										
CDC Minto	52	88	62	4.3	2.2	n/a	424	1.3	2980										
GTS900	58	90	58	6.3	2.1	n/a	302	1.7	3115										
Topaz	52	86	63	3.7	1.7	n/a	349	1.0	3005										
02YT145	56	92	56	4.0	1.4	n/a	306	1.3	3039										
EX08520645	60	93	58	4.7	3.6	n/a	335	1.3	2939										
Rally	56	90	50	5.7	2.6	n/a	314	1.3	3182										
							mean		3033										3033
							C.V.%		8.4										8.4
							LSD		370										370

MORDEN		Seeded May 27																	
ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
AC Pintoba	50	96	75	6.3	2.0	75	350	2.0	2948										
CDC Minto	44	97	77	5.7	2.0	78	451	2.0	2297										
GTS900	53	96	73	6.0	2.0	77	337	2.0	2866										
Topaz	46	84	55	5.3	2.0	70	378	2.0	2465										
02YT145	51	94	75	5.7	1.7	78	364	1.0	2988										
EX08520645	53	98	57	5.0	2.3	70	376	2.0	2901										
Rally	52	96	73	6.7	2.3	75	341	2.0	3009										
							mean		2782										3092
							C.V.%		6.5										8.2
							LSD		259										365

WINKLER		Seeded May 22																	
ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
AC Pintoba	47	101	85	7.7	2.7	67	363	2.0	3274										
CDC Minto	46	104	85	7.0	2.0	70	447	1.0	2552										
GTS900	51	101	73	7.0	2.7	68	356	1.0	3488										
Topaz	45	90	65	6.7	2.3	67	394	1.7	2562										
02YT145	48	95	85	7.3	2.7	70	378	1.0	3472										
EX08520645	50	102	75	7.3	3.0	60	391	2.0	3440										
Rally	51	101	65	8.0	2.3	75	387	1.7	3375										
SC11745-3	44	89	52	4.3	2.3	77	357	1.0	2573										
							mean		3092										3092
							C.V.%		8.2										8.2
							LSD		365										365

LARGE NON-PINTO BEANS – 2003 WIDE ROW SCREENING TRIAL

CARMAN Seeded May 26

ENTRY	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
LRK Foxfire	44	38	1.0	1.0	78	463	1.0	2522
EX08590462	43	42	1.3	1.3	83	578	1.0	2520
DRK ROG 802	48	48	1.3	1.0	87	438	1.3	2025
Redhawk	44	43	1.3	1.7	72	424	1.0	1462
Cabernet	47	47	1.3	1.0	80	456	1.0	1800
WK GTS 401	45	100	1.3	1.3	85	378	1.7	2691
WK 380	44	88	1.0	1.0	85	451	3.0	951
GNB Beryl	48	43	6.3	2.7	65	276	2.3	2619
AC Polaris	49	52	5.0	1.3	85	322	1.0	2582
Alert	50	62	4.7	1.7	80	342	1.3	2844
Matterhorn	49	90	4.3	1.0	85	316	1.0	2923
Cran Cran 09	49	87	4.5	1.7	2.3	451	2.7	2384
ROG 912	44	92	4.2	1.7	1.0	472	2.0	2396
Hooter	45	100	4.8	1.7	2.0	563	2.0	2868

mean 2328
C.V.% 10.0
LSD 339

PORTAGE Seeded May 23

ENTRY	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (>5cm)	Pod Ht (g)	1000K Seed (1-5)	Quality (lb/acre)	Yield
LRK Foxfire	47	86	5.3	1.0	1.1	86	421	1.0
EX08590462	47	88	5.4	1.0	1.1	88	517	1.3
DRK ROG 802	52	87	5.4	1.3	1.2	87	413	1.3
Redhawk	49	89	5.3	1.0	1.2	89	399	2.0
Cabernet	50	90	5.3	1.0	1.6	90	422	1.0
WK GTS 401	50	92	5.4	1.0	1.1	92	323	2.7
WK 380	47	89	4.6	1.0	1.1	89	445	3.0
GNB Beryl	52	85	6.2	1.7	2.6	85	247	1.0
AC Polaris	55	88	6.2	4.3	1.6	88	278	1.0
Alert	53	87	6.4	3.7	2.5	87	294	1.3
Matterhorn	57	89	5.6	4.0	1.4	89	289	1.3
Cran Cran 09	52	87	5.0	1.0	2.4	87	419	2.0
ROG 912	47	93	5.5	1.3	1.6	93	416	2.0
Hooter	47	95	5.2	1.0	1.0	95	481	2.0

mean 2501
C.V.% 10.6
LSD 370

MORDEN Seeded May 27

ENTRY	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
LRK Foxfire	43	86	4.2	1.0	1.0	77	457	1.0
EX08590462	43	98	4.2	1.0	1.0	87	526	1.0
DRK ROG 802	45	97	4.2	1.0	1.0	82	444	2.0
Redhawk	43	98	3.8	1.0	1.0	77	448	2.3
Cabernet	43	96	4.3	1.0	1.0	75	429	2.7
WK GTS 401	43	99	4.7	1.0	1.0	83	382	3.0
WK 380	43	n/a	3.2	1.0	n/a	n/a	n/a	n/a
GNB Beryl	47	96	4.5	4.7	2.0	77	274	2.0
AC Polaris	49	97	6.2	4.3	2.0	87	292	2.0
Alert	48	96	6.7	4.3	1.7	83	322	2.3
Matterhorn	50	95	5.7	4.0	1.3	87	320	2.0
Cran Cran 09	47	92	4.8	2.0	1.0	83	427	3.0
ROG 912	43	98	4.0	1.3	1.0	78	441	2.3
Hooter	43	100	4.3	1.0	1.0	87	497	2.3

mean 2036
C.V.% 12.5
LSD 384

WINKLER Seeded May 22

ENTRY	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
LRK Foxfire	46	95	4.2	1.0	1.0	77	507	1.0
EX08590462	46	105	4.8	1.7	1.3	78	610	1.0
DRK ROG 802	50	103	4.7	1.0	1.0	82	475	1.0
Redhawk	47	102	4.8	1.0	1.0	78	459	1.3
Cabernet	47	104	4.7	1.0	1.7	77	494	1.0
WK GTS 401	47	105	4.5	1.3	1.3	78	315	1.7
WK 380	45	n/a	3.8	1.0	1.0	n/a	447	3.0
GNB Beryl	47	103	8.0	7.7	3.0	68	293	1.7
AC Polaris	49	98	8.3	5.7	2.3	77	330	1.3
Alert	48	100	8.0	4.3	2.0	82	371	1.3
Matterhorn	50	101	7.5	4.7	1.7	80	330	1.3
Cran Cran 09	47	101	4.7	1.3	2.3	75	469	3.0
ROG 912	46	104	4.5	2.0	2.0	78	506	2.0
Hooter	47	105	4.5	1.3	1.0	80	444	1.3

mean 2515
C.V.% 8.0
LSD 286

NAVY BEANS – 2003 WIDE ROW SCREENING TRIALS

CARMAN Seeded May 26

ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
Envo	49	88	42	1.3	1.7	78	170	1.0	1781
AC Cruiser	50	94	45	4.0	1.0	87	194	1.3	2487
AC Mast	49	92	45	4.3	1.7	82	184	1.7	2370
Cargo	49	89	40	1.3	1.0	83	173	1.3	1667
CDC Whitecap	51	91	55	6.0	1.3	90	192	2.0	2536
Cirrus	50	90	47	4.7	1.3	78	182	1.3	2587
ENSIGN	51	94	48	2.0	1.7	75	195	1.7	2632
Morden 003	48	87	40	1.0	1.0	82	175	1.0	2547
Navigator	54	96	52	2.3	1.0	87	181	2.7	2446
Regent	51	91	50	4.3	1.0	85	158	2.3	2643
GTS 531	49	97	52	5.3	1.3	78	189	1.3	2779
HR100	49	92	45	2.3	1.0	88	168	2.3	2522
ROG 361	49	95	57	3.7	1.0	83	178	2.3	2271
T2001	51	91	42	1.7	1.0	80	176	1.0	1393
T2003	49	91	47	4.7	1.0	82	180	1.7	2905
T9601	50	90	45	2.7	1.7	83	184	1.0	3025
T9808	51	91	48	3.0	1.0	85	178	2.0	2110
T9903	50	90	52	4.7	1.0	87	193	1.0	2878
									mean 2421
									C.V.% 8.4
									LSD 283

MORDEN Seeded May 27

ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
Envo	47	94	45	1.3	1.0	90	167	1.0	2114
AC Cruiser	47	94	48	3.7	1.0	90	176	1.3	2550
AC Mast	47	96	50	3.7	1.0	85	178	2.3	2457
Cargo	47	92	38	1.7	1.0	85	157	1.0	1639
CDC Whitecap	47	96	52	3.7	1.0	88	189	2.3	2602
Cirrus	47	92	48	4.0	1.0	88	178	2.3	2201
ENSIGN	53	92	48	2.3	1.0	87	167	2.0	2280
Morden 003	45	85	38	1.0	1.0	88	169	1.7	2215
Navigator	53	96	47	2.3	1.0	92	163	2.0	2388
Regent	51	91	48	4.0	1.0	93	143	2.0	2428
GTS 531	47	96	52	3.7	1.0	87	169	2.3	2377
HR100	47	91	45	2.0	1.0	90	167	1.0	2475
ROG 361	48	94	48	3.3	1.0	88	169	1.7	1987
T2001	45	89	45	2.3	1.0	87	174	1.0	2179
T2003	47	96	52	4.0	1.0	88	171	1.3	2804
T9601	47	89	45	2.0	1.0	93	178	1.3	2463
T9808	49	90	45	3.0	1.0	88	182	2.3	2132
T9903	49	94	48	4.0	1.0	87	200	1.7	2493
									mean 2321
									C.V.% 8.0
									LSD 261

PORTAGE Seeded May 23

ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
Envo	52	86	46	1.7	2.6	n/a	169	1.0	3218
AC Cruiser	54	91	64	3.7	2.1	n/a	168	2.0	3204
AC Mast	53	89	59	3.7	2.3	n/a	170	1.3	3310
Cargo	52	86	48	1.3	2.1	n/a	165	1.0	3415
CDC Whitecap	56	91	61	4.3	2.4	n/a	182	2.3	3113
Cirrus	54	88	59	4.0	1.4	n/a	171	1.3	3204
ENSIGN	59	89	65	3.0	1.9	n/a	174	2.0	3549
Morden 003	53	87	52	1.0	1.2	n/a	172	1.7	2566
Navigator	60	91	64	3.3	1.0	n/a	154	2.3	2924
Regent	59	88	56	3.7	1.4	n/a	134	2.0	3303
GTS 531	54	89	56	4.0	2.7	n/a	157	1.3	3225
HR100	54	89	58	2.7	1.4	n/a	146	1.0	3303
ROG 361	56	91	60	3.3	1.1	n/a	163	2.0	2977
T2001	52	88	51	1.7	1.9	n/a	181	1.0	3045
T2003	53	89	59	3.7	1.4	n/a	161	1.3	3508
T9601	52	87	56	2.3	1.9	n/a	176	1.0	3250
T9808	59	89	57	3.7	1.9	n/a	171	2.7	2824
T9903	55	90	60	3.7	1.0	n/a	181	1.0	3308
									mean 3180
									C.V.% 12.0
									LSD 526

WINKLER Seeded May 22

ENTRY	Days to Flower	Days to Maturity	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)
Envo	48	97	43	1.3	2.0	83	185	1.0	2036
AC Cruiser	49	105	63	4.3	1.3	85	198	1.0	3372
AC Mast	47	104	53	4.7	2.0	77	201	1.3	3257
Cargo	48	99	40	1.3	2.0	77	182	1.0	1600
CDC Whitecap	52	103	70	5.7	1.3	83	201	2.0	2889
Cirrus	48	99	57	5.3	2.0	70	182	1.7	2789
ENSIGN	56	101	63	4.3	2.0	80	206	1.3	2995
Morden 003	48	98	43	1.0	1.7	85	180	1.0	2624
Navigator	54	104	60	2.3	1.0	87	193	2.0	2906
Regent	55	101	67	5.7	2.3	78	175	2.0	2954
GTS 531	49	105	50	4.3	2.0	73	192	1.7	2735
HR100	48	101	62	2.7	1.7	87	181	1.3	3232
ROG 361	51	101	63	4.0	1.0	83	186	1.3	2740
T2001	48	97	43	1.3	2.3	82	179	1.0	2468
T2003	48	103	73	4.7	2.0	78	184	1.3	3090
T9601	50	102	48	2.7	2.0	78	184	1.3	3042
T9808	51	97	62	3.0	1.7	85	182	1.7	2230
T9903	51	101	75	4.7	1.7	82	210	1.3	3133
									mean 2783
									C.V.% 9.0
									LSD 342

SMALL NON-NAVY BEANS – 2003 WIDE ROW SCREENING TRIAL

CARMAN		Seeded May 26																					
ENTRY	Viva	Early Rose	95-34-6PK	GTS 1302	ROG312	AC Earlired	AC Scarlet	Cajun	CDC 180-5F	AC Harblack	AC Black Diamond	Black Violet	CDC Jet	SVR 08520643	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht. (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
															49	42	6.3	2.7	65	236	2.0	2258	
PINK															49	42	6.3	2.7	65	236	2.0	2258	
															85	38	2.7	2.0	72	311	1.0	2219	
															95	72	6.0	3.0	62	315	2.0	2320	
															52	55	6.3	3.3	58	263	2.0	1703	
															50	45	5.0	3.3	57	310	1.0	2608	
RED															48	43	2.0	2.3	68	312	1.0	2177	
															50	47	3.3	2.0	80	343	1.3	2510	
															90	55	4.3	1.0	87	234	1.7	1948	
FDM															51	63	6.3	3.0	70	359	2.0	2241	
BLACK															54	47	1.7	1.0	92	175	1.0	2736	
															87	52	2.0	1.0	77	269	1.0	2537	
															97	48	1.0	1.0	95	193	1.3	2457	
															55	45	1.3	1.0	92	194	1.3	2242	
															54	50	1.0	1.0	95	201	1.0	2611	
																					mean	2326	
																						C.V.%	11.0
																						LSD	338

PORTAGE		Seeded May 23																					
ENTRY	Viva	Early Rose	95-34-6PK	GTS 1302	ROG312	AC Earlired	AC Scarlet	Cajun	CDC 180-5F	AC Harblack	AC Black Diamond	Black Violet	CDC Jet	SVR 08520643	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht. (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
															51	52	6.0	1.4	n/a	234	1.7	2742	
PINK															51 <td>52 <td>6.0 <td>1.4 <td>n/a <td>234 <td>1.7 <td>2742</td> </td></td></td></td></td></td>	52 <td>6.0 <td>1.4 <td>n/a <td>234 <td>1.7 <td>2742</td> </td></td></td></td></td>	6.0 <td>1.4 <td>n/a <td>234 <td>1.7 <td>2742</td> </td></td></td></td>	1.4 <td>n/a <td>234 <td>1.7 <td>2742</td> </td></td></td>	n/a <td>234 <td>1.7 <td>2742</td> </td></td>	234 <td>1.7 <td>2742</td> </td>	1.7 <td>2742</td>	2742	
															54 <td>54 <td>2.7</td> <td>2.1 <td>n/a <td>272</td> <td>1.0</td> <td>3017</td> </td></td></td>	54 <td>2.7</td> <td>2.1 <td>n/a <td>272</td> <td>1.0</td> <td>3017</td> </td></td>	2.7	2.1 <td>n/a <td>272</td> <td>1.0</td> <td>3017</td> </td>	n/a <td>272</td> <td>1.0</td> <td>3017</td>	272	1.0	3017	
															57 <td>60 <td>7.0</td> <td>3.6 <td>n/a <td>292</td> <td>1.7</td> <td>3159</td> </td></td></td>	60 <td>7.0</td> <td>3.6 <td>n/a <td>292</td> <td>1.7</td> <td>3159</td> </td></td>	7.0	3.6 <td>n/a <td>292</td> <td>1.7</td> <td>3159</td> </td>	n/a <td>292</td> <td>1.7</td> <td>3159</td>	292	1.7	3159	
															57 <td>58 <td>5.0</td> <td>3.4 <td>n/a <td>249</td> <td>1.7</td> <td>2715</td> </td></td></td>	58 <td>5.0</td> <td>3.4 <td>n/a <td>249</td> <td>1.7</td> <td>2715</td> </td></td>	5.0	3.4 <td>n/a <td>249</td> <td>1.7</td> <td>2715</td> </td>	n/a <td>249</td> <td>1.7</td> <td>2715</td>	249	1.7	2715	
															53 <td>58 <td>6.0</td> <td>7.3 <td>n/a <td>286</td> <td>1.0</td> <td>3193</td> </td></td></td>	58 <td>6.0</td> <td>7.3 <td>n/a <td>286</td> <td>1.0</td> <td>3193</td> </td></td>	6.0	7.3 <td>n/a <td>286</td> <td>1.0</td> <td>3193</td> </td>	n/a <td>286</td> <td>1.0</td> <td>3193</td>	286	1.0	3193	
RED															52 <td>47</td> <td>2.3</td> <td>2.7 <td>n/a <td>284</td> <td>1.3</td> <td>2454</td> </td></td>	47	2.3	2.7 <td>n/a <td>284</td> <td>1.3</td> <td>2454</td> </td>	n/a <td>284</td> <td>1.3</td> <td>2454</td>	284	1.3	2454	
															55 <td>58 <td>4.0</td> <td>2.4 <td>n/a <td>319</td> <td>1.0</td> <td>2808</td> </td></td></td>	58 <td>4.0</td> <td>2.4 <td>n/a <td>319</td> <td>1.0</td> <td>2808</td> </td></td>	4.0	2.4 <td>n/a <td>319</td> <td>1.0</td> <td>2808</td> </td>	n/a <td>319</td> <td>1.0</td> <td>2808</td>	319	1.0	2808	
															54 <td>60 <td>5.3</td> <td>1.4 <td>n/a <td>226</td> <td>1.7</td> <td>2430</td> </td></td></td>	60 <td>5.3</td> <td>1.4 <td>n/a <td>226</td> <td>1.7</td> <td>2430</td> </td></td>	5.3	1.4 <td>n/a <td>226</td> <td>1.7</td> <td>2430</td> </td>	n/a <td>226</td> <td>1.7</td> <td>2430</td>	226	1.7	2430	
FDM															52 <td>58 <td>7.7</td> <td>2.6 <td>n/a <td>338</td> <td>2.0</td> <td>2798</td> </td></td></td>	58 <td>7.7</td> <td>2.6 <td>n/a <td>338</td> <td>2.0</td> <td>2798</td> </td></td>	7.7	2.6 <td>n/a <td>338</td> <td>2.0</td> <td>2798</td> </td>	n/a <td>338</td> <td>2.0</td> <td>2798</td>	338	2.0	2798	
BLACK															59	57	2.3	1.4 <td>n/a <td>156</td> <td>1.0</td> <td>3287</td> </td>	n/a <td>156</td> <td>1.0</td> <td>3287</td>	156	1.0	3287	
															53 <td>56</td> <td>2.0</td> <td>1.2 <td>n/a <td>239</td> <td>1.0</td> <td>2883</td> </td></td>	56	2.0	1.2 <td>n/a <td>239</td> <td>1.0</td> <td>2883</td> </td>	n/a <td>239</td> <td>1.0</td> <td>2883</td>	239	1.0	2883	
															95	58	2.0	1.0 <td>n/a <td>149</td> <td>1.0</td> <td>3132</td> </td>	n/a <td>149</td> <td>1.0</td> <td>3132</td>	149	1.0	3132	
															56 <td>63</td> <td>2.0</td> <td>1.0 <td>n/a <td>174</td> <td>1.7</td> <td>2724</td> </td></td>	63	2.0	1.0 <td>n/a <td>174</td> <td>1.7</td> <td>2724</td> </td>	n/a <td>174</td> <td>1.7</td> <td>2724</td>	174	1.7	2724	
															60	64	2.0	1.0 <td>n/a <td>180</td> <td>1.7</td> <td>3038</td> </td>	n/a <td>180</td> <td>1.7</td> <td>3038</td>	180	1.7	3038	
																					mean	2884	
																						C.V.%	10.0
																						LSD	401

MORDEN		Seeded May 27																					
ENTRY	Viva	Early Rose	95-34-6PK	GTS 1302	ROG312	AC Earlired	AC Scarlet	Cajun	CDC 180-5F	AC Harblack	AC Black Diamond	Black Violet	CDC Jet	SVR 08520643	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht. (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
															46	47	5.3	2.0	77	236	2.0	2285	
PINK															46 <td>47 <td>5.3 <td>2.0 <td>77 <td>236 <td>2.0 <td>2285</td> </td></td></td></td></td></td>	47 <td>5.3 <td>2.0 <td>77 <td>236 <td>2.0 <td>2285</td> </td></td></td></td></td>	5.3 <td>2.0 <td>77 <td>236 <td>2.0 <td>2285</td> </td></td></td></td>	2.0 <td>77 <td>236 <td>2.0 <td>2285</td> </td></td></td>	77 <td>236 <td>2.0 <td>2285</td> </td></td>	236 <td>2.0 <td>2285</td> </td>	2.0 <td>2285</td>	2285	
															84 <td>38</td> <td>1.3</td> <td>1.0</td> <td>70</td> <td>282</td> <td>1.7</td> <td>1549</td>	38	1.3	1.0	70	282	1.7	1549	
															91 <td>48</td> <td>5.7</td> <td>2.7</td> <td>72</td> <td>324</td> <td>1.3</td> <td>2505</td>	48	5.7	2.7	72	324	1.3	2505	
															94 <td>53</td> <td>3.7</td> <td>2.3</td> <td>78</td> <td>262</td> <td>2.0</td> <td>2068</td>	53	3.7	2.3	78	262	2.0	2068	
															48 <td>53</td> <td>4.3</td> <td>2.7</td> <td>75</td> <td>293</td> <td>1.3</td> <td>1968</td>	53	4.3	2.7	75	293	1.3	1968	
RED															45 <td>40</td> <td>1.0</td> <td>1.0</td> <td>70</td> <td>317</td> <td>1.7</td> <td>1744</td>	40	1.0	1.0	70	317	1.7	1744	
															94 <td>47</td> <td>3.7</td> <td>2.0</td> <td>80</td> <td>312</td> <td>1.7</td> <td>2148</td>	47	3.7	2.0	80	312	1.7	2148	
															90 <td>43</td> <td>3.7</td> <td>1.0</td> <td>90</td> <td>221</td> <td>2.7</td> <td>2063</td>	43	3.7	1.0	90	221	2.7	2063	
FDM															47 <td>65</td> <td>6.7</td> <td>3.0</td> <td>72</td> <td>367</td> <td>2.0</td> <td>2351</td>	65	6.7	3.0	72	367	2.0	2351	
BLACK															51 <td>43</td> <td>2.0</td> <td>1.0</td> <td>90</td> <td>163</td> <td>1.3</td> <td>2392</td>	43	2.0	1.0	90	163	1.3	2392	
															89 <td>42</td> <td>1.7</td> <td>1.0</td> <td>80</td> <td>246</td> <td>1.0</td> <td>1829</td>	42	1.7	1.0	80	246	1.0	1829	
															95 <td>48</td> <td>1.0</td> <td>1.0</td> <td>92</td> <td>166</td> <td>1.3</td> <td>2485</td>	48	1.0	1.0	92	166	1.3	2485	
															52 <td>45</td> <td>1.7</td> <td>1.0</td> <td>93</td> <td>179</td> <td>1.3</td> <td>1732</td>	45	1.7	1.0	93	179	1.3	1732	
															52 <td>45</td> <td>1.0</td> <td>1.0</td> <td>93</td> <td>175</td> <td>1.7</td> <td>2041</td>	45	1.0	1.0	93	175	1.7	2041	
															96 <td>45</td> <td>1.0</td> <td>1.0</td> <td>93</td> <td>175</td> <td>1.7</td> <td>2041</td>	45	1.0	1.0	93	175	1.7	2041	
																					mean	2083	
																						C.V.%	9.8
																						LSD	284

WINKLER		Seeded May 22																					
ENTRY	Viva	Early Rose	95-34-6PK	GTS 1302	ROG312	AC Earlired	AC Scarlet	Cajun	CDC 180-5F	AC Harblack	AC Black Diamond	Black Violet	CDC Jet	SVR 08520643	Days to Flower	Plant Ht. (cm)	Plant Type (1-9)	Lodging (1-5)	Pod Ht. (>5cm)	1000K Wt (g)	Quality Seed (1-5)	Yield (lb/acre)	
															49	63	7.7	3.7	55	245	2.3	2495	
PINK															49 <td>63 <td>7.7 <td>3.7 <td>55 <td>245 <td>2.3 <td>2495</td> </td></td></td></td></td></td>	63 <td>7.7 <td>3.7 <td>55 <td>245 <td>2.3 <td>2495</td> </td></td></td></td></td>	7.7 <td>3.7 <td>55 <td>245 <td>2.3 <td>2495</td> </td></td></td></td>	3.7 <td>55 <td>245 <td>2.3 <td>2495</td> </td></td></td>	55 <td>245 <td>2.3 <td>2495</td> </td></td>	245 <td>2.3 <td>2495</td> </td>	2.3 <td>2495</td>	2495	
															47 <td>45</td> <td>3.3</td> <td>2.3</td> <td>73</td> <td>319</td> <td>1.3</td> <td>2123</td>	45	3.3	2.3	73	319	1.3	2123	
															50 <td>70</td> <td>8.3</td> <td>4.0</td> <td>47</td> <td>324</td> <td>2.0</td> <td>2375</td>	70	8.3	4.0	47	324	2.0	2375	
															51 <td>80</td> <td>7.0</td> <td>3.7</td> <td>55</td> <td>281</td> <td>1.3</td> <td>3054</td>	80	7.0	3.7	55	281	1.3	3054	
															48 <td>60</td> <td>6.3</td> <td>3.7</td> <td>57</td> <td>301</td> <td>1.7</td> <td>2527</td>	60	6.3	3.7	57	301	1.7	2527	
RED															47 <td>52</td> <td>3.0</td> <td>3.0 <td>67</td> <td>313</td> <td>2.0</td> <td>2351</td> </td>	52	3.0	3.0 <td>67</td> <td>313</td> <td>2.0</td> <td>2351</td>	67	313	2.0	2351	
															49 <td>58</td> <td>5.3</td> <td>3.7 <td>60</td> <td>334</td> <td>1.3</td> <td>2443</td> </td>	58	5.3	3.7 <td>60</td> <td>334</td> <td>1.3</td> <td>2443</td>	60	334	1.3	2443	
															49 <td>55</td> <td>5.7</td> <td>2.0 <td>78</td> <td>248</td> <td>2.0</td> <td>2104</td> </td>	55	5.7	2.0 <td>78</td> <td>248</td> <td>2.0</td> <td>2104</td>	78	248	2.0	2104	
FDM															50 <td>87</td> <td>8.7</td> <td>3.3 <td>55</td> <td>367</td> <td>2.3</td> <td>2276</td> </td>	87	8.7	3.3 <td>55</td> <td>367</td> <td>2.3</td> <td>2276</td>	55	367	2.3	2276	
BLACK															54 <td>57</td> <td>2.0</td> <td>1.7 <td>80</td> <td>173</td> <td>1.3</td> <td>2640</td> </td>	57	2.0	1.7 <td>80</td> <td>173</td> <td>1.3</td> <td>2640</td>	80	173	1.3	2640	
															49 <td>52</td> <td>2.0</td> <td>1.3 <td>85</td> <td>265</td> <td>1.0</td> <td>2498</td> </td>	52	2.0	1.3 <td>85</td> <td>265</td> <td>1.0</td> <td>2498</td>	85	265	1.0	2498	
															53 <td>57</td> <td>1.0</td> <td>1.0 <td>83</td> <td>195</td> <td>1.0</td> <td>3195</td> </td>	57	1.0	1.0 <td>83</td> <td>195</td> <td>1.0</td> <td>3195</td>	83	195	1.0	3195	
															54 <td>58</td> <td>2.3</td> <td>1.0 <td>87</td> <td>188</td> <td>1.0</td> <td>2802</td> </td>	58	2.3	1.0 <td>87</td> <td>188</td> <td>1.0</td> <td>2802</td>	87	188	1.0	2802	
															56 <td>58</td> <td>1.3</td> <td>1.0 <td>83</td> <td>205</td> <td>1.0</td> <td>3155</td> </td>	58	1.3	1.0 <td>83</td> <td>205</td> <td>1.0</td> <td>3155</td>	83	205	1.0	3155	
																					mean	2574	
																						C.V.%	12.0
																						LSD	436

Manitoba Summary for Wide Row Bean

MANITOBA SUMMARY – PINTO

ENTRY	Yield (lb/acre)			Days to Maturity			Plant Type (1-9)			% Pod Ht > 5cm			% Rust		% White Mould	
	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003	2003-2002
AC Pintoba	3120	2830	2941	95	102	103	6.9	7.3	7.2	71	63	65	4	6	6	17
CDC Minto	2620	2536	2470	96	100	101	5.8	6.9	7.2	73	60	60	5	9	5	24
GTS900	3081	2728	2863	96	101	102	6.7	7.1	6.9	67	60	64	5	7	7	23
Topaz	2679	2431	-	86	91	-	5.4	6.7	-	72	61	-	3	5	5	27
O2YT145	3176	-	-	93	-	-	6.1	-	-	73	-	-	0	-	6	-
EX08520645	3079	2907	-	98	102	-	6.3	6.4	-	65	55	-	0	0	4	18
Rally	3109	-	-	95	-	-	7.1	-	-	73	-	1	-	-	3	-
SC111745-3*	2557	-	-	88	-	-	5.0	-	-	76	-	-	0	-	15	-
Average	2928	2686	2758	93	99	102	6	7	7	71	60	63				

* only grown at Winkler and Portage due to shortage of seed

MANITOBA SUMMARY – LARGE NON-PINTO

ENTRY	Yield (lb/acre)			Days to Maturity			Plant Type (1-9)			% Pod Ht > 5cm			% Rust		% White Mould	
	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	200-2001	2003	2003-2002	2003	2003-2002
Light Red Kidney																
Foxfire	2561	2202	2269	89	95	96	1.0	1.2	1.6	89	72	72	0	0	5	15
EX08590462	2535	2396	2418	96	102	103	1.3	1.6	2.0	96	77	76	0	0	1	2
Dark Red Kidney																
ROG 802	2099	1989	2060	95	103	103	1.2	1.7	2.0	95	75	77	0	0	3	7
Redhawk	1351	1363	1559	95	102	103	1.1	1.6	2.0	95	72	74	0	0	1	2
Cabernet	1833	-	-	96	-	-	1.1	-	-	96	-	-	0	-	3	-
White Kidney																
GTS401	2713	-	-	99	-	-	1.2	-	-	99	-	-	0	0	1	4
WK 380	713	1034	-	89	98	-	1.0	1.3	-	89	75	-	0	0	2	3
Great Northern Bean																
Beryl	2648	2519	2539	94	99	100	5.1	6.3	6.7	94	59	57	0	3	10	25
AC Polaris	2612	2513	2630	94	100	100	4.8	5.3	5.8	94	71	70	1	7	8	25
Alert	2919	2725	2813	94	100	100	4.3	4.6	4.9	94	77	78	1	4	9	18
Matterhorn	3131	2889	-	94	99	-	4.3	4.9	-	94	77	-	0	0	10	22
Cranberry																
Cran 09	2299	2235	2487	92	97	99	1.5	1.7	2.1	92	71	71	0	0	5	9
ROG 912	2557	2275	2513	97	104	105	1.6	1.8	2.3	97	72	72	0	0	3	5
Hooter	2858	2526	2663	100	107	110	1.3	1.7	1.1	100	77	51	0	0	4	11
Average	2345	2222	2395	94	101	102	2.2	2.8	3.1	94	73	70				

KEY (applicable to all edible bean charts)

Plant Type – (1-9)	1 = upright / bush type, 9 = vine type	Seed Quality – (1-5)	1 = very good (based on colour/wrinkle free/uniform size), 5 = very poor
Lodging – (1-5)	1 = upright, 5 = flat on the ground (rated at maturity)	% Rust	% of plants displaying rust symptoms
% Pod >5cm	Percent of pods above 5cm from the ground	% Mould	% plants with white mould on plant/pod
1000 K wt	Estimation of seed size, larger the number the larger the bean		

MANITOBA SUMMARY – NAVY

ENTRY	Yield (lb/acre)			Days to Maturity			Plant Type (1-9)			% Pod Ht > 5cm			% Rust		% White Mould	
	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003	2003-2002
Envoy	2287	2156	2202	91	100	101	1.4	1.9	2.2	84	75	76	0	0	7	18
AC Cruiser	2903	2993	3044	96	102	103	3.9	4.0	4.2	87	84	83	0	0	2	8
AC Mast	2849	2760	–	95	103	–	4.1	4.4	–	81	78	–	0	0	2	7
Cargo	2080	2295	2321	92	99	101	1.4	2.1	2.4	82	77	77	0	0	9	15
CDC White Cap	2785	2796	2760	95	101	102	4.9	5.6	5.9	87	81	80	0	0	9	22
Cirrus	2695	2767	2737	92	99	100	4.5	4.9	5.0	79	72	72	0	0	7	17
ENSIGN	2864	2797	2782	94	102	102	2.9	3.6	3.7	81	73	73	0	0	5	17
Morden 003	2488	–	–	89	–	–	1.0	–	–	85	–	–	0	–	6	–
Navigator	2666	2760	2826	97	104	105	2.6	3.2	3.6	89	86	88	0	0	1	4
Regent	2832	2653	2855	93	101	103	4.4	4.6	4.8	85	78	78	0	0	3	14
GTS 531	2779	2763	–	97	104	–	4.3	4.7	–	79	73	–	0	0	3	9
HR100	2883	–	–	93	–	–	2.4	–	–	88	–	–	0	–	5	–
ROG 361	2494	2379	2383	95	101	101	3.6	3.9	4.3	85	78	76	0	1	10	19
T2001	2271	–	–	91	–	–	1.8	–	–	83	–	–	0	–	5	–
T2003	3077	–	–	95	–	–	4.3	–	–	83	–	–	1	–	6	–
T9601	2945	2848	2742	92	99	99	2.4	2.8	2.8	85	76	78	0	2	14	23
T9808	2324	–	–	92	–	–	3.2	–	–	86	–	–	0	–	7	–
T9903	2953	2787	–	94	100	–	4.3	4.7	–	85	80	–	0	–	9	18
Average	2676	2673	2665	94	101	102	3.2	3.9	3.9	84	78	78				

MANITOBA SUMMARY – SMALL NON-NAVY

ENTRY	Yield (lb/acre)			Days to Maturity			Plant Type (1-9)			% Pod Ht > 5cm			% Rust		% White Mould	
	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003	2003-2002
PINK																
Viva	2445	2174	2245	93	68	105	6.3	7.1	7.3	66	55	51	2	7	7	16
Early Rose	2227	–	–	86	–	–	2.5	–	–	72	–	–	2	–	10	–
95-34-6PK	2590	2314	2425	94	67	101	6.8	7.0	7.3	60	49	49	5	8	9	17
GTS1302	2385	2231	–	96	71	–	5.5	6.5	–	64	55	–	4	6	4	11
ROG312	2574	2613	2571	91	65	98	5.4	5.9	6.5	63	51	52	4	5	8	13
RED																
AC Earlired	2181	2316	2398	86	61	93	2.1	3.3	4.7	68	56	58	4	6	9	19
AC Scarlet	2477	2503	2611	93	66	101	4.1	5.0	5.6	73	65	64	1	2	7	15
Cajun	2136	1962	2195	91	66	101	4.8	5.6	6.2	85	67	65	4	5	9	17
BLACK																
AC Harblack	2764	2596	2610	94	68	103	2.0	3.2	3.6	87	80	79	0	0	4	14
AC Black Diamond	2437	2539	2572	92	65	99	1.9	3.1	3.3	81	75	77	0	0	6	8
Black Violet	2817	–	–	98	–	–	1.3	–	–	90	–	–	0	–	2	–
CDC Jet	2375	2177	2348	94	67	101	1.8	2.3	2.6	91	84	85	0	0	3	7
SVR 08520643	2711	2647	–	98	70	–	1.3	2.3	–	90	85	57	0	0	2	13
FLOR DE MAYO																
CDC 180-5F	2417	2229	–	97	70	–	7.4	7.8	–	66	50	–	1	1	5	15
Average	2467	2358	2442	93	67	100	3.8	4.9	5.2	75	64	64				

2003 Narrow Row Bean Screening Trials

YIELD AND SEED SIZE BY INDIVIDUAL SITES

Yield Sorted by Location and Averaged over 1, 2 and 3 Years

Type	Variety	Treherne			Arborg			Boissevain			Thornhill		
		2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2003-2002	2003-2001	2003	2001	2003 & 2001
Navy	CDC Whitecap	1660	2053	2164	1679	2316	2465	2124	2170	2184	1823	2123	1973
Navy	Cirrus	1300	1852	–	1490	2132	–	2848	2688	–	2097	–	–
Navy	AC Cruiser	1676	2243	–	1454	2389	–	3162	2829	–	2049	–	–
Navy	T9601	1652	2216	–	1736	2534	–	1938	2094	–	2165	–	–
Navy	Envoy	1364	1686	1819	1824	2359	2281	2732	2367	2458	1577	1661	1619
Navy	Morden 003	1685	–	–	1693	–	–	2353	–	–	2623	–	–
Black	CDC Espresso	1430	1327	1499	1285	1917	1864	2100	2034	1970	1259	1939	1599
Black	CDC Jet	1490	1748	1883	1800	2659	2580	2581	2370	2263	1939	2245	2092
Black	316-13	1516	–	–	1692	–	–	2539	–	–	1859	–	–
SM Red	AC Redbond	1707	1865	1982	1242	1885	2180	1636	1954	1851	1842	1856	1849
Pinto	CDC Pintium	2289	2021	2023	2071	2489	2493	2670	2590	2486	2501	1978	2239
Pinto	HR99	1530	1794	1898	1425	2095	2296	4040	3435	2930	1949	2051	2000
Pinto	CDC Minto	1775	2055	–	1447	2174	–	3510	3066	–	1895	–	–
Pinto	SC 11745-3	1782	–	–	1753	–	–	2907	–	–	2067	–	–
GNB	CDC Crocus	1272	1613	1830	1196	1934	2100	2534	2493	2383	1935	1858	1897
GNB	AC Polaris	1796	2081	2366	1770	2364	2705	2551	2522	2527	2215	2386	2301
Bayo	610-23	1957	–	–	1681	–	–	2712	–	–	2105	–	–
	Average	1640	1889	1941	1602	2250	2329	2643	2509	2339	1994	2011	1952

Yield is in lb/acre

2003 Seeding Date

May 28th

May 23rd

May 22

June 2nd

PLANT CHARACTERISTICS – AVERAGED ACROSS ALL LOCATIONS

Type	Variety	Days to Maturity			Plant Type (1-9)		% pods > 5 cm		Lodging (1-5)		Seed Quality (1-5)	
		2003	2003-2002	2003-2001	2003	2003-2002	2003	2003-2002	2003	2003-2002	2003	2003-2002
Navy	CDC Whitecap	86	96	97	1.3	1.9	83	43	1.4	1.8	1.1	1.3
Navy	Cirrus	89	94	96	3.5	4.2	81	43	1.7	2.2	2.7	2.3
Navy	AC Cruiser	87	94	–	3.2	3.6	76	40	1.1	1.3	1.2	1.4
Navy	T9601	85	93	–	2.7	3.3	69	36	1.2	1.5	1.3	1.7
Navy	Envoy	89	95	–	2.7	2.9	83	43	2.0	2.3	1.2	1.4
Navy	Morden 003	85	–	–	1.1	–	81	–	1.3	–	1.8	–
Black	CDC Espresso	87	–	–	1.8	–	76	–	1.0	–	2.2	–
Black	CDC Jet	86	92	95	1.0	1.3	72	37	1.1	1.1	2.3	2.2
Black	316-13	87	95	97	1.3	2.3	82	42	1.0	1.5	1.2	1.1
Red	AC Redbond	86	90	93	1.3	2.3	71	37	1.2	1.9	1.1	1.6
Pinto	CDC Pintium	82	86	88	1.0	1.6	81	41	1.1	1.3	1.0	1.8
Pinto	HR99	85	92	94	1.6	2.3	68	35	1.2	1.1	1.0	1.5
Pinto	CDC Minto	86	93	–	5.2	5.9	70	38	1.8	2.6	1.0	1.5
Pinto	SC 11745-3	84	–	–	1.7	–	77	–	1.5	–	1.0	–
GNB	CDC Crocus	87	94	95	4.1	4.7	77	41	2.0	2.6	1.8	2.1
GNB	AC Polaris	85	90	93	4.8	5.6	59	32	1.9	3.1	2.2	2.5
Bayo	610-23	82	–	–	1.1	–	75	–	1.0	–	2.0	–
	Average	86	93	94	2.3	3.2	75	39	1.4	1.9	1.5	1.7

KEY Pod Ht – (>5cm) Percent of pods above 5cm from the ground.
Plant Type – (1-9) 1 = upright / bush type, 9 = vine

Lodging – (1-5) 1 = upright, 5 = flat on the ground (rated at maturity).

Manitoba Pulse Crop Buyers – November 2003

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

Company/Agent	Commodity	Phone	City/Town	CGC Registered
AgPro/Saskatchewan Wheat Pool	P, L	306-569-5488	Regina, SK	Y
Agassiz Feeds	P	204-638-5840	Dauphin, MB	N
Agricore United	P, S	204-954-1528	Winnipeg, MB	Y
Agricore United 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
AgriTel Grain Ltd	P, S	204-268-1415	Beausejour, MB	N
Alfred C. Toepfer (Canada) Ltd.	L, C, P	204-925-0468	Winnipeg, MB	N
Archer Daniels Midland C/O Northern Sun	S	701-437-3000	Enderlin, ND	Y
Berdex Canada Ltd.	B, L, P	204-975-0913	Winnipeg, MB	Y
Bison Commodities	B	204-329-2326	Plum Coulee, MB	Y
Brett Young Seeds	P, L	204-261-7932	Winnipeg, MB	N
Brett Young Seeds	P, L	204-548-2969	Gilbert Plains, MB	N
Cargill Ltd.	P	204-947-6219	Winnipeg, MB	Y
Central Grain Company	B	204-233-4977	Winnipeg, MB	N
Cloutier Agra Seeds Ltd.	S, P, B	204-261-0584	Winnipeg, MB	N
ConAgra Grain Canada	P	204-942-5550	Winnipeg, MB	Y
Delmar Commodities	S	204-331-3696	Winkler, MB	Y
Duncan Seeds	B	204-822-6629	Morden, MB	Y
Finora Canada Ltd.	B, P, L, F	204-325-9327	Winkler, MB	Y
Fisher Seeds Ltd.	F	204-622-8800	Dauphin, MB	N
Global Grain Canada	B	204-829-3641	Plum Coulee, MB	Y
Great Western Grain Co.	P	306-825-4344	Lloydminster, SK	Y
H & W Seed Service	B	204-325-7440	Winkler, MB	N
Hensall District Co-op	B	519-262-3002	Hensall, ON	N
Horizon Agro	P, L, S,	204-746-2026	Morris, MB	Y
International Grain Trade Canada Inc.	P	604-685-5259		Y
James Richardson International • Pioneer Grain	P	204-934-5621	Winnipeg, MB	Y
KBC Trading & Processing Co., a division of ConAgra Foods • KBC Oakville	B	204-942-5550 204-267-2854	Winnipeg, MB Oakville, MB	Y Y
Keystone Grain Ltd.	B, S	204-325-9555	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. • Rathwell Station	P	204-749-2211	Rathwell, MB	Y
• Virden Station		204-748-6282	Virden, MB	Y
Masterfeeds	F, P	204-638-5840	Dauphin, MB	N
Parent Seeds Ltd. • Adrian Bean Station	B, P, L, S B	204-737-2625 204-274-2720	St. Joseph, MB Macdonald, MB	Y Y
Paterson & Sons Limited, N.M.	P, S	204-956-2090	Winnipeg, MB	Y
Parrheim Foods	P	204-239-5995	Portage la Prairie, MB	Y
Parrish & Heimbecker Ltd.	P	204-987-4320	Winnipeg, MB	Y
Prairieland Grain Co. Ltd.	B, P, L	204-483-3636	Hartney, MB	N
Prairie Mountain Agri Ltd.	P	201-937-6370	Roblin, MB	Y
Roy Legumex • Bison Commodities	B, F, L, P, S B	204-758-3597 204-829-2326	St. Jean Baptiste, MB Plum Coulee, MB	Y Y
• Duncan Seeds	B	204-822-6629	Morden, MB	Y
R. T. Stow Ltd.	B	204-745-3252	Carman, MB	Y
S.S. Johnson Seeds	P, B	204-376-5228	Arborg, MB	Y
Saskatchewan Wheat Pool	P	306-569-4200	Regina, SK	Y
Tri Lake Agri Limited	P	204-523-5380	Killarney, MB	Y
Vanderveen Commodity Services	S	204-745-6444	Carman, MB	Y
W.G. Thompson & Sons Ltd. • Keystone Grain	B, P, L B, S	519-676-5411 204-325-9555	Blenheim, ON Winkler, MB	Y Y
• Y2K Farms	B	204-252-2132	Edwin, MB	Y
Walhalla Bean Co. (Canada Ltd.) • Winkler Receiving	B B	701-549-3721 204-325-0767	Walhalla, ND Winkler, MB	Y Y
Walker Seeds Ltd.	P	306-873-3777	Tisdale, SK	Y
Western Grain Cleaning & Processing	P	306-445-4022	North Battleford, SK	N

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.