

1999 REPORT

Ontario Soybean Variety Trials



Conducted in 1996 - 98

by the

Ontario Oil & Protein
Seed Crop Committee



ONTARIO OIL & PROTEIN SEED CROP COMMITTEE

This organization is made up of representatives of OMAFRA, Agriculture & Agri-Food Canada, the University of Guelph, the Ontario Seed Growers Association, the Canadian Seed Trade Association, the Ontario Soybean Growers Marketing Board and the Oilseed Crushers. Tests are conducted each year by the following co-operating agencies: Research Centre, Harrow; Ridgeway College; Huron Research Station; University of Guelph; Kemptville College; Research Centre, Ottawa.

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INTERPRETATION OF RESULTS HEAT UNIT RATING

Using the same crop heat unit system as for corn, each variety is given a heat unit rating based on the relative maturity of that variety in the most recent 2 years of test results. In choosing a variety you should select those varieties approximately equal to or less than the heat units available on your farm.

DAYS FROM PLANTING TO MATURITY

Maturity is affected by planting date and the area where a variety is being grown. Varieties are rated as being mature when 95% of the pods on the plants are ripe. Normally, 3-10 additional drying days are needed before the crop is dry enough for combining.

HILUM COLOUR

Each soybean seed has a hilum which is the point where it was attached to the pod. Varieties differ in hilum colour and can be either Yellow (Y), Imperfect Yellow (IY), Gray (G), Buff (Bf), Brown (Br), Black (Bl), or Imperfect Black (IBl). Hilum colour may also be Light (L). Yellow hilum soybeans are generally the only type accepted for the export market. In certain years, however, discolouration of the hilum of IY varieties can occur and as a result the soybeans may not be acceptable for export markets.

SEEDS PER KILOGRAM

This is an estimate of the relative number of seeds of a particular variety in a kilogram of seed based on a 2-year average of data from all locations where a variety was tested. Since seed size can vary from year to year and from seed lot to seed lot these figures should be used as a rough guide only. The actual seed size reported on each seed lot should be used to calculate seeding rate.

PROTEIN INDEX

This index measures the relative seed protein content among the varieties at a test location. Those varieties with a protein index above 100% have above average seed protein content on a dry matter basis, whereas, those varieties with a protein index less than 100% have below average seed protein content. A 5% difference in protein index is approximately equal to a 2% difference in actual dry matter protein content. If a variety had a protein index of 100% and

had an actual protein content of 40.0%, then a variety with a protein index of 105% would have an actual protein content of 42% and a variety with a protein index of 95% would have an actual protein content of 38%. All protein index values reported in Table 1 are averages of 2 years of data from all locations where a variety was tested.

YIELD INDEX

Varieties can only be compared within each test area. Yield index of a variety indicates its performance as a percentage of the average yield of all recommended varieties grown in a test area. Small index differences are not meaningful. The yield index for each location and for the average of all locations is based on 2-3 years of testing. Yield index averaged over locations and years will be a more reliable indicator of yield potential than performance from one single location.

PLANT HEIGHT

An indicator of the amount of plant growth, it is measured at maturity as the length of the stem from the base of the plant to its tip.

LODGING

A visual estimate at maturity of the standability of the crop. A value of 1 is equivalent to a crop standing completely upright while a 5 represents a crop entirely flat. Within a test area, varieties with lower values are less prone to lodging.

TESTING METHODS

In each trial, varieties were replicated in a suitable experimental design and received equal fertility, weed control and management. All trials were planted and harvested by machine.

Prior to harvest, plant height and lodging scores were obtained. The grain harvested from each plot was weighed and the yield of soybeans was calculated in tonnes/hectare at 14% moisture (13% in 1997 and 1998).

Agronomic data in Tables 2 & 3 represent 1-3 year averages of individual locations as well as a 2-year and a 3-year average of all locations. Agronomic data in Tables 4 & 5 have been split on a soil type basis; data from 1-3 years of testing are provided for each location. Plant height and lodging values in

INTERPRETATION OF TABLE 1 NOTES:

Varieties with resistance genes for races of the Phytophthora root rot organism in Ontario:

1C & 1K Each gives resistance to most races but some races controlled by one gene are not controlled by the other gene.

MS Metribuzin herbicide should not be used on these varieties.

SCN Resistant to the major races of Soybean Cyst Nematode (SCN) in Ontario.

RR Roundup Ready' (Trademark of Monsanto Company)

STS Sulfonylurea Tolerant Soybean to Reliance (STS & Reliance are trademarks of E.I. du Pont de Nemours & Co.)

Phytophthora Root Rot % Plant Loss:

Two-year average in a field heavily infested with Phytophthora. Not all races of Phytophthora root rot are found at this site. Thus, the relative ranking of varieties for plant loss may differ in fields that have other races present.

TABLE 1. ONTARIO 1999 SOYBEAN VARIETY PERFORMANCE LIST & DESCRIPTIONS

Variety	Notes	Heat Unit Rating	Hilum Colour	Seeds per Kilogram	Phytophthora Root Rot % Plant Loss	Protein Index %	Distributor
AC Harmonv		2450	BR	6800	11	94	SeCan Members
Corona		2450	BR	5900	5	100	Hyland Seeds
OAC Salem		2450	IY	5800	7	102	Agrocentre Belcan
Medallion		2475	BF	5700	12	99	Heartland Seeds
PS32		2500	BF	6100	13	95	Pride Brand Seeds
Fiston		2525	BR	6600	7	98	Semences Laquerre Inc.
S 00-66		2525	BR	5400	4	98	Novartis Seeds Inc.
AC Proteina		2550	BR	6100	10	115	Semican Atlantic Inc.
Aquilon		2550	BL	5000	8	102	Advantage Seed Grow&Proc
HS 2578		2550	IY	5100	9	101	GROWMARK Inc.
HS 2688	MS	2550	BR	5200	8	100	GROWMARK Inc.
OAC Erin		2550	Y	7200	11	97	PRO Seeds of Canada
PS36		2550	Y	5000	16	104	Pride Brand Seeds
Quest		2550	BR	4800	8	106	Hyland Seeds
Maple Glen		2575	IY	5000	12	102	SeCan Members
OAC Atwood		2600	Y	5800	12	100	Advantage Seed Grow&Proc
HS 2689		2625	BR	5400	6	95	GROWMARK Inc.
Korada		2625	IY	5300	5	101	First Line Seeds Ltd.
OAC Windham		2625	BR	6100	12	98	SeCan Members
PS42		2625	IV	4900	6	101	Pride Brand Seeds
York		2625	IV	5500	7	100	First Line Seeds Ltd.
DB1979		2650	BR	4700	13	106	Advantage Seed Grow&Proc
Grand		2675	GR	4000	16	105	Hyland Seeds
KG41		2675	IY	5300	5	100	Pride Brand Seeds
OAC Millennium		2675	BR	6300	7	96	PRO Seeds of Canada
Achiever		2700	IV	5300	7	99	Mapleseed Inc.
OAC Brussels		2700	BR	4900	10	99	SeCan Members
S 03-C3		2700	IV	4900	8	103	Novartis Seeds Inc.
AC 2001		2725	BR	5600	13	97	SeCan Members
OAC Bavfield		2725	BR	5100	9	99	SeCan Members
9063		2725	GR	5600	4	97	Pioneer Hi-Bred Ltd.
AC Bravor	1c	2750	BR	5400	6	99	First Line Seeds Ltd.
Enterprise		2750	IY	4900	7	101	Hyland Seeds
HS 2778	MS	2750	LBR	5300	9	102	GROWMARK Inc.
OAC Arthur		2750	IY	5100	7	102	Advantage Seed Grow&Proc
OAC Auburn		2750	LBR	5100	12	99	Advantage Seed Grow&Proc
PS50		2750	BR	5000	5	100	Pride Brand Seeds
PS55		2750	BR	5400	11	99	Pride Brand Seeds
S 07-57		2750	BR	5400	4	99	Novartis Seeds Inc.
Maverick		2775	IV	5000	6	102	Hyland Seeds
MS0747		2775	BR	5500	12	100	Mapleseed Inc.
OAC Embro		2775	BR	5400	10	98	Heartland Seeds
Zephvr		2775	IV	5200	12	99	First Line Seeds Ltd.
9071	1c	2775	Y	6200	6	94	Pioneer Hi-Bred Ltd.
OAC Eclipse	1c	2825	BR	5100	7	99	SeCan Members
Bounty	MS	2850	Y	5500	14	102	Hyland Seeds
91B01	1	2850	BL	5700	2	96	Pioneer Hi-Bred Ltd.
AP1394	1c	2875	GR	5900	6	104	Mapleseed Inc.
HS 2888	1c	2875	GR	5600	18	102	GROWMARK Inc.-
Marathon		2875	Y	5200	9	100	Hyland Seeds
PS63		2875	LBF	6300	20	99	Pride Brand Seeds
S 08-80	1c	2875	Y	4800	7	101	Novartis Seeds Inc.
Arva		2900	Y	5300	13	99	Advantage Seed Grow&Proc
A0756		2900	BL	5400	7	103	Caraill Hybrid Seeds
A0868	1k	2900	Y	5900	3	98	Caraill Hybrid Seeds
M-080	1	2900	BR	5400	7	100	Mvcoen Canada
OAC Dorado		2900	BR	5300	10	99	SeCan Members
OAC Exeter		2900	Y	5100	6	105	First Line Seeds Ltd.
Sentry		2900	IV	5400	5	102	Hyland Seeds
9132	1c	2900	BL	5600	5	99	Pioneer Hi-Bred Ltd.
CX145		2925	BL	6300	16	104	DEKALB Canada Inc.
HS 2988		2925	BR	5300	17	97	GROWMARK Inc.
PRO 285		2925	BF	4900	12	99	PRO Seeds of Canada
RCAT Bobcat		2925	IY	4900	6	97	SeCan Members
Squire		2925	IV	5300	11	102	First Line Seeds Ltd.
Telstar		2925	BR	5200	10	101	Hyland Seeds
140	1	2925	BR	5300	3	100	Mvcoen Canada
9163	1c	2925	Y	6000	2	95	Pioneer Hi-Bred Ltd.
HS 3078	1k	2950	BL	5800	5	96	GROWMARK Inc.
PRO 280	MS	2950	BR	5400	5	98	PRO Seeds of Canada
PS77	1 c	2950	Y	5000	5	98	Pride Brand Seeds
T8508		2950	BR	5000	10	98	Hyland Seeds
AP1876	1	2975	BL	5100	4	99	Mapleseed Inc.
Crusher		2975	BL	5700	8	98	SeCan Members
CX173	1c	2975	BL	6700	8	99	DEKALB Canada Inc.
OAC Bright		2975	Y	5200	5	100	First Line Seeds Ltd.
OAC Shire		2975	BL	5800	2	103	SeCan Members

TABLE 1. ONTARIO 1999 SOYBEAN VARIETY PERFORMANCE LIST & DESCRIPTIONS (Cont.)

<i>Variety</i>	<i>Notes</i>	<i>Heat Unit Rating</i>	<i>Hilum Colour</i>	<i>Seeds per Kilogram</i>	<i>Phytophthora Root Rot % Plant Loss</i>	<i>Protein Index %</i>	<i>Distributor</i>
PRO 295		2975	BL	5900	8	100	PRO Seeds of Canada
PS73		2975	LBF	5300	10	100	Pride Brand Seeds
S 14-H4		2975	BL	4700	3	99	Novartis Seeds Inc.
A1923	1k	3000	BL	5200	2	99	Caraill Hybrid Seeds
S 14-M7	1 c	3000	GR	5300	7	100	Novartis Seeds Inc.
Sapphire		3000	Y	5600	18	99	Hvland Seeds
Stine 2500		3000	IY	5500	6	101	Advantage Seed Grow&Proc
Tornado		3000	IY	5100	5	104	Hvland Seeds
AG1901	1k, RR	3025	BL	5900	2	98	Caraill Hybrid Seeds
A1553	1 k	3025	BL	6500	1	99	Caraill Hybrid Seeds
A2161	1k, STS	3025	IBL	5900	1	97	Caraill Hybrid Seeds
Bailev	SCN	3025	BL	5600	3	103	Hvland Seeds
Blackjack 21		3025	BL	5400	6	99	Southwest Seeds
HS 3168		3025	BF	5200	6	103	GROWMARK Inc.
M-210		3025	Y	5600	13	98	Mvcoen Canada
PRO 305		3025	BF	5000	3	100	PRO Seeds of Canada
PS84SCN	SCN	3025	BR	4900	6	100	Pride Brand Seeds
S 18-11	SCN	3025	BL	4100	5	105	Novartis Seeds Inc.
S 19-90	1c	3025	GR	4600	3	100	Novartis Seeds Inc.
5 20-20	1 c	3025	Y	5100	3	98	Novartis Seeds Inc.
Westaa 97		3025	BF	4900	7	96	SeCan Members
3001S	1k, STS	3025	IBL	5500	4	96	First Line Seeds Ltd.
AG2101	1k, RR	3050	BL	5900	3	98	First Line Seeds Ltd.
A2069	1k, SCN	3050	BL	5400	1	100	Caraill Hybrid Seeds
Bennett		3050	BL	4900	6	99	First Line Seeds Ltd.
CX205	1c	3050	GR	6000	6	99	DEKALB Canada Inc.
DB1926	1c	3050	BR	4600	8	101	Advantage Seed Grow&Proc
OAC Glencoe		3050	BR	5700	7	93	SeCan Members
PS85		3050	BL	5200	10	103	Pride Brand Seeds
PS86RR	1k, RR	3050	BL	5500	3	104	Pride Brand Seeds
RR Reward	RR	3050	BL	6100	7	97	Hvland Seeds
S 20-B9	1c, RR	3050	GR	4900	8	100	Novartis Seeds Inc.
S 20-91	1 c	3050	GR	4500	6	99	Novartis Seeds Inc.
9234	SCN	3050	BR	5600	8	98	Pioneer Hi-Bred Ltd.
CX232		3075	BR	5200	9	101	DEKALB Canada Inc.
Hammer	SCN	3075	BR	6100	3	104	Hvland Seeds
Kenwood 94	1k	3075	BL	5700	1	100	SeCan Members
Nankino		3075	IBL	5600	7	100	Hvland Seeds
Nemecvs 19	1k, SCN	3075	BL	5300	4	111	First Line Seeds Ltd.
PS83		3075	Y	5600	25	100	Pride Brand Seeds
RCAT Leacv		3075	Y	4400	3	100	SeCan Members
RR Renown	RR	3075	BL	5400	4	100	Hvland Seeds
5 24-92		3075	BL	5600	3	100	Novartis Seeds Inc.
TS210		3075	BR	5600	9	103	Southwest Seeds
AG2301	1 k, RR	3100	BL	6100	3	101	First Line Seeds Ltd.
CX229	1c	3100	GR	5400	3	99	DEKALB Canada Inc.
Fraser		3100	BR	4000	3	107	Hvland Seeds
PRO 315	1	3100	BL	5100	4	100	PRO Seeds of Canada
S 24-12	1 c	3100	Y	4800	5	101	Novartis Seeds Inc.
Stratus		3100	BR	4500	4	98	Hvland Seeds
Wizard	1 k	3100	BL	5500	3	95	First Line Seeds Ltd.
Alex	STS	3125	IBL	5500	3	99	Advantage Seed Grow&Proc
A2615	1k	3125	IBL	5200	3	101	Caraill Hybrid Seeds
CX235C	SCN	3125	BL	5700	4	100	DEKALB Canada Inc.
J-251		3125	BR	5200	4	101	Mvcoen Canada
RS2595	1k	3125	BL	5200	2	102	Renk Seed Co. of Canada
3101R	RR	3125	IBL	5400	7	102	First Line Seeds Ltd.
92B61	1 k	3125	BL	5400	2	101	Pioneer Hi-Bred Ltd.
A2540	SCN	3150	BF	6400	5	102	Caraill Hybrid Seeds
A2557	1 k	3150	IBL	5700	3	95	Caraill Hybrid Seeds
RCAT Anora	1 c	3150	Y	5600	4	95	SeCan Members
RCAT Calico		3150	Y	5200	12	104	SeCan Members
RCAT Columbus		3150	BL	5300	5	99	Ferguson Seeds
RR Renwick	RR	3150	BL	5500	3	99	Hvland Seeds
Starburst		3150	Y	5300	2	98	Hvland Seeds
Hanlon		3175	IBL	5400	9	97	First Line Seeds Ltd.
Nemecvs 28	1k SCN	3175	BL	5600	4	102	First Line Seeds Ltd.
TS255		3175	BR	5400	8	99	Southwest Seeds
3201R	RR	3175	BR	6000	7	99	First Line Seeds Ltd.
9281	1	3175	BL	5700	4	99	Pioneer Hi-Bred Ltd.
5261		3200	BL	5600	9	97	Mvcoen Canada
92B91	SCN	3225	Y	6300	3	96	Pioneer Hi-Bred Ltd.
9305	1 k	3225	Y	5200	2	100	Pioneer Hi-Bred Ltd.
CX260C	SCN	3250	BL	5600	2	100	DEKALB Canada Inc.
SW 33-08		3375	Y	5500	2	103	Southwest Seeds

All data in Table 1 are 2-year (1997-1998) Averages

TABLE 2. AGRONOMIC DATA 2500 - 2800 HEAT UNIT AREAS

<i>Variety</i>	<i>Days to Mature</i>	<i>Yield Index (%)</i>										<i>Plant Height (cm)</i>	<i>Lodging I=Standin 5= Flat</i>
		<i>Brussels</i>		<i>Elora</i>		<i>Ottawa</i>		<i>Winchester</i>		<i>Average</i>			
		<i>2yr</i>	<i>3yr</i>	<i>2yr</i>	<i>3Yr</i>	<i>2yr</i>	<i>3yr</i>	<i>2yr</i>	<i>3yr</i>	<i>2yr</i>	<i>3yr</i>		
AC Harmony	107	82	86	101	97	77	87	89	90	88	90	67	1.1
Corona	107	83	84	91	92	86	87	81	85	85	87	73	1.6
OAC Salem	107	86	89	92	89	96	95	87	91	91	91	68	1.4
Medallion	108	84	84	95	92	97	89	88	94	91	90	68	1.4
PS32	109	85	86	91	88	79	83	81	81	84	84	67	1.1
Fiston	110	81	84	82	79	80	81	87	89	83	84	68	1.3
S 00-66	110	94	95	97	96	89	96	103	103	96	98	71	1.2
AC Proteina	111	73	81	88	87	96	97	95	94	88	90	72	1.0
Aquilon	111	82	86	96	93	88	88	90	93	89	90	73	1.4
HS 2578	111	90	93	95	92	87	92	95	97	92	93	77	1.6
HS 2688	111	81	87	93	94	92	90	89	95	89	92	63	1.0
OAC Erin	111	93	97	99	105	95	99	95	101	96	100	67	1.3
PS36	111	99	99	99	100	100	102	103	104	100	101	77	1.2
Quest	111	77	83	92	95	85	87	94	95	87	90	65	1.1
Maple Glen	112	92	96	94	94	93	99	89	88	92	94	67	1.1
OAC Atwood	113	103	103	101	106	102	97	102	104	102	103	67	1.2
HS 2689	114	101	101	103	98	102	103	93	97	100	99	71	1.3
Korada	114	117	111	105	106	107	109	111	105	110	107	63	1.0
OAC Wingham	114	105	106	99	99	97	101	99	97	100	101	66	1.1
PS42	114	106	100	102	101	104	106	107	108	105	104	68	1.1
York	114	100	99	100	102	98	98	98	99	99	99	78	1.5
DB1979	115	99	102	102	103	101	103	95	94	99	101	66	1.2
Grand	116	94	99	105	105	101	100	100	102	101	102	67	1.2
KG41	116	88	93	96	97	104	109	104	104	99	101	70	1.0
OAC Millennium	116	96	100	103	101	104	107	106	108	103	104	69	1.0
Achiever	117	114	112	103	105	107	104	103	104	106	106	81	1.6
OAC Brussels	117	100	102	103	104	92	98	106	106	101	103	64	1.0
S 03-C3	117	109	107	100	100	94	101	104	102	102	102	75	1.2
AC 2001	118	109	106	104	108	109	108	101	104	105	106	84	1.9
OAC Bayfield	118	122	119	108	109	106	102	109	108	111	109	74	1.3
9063	118	92	95	106	109	109	107	103	105	103	104	67	1.0
AC Bravor	119	108	106	102	103	109	109	103	101	105	105	77	1.3
Enterprise	119	129	119	102	103	116	109	109	105	113	109	71	1.1
HS 2778	119	116	110	105	104	111	111	104	103	109	107	61	1.0
OAC Arthur	119	112	106	103	104	104	101	101	101	104	103	67	1.2
OAC Auburn	119	116	114	107	110	104	100	102	105	107	107	74	1.2
PS50	119	114	111	104	105	107	98	107	103	108	104	79	1.2
PS55	119	112	--	102	--	112	--	115	--	110	--	75	1.1
S 07-57	119	111	110	107	107	106	108	111	110	109	109	66	1.0
9071	120	105	104	110	108	117	109	123	114	114	109	69	1.2
Zephyr	121	130	125	107	111	120	112	108	108	115	114	77	1.3
OAC Eclipse	122	113	110	104	106	113	114	103	102	108	108	80	1.2
Average yield (T/ha)		2.47	2.66	3.06	3.01	2.84	3.16	3.17	3.28	2.88	3.03		
Average yield (bu/ac)		37.5	40.5	46.5	45.8	43.2	48.1	48.3	49.9	43.8	46.1		

TABLE 3. AGRONOMIC DATA 2700 - 2900 HEAT UNIT AREAS

Variety	Days to			Yield Index (%)						Plant Lodging		
	Mature	Exeter 1 yr	St. Pauls 2yr	3yr	Winchester 2yr	3yr	Woodstock 2yr	3yr	Average 2yr	3yr	Height (cm)	1=Standing 5 = Flat
OAC Bayfield	112	92	90	89	88	94	93	94	90	92	70	1.4
PS50	114	99	91	89	81	83	92	85	90	87	77	1.5
Maverick	115	93	88	92	93	94	98	96	93	94	67	1.6
MS0747	115	100	95	96	87	93	105	102	96	97	77	1.2
OAC Auburn	115	102	99	99	87	92	97	97	96	97	75	1.4
OAC Embro	115	91	90	90	103	105	96	95	95	96	74	1.3
Zephyr	115	101	98	98	96	98	99	98	98	98	76	1.5
Bounty	118	94	93	93	104	105	94	95	96	97	67	1.0
91B01	118	98	102	101	103	98	93	98	100	99	71	1.3
AP1394	119	99	98	100	101	101	98	100	99	100	82	1.2
HS 2888	119	103	102	104	100	99	103	100	102	101	77	1.5
Marathon	119	95	96	99	90	92	101	100	95	97	82	1.8
PS63	119	101	98	95	96	95	92	95	97	95	78	1.4
S 08-80	119	99	100	101	98	99	104	108	100	102	77	1.2
Arva	120	100	102	104	105	103	102	108	103	104	73	1.1
A0756	120	100	98	98	103	101	104	102	101	100	75	1.2
A0868	120	96	105	105	108	105	101	101	103	103	68	1.2
M-080	120	100	102	103	108	107	101	103	103	104	81	1.2
OAC Dorado	120	103	93	93	96	94	96	96	96	95	75	1.0
OAC Exeter	120	91	94	96	102	101	97	101	96	98	72	1.4
RCAT Bobcat	120	102	106	105	102	103	107	105	104	104	76	1.2
Sentry	120	103	99	98	100	100	107	102	102	100	77	1.5
9132	120	96	103	104	106	104	103	100	103	102	72	1.3
CX145	121	106	103	102	107	104	99	100	103	103	72	1.2
HS 2988	121	97	107	105	107	106	104	105	105	105	77	1.3
PRO 285	121	108	107	108	103	102	106	103	106	105	85	1.5
PRO 280	122	101	102	101	97	99	106	105	101	102	74	1.2
Telstar	122	110	108	--	108	--	105	--	107	--	76	1.5
OAC Shire	123	103	102	106	98	99	99	99	100	102	70	1.3
PRO 295	123	101	103	105	103	106	105	105	103	105	86	1.3
PS73	123	110	106	104	106	104	98	101	105	104	79	1.1
S 14-H4	123	102	105	106	112	109	97	103	104	105	77	1.1
S 14-M7	124	97	96	98	94	94	88	93	94	95	78	1.1
T8508	124	104	106	105	98	101	104	104	103	103	84	1.2
A1553	125	103	112	110	112	109	105	103	109	107	68	1.3
Average yield (T/ha)		3.65	3.90	3.79	3.33	3.24	2.78	2.97	3.38	3.36		
Average yield (bu/ac)		55.5	59.3	57.6	50.6	49.3	42.3	45.2	51.4	513		

Testing areas: Table 2

Brussels	1996	1997	1998
Elora	1996	1997	1998
Ottawa	1996	1997	1998
Winchester	1996	1997	1998

Testing areas: Table 3

Exeter	--	1997	--
St. Pauls	1996	1997	1998
Winchester	1996	1997	1998
Woodstock	1996	1997	1998

TABLE 4. AGRONOMIC DATA 2900 - 3300 HEAT UNIT AREAS

Variety	Days to Mature	YIELD INDEX (%)							Plant Height (cm)	Lodging 1=Standing 5 = Flat
		CLAY				LOAM				
		Dutton		Inwood		Ridgetown	Talbotville			
2yr	3yr	2yr	3yr	2yr	2yr	3Yr				
RCAT Bobcat	116	99	97	98	99	100	93	96	72	1.7
Squire	116	100	99	93	94	100	107	108	65	1.7
Telstar	116	100	97	95	96	96	96	96	70	1.7
140	116	98	97	95	97	98	96	99	77	1.6
9163	116	99	100	97	99	105	99	100	75	1.8
CX173	117	96	96	98	98	102	99	98	75	1.6
HS 3078	117	100	100	95	95	90	101	100	66	2.0
PS77	117	100	99	100	100	97	101	103	68	1.7
T8508	117	96	95	102	101	98	101	100	76	1.6
AP1876	118	102	101	101	100	95	99	102	73	2.4
Crusher	118	108	106	102	103	99	99	101	83	2.2
OAC Bright	118	101	99	102	102	99	102	101	75	2.2
A1923	119	102	102	99	100	103	103	102	70	1.5
Blackjack 21	119	98	97	99	99	105	103	104	83	2.1
Sapphire	119	97	100	97	100	97	104	103	73	1.9
Stine 2500	119	99	100	98	99	109	105	105	71	1.7
Tornado	119	104	104	99	99	101	97	99	70	1.3
AG1901	120	100	98	99	99	96	102	102	81	1.8
A2161	120	104	105	94	95	98	102	105	72	2.3
Bailey	120	96	97	93	95	100	97	95	69	1.5
HS 3168	120	99	101	99	100	100	101	96	70	1.6
M-210	120	107	105	102	104	100	101	99	74	2.0
PRO 305	120	99	99	100	99	96	99	100	66	1.9
PS84SCN	120	97	97	98	98	93	95	95	69	1.9
S 18-11	120	95	97	95	97	97	100	99	66	1.8
S 19-90	120	98	100	96	95	98	96	99	72	1.5
S 20-20	120	99	98	98	97	95	99	99	75	1.6
Westag 97	120	113	111	108	105	103	10	106	71	2.3
30015	120	102	101	100	97	102	94	96	77	2.1
AG2101	121	102	--	99	--	100	104	--	74	1.3
A2069	121	108	109	104	104	107	101	101	69	1.4
Bennett	121	94	96	101	101	103	105	105	80	1.8
CX205	121	100	98	100	103	107	101	102	80	2.4
DB1926	121	100	98	100	99	101	96	96	71	2.0
OAC Glencoe	121	98	98	109	108	107	105	104	86	1.8
PS85	121	90	97	97	99	98	96	97	76	2.0
PS86RR	121	102	--	98	--	96	99	--	77	1.8
S 20-B9	121	91	89	94	90	93	90	91	75	1.4
S 20-91	121	92	95	99	99	104	99	101	72	1.5
CX232	122	105	105	102	102	104	103	100	68	1.2
Kenwood 94	122	106	104	102	103	102	98	96	83	2.3
Nemecys 19	122	91	95	96	97	83	93	94	69	1.4
P583	122	90	89	101	101	94	101	101	82	2.3
RCAT Legacy	122	101	105	109	109	99	104	105	65	2.2
RR Renown	122	99	--	98	--	95	102	--	75	1.6
S 24-92	122	104	105	98	99	111	104	103	72	1.6
TS210	122	107	107	103	103	106	100	99	71	1.3
AG2301	123	95	94	100	99	100	95	95	76	1.6
CX229	123	105	107	93	94	108	103	104	72	1.9
PRO 315	123	100	102	103	103	94	101	103	76	1.7
S 24-12	123	103	105	108	107	104	101	103	72	1.7
Alex	124	109	--	103	--	97	104	--	82	2.2
CX235C	124	99	101	109	108	99	95	97	78	1.5
R52595	124	107	106	104	104	103	104	104	75	1.6
3101R	124	93	96	96	99	103	99	98	74	1.5
92B61	124	106	--	112	--	105	103	--	77	2.1
RCAT Angora	125	101	103	107	105	105	98	97	75	3.1
Average yield (T/ha)		3.51	3.36	3.57	3.23	4.14	4.08	3.78		
Average yield (bu/ac)		53.3	51.1	54.3	49.1	62.9	62.1	57.4		

TABLE 5. AGRONOMIC DATA 3300 - 3500 HEAT UNIT AREAS

Variety	YIELD INDEX (%)										Plant Height (cm)	Lodging 1=Standing 5 = Flat
	Days to Mature	CLAY				LOAM						
		Tilbury 1yr	Tilbury 2yr	Woodslee 2yr	Woodslee 3yr	Chatham 1yr	Chatham 2yr	Malden 1yr	Malden 2yr			
Stine 2500	113	86	90	106	101	99	102	102	98	66	1.2	
S 19-90	113	88	88	95	94	94	97	105	103	63	1.2	
S 20-20	113	95	95	102	101	91	96	97	103	69	1.1	
RR Reward	114	97	--	93	--	95	--	93	--	70	1.4	
9234	114	91	89	91	91	89	86	96	90	69	1.9	
CX232	115	99	96	96	98	106	106	103	101	63	1.0	
Hammer	115	98	95	93	94	99	94	95	92	76	1.7	
Nankino	115	92	94	102	103	102	101	104	101	72	1.5	
Fraser	116	93	96	93	93	97	100	101	98	67	1.0	
Kenwood 94	116	102	106	107	101	95	96	98	99	76	2.0	
Stratus	116	103	101	105	103	106	102	101	99	74	1.5	
S 24-12	116	93	98	101	101	97	100	104	107	67	1.2	
S 24-92	116	100	97	102	101	106	106	102	99	67	1.4	
Wizard	116	89	94	102	101	96	96	102	97	69	1.4	
A2615	117	104	107	96	98	101	100	99	101	64	1.1	
3101R	117	92	89	96	96	97	98	93	91	69	1.4	
92B61	117	107	110	105	104	104	100	97	102	74	1.7	
J-251	117	107	100	100	101	106	103	100	98	63	1.3	
A2540	118	109	101	95	95	97	95	81	89	76	1.5	
A2553	118	105	106	100	100	102	107	110	107	65	1.0	
RCAT Calico	118	91	90	104	103	102	104	104	102	72	1.1	
RCAT Columbus	118	102	103	100	102	94	99	103	105	81	1.6	
RR Renwick	118	105	--	97	--	103	--	97	--	74	1.5	
Starburst	118	100	105	102	101	101	102	95	96	71	1.8	
Hanlon	119	103	104	95	98	105	106	101	104	77	1.5	
Nemecys 28	119	104	102	98	98	91	95	101	95	76	1.4	
TS255	119	105	103	107	106	108	104	106	105	74	1.6	
3201R	119	97	--	101	--	108	--	95	--	82	1.7	
9281	119	114	111	104	104	99	100	99	101	69	1.0	
5261	120	107	107	104	107	108	111	104	105	70	1.2	
92B91	121	102	--	97	--	110	--	104	--	84	2.2	
9305	121	111	109	106	104	94	95	99	105	73	1.7	
CX260C	122	104	104	100	100	104	103	108	106	88	2.2	
SW 33-08	127	109	110	108	108	101	102	101	101	84	1.8	
Average yield (T/ha)		3.91	3.41	3.74	3.50	4.94	4.34	4.29	3.78			
Average yield (bu/ac)		59.5	51.8	56.8	53.2	75.1	66.0	65.2	57.5			

Testing areas: Table 4

Dutton	1996	1997	1998
Inwood	1996	1997	1998
Ridgetown	--	1997	1998
Talbotville	1996	1997	1998

Testing areas: Table 5

Chatham	1996	--	1998
Malden	1996	1997	--
Tilbury	1996	--	1998
Woodslee	1996	1997	1998

TABLE 6. RESISTANT VARIETY PERFORMANCE IN SCN INFESTED FIELDS

Variety	Days to Mature	Plant Height (cm)	Yield* Index (%)	Resistance Ratings**	Resistance Source
	Average of 5 tests (1996-1998)				
S18-11	111	65	133	R	P188788
PS84SCN	112	64	128	MR	PI88788
Bailey	112	70	132	R	PI88788
Nemecys 19	113	65	119	R	PI88788
Hammer	113	77	134	R	PI88788
A2069	113	62	137	R	
CX235C	116	76	136	MR	
A2540	117	79	127	R	PI88788
Nemecys 28	120	76	135	R	PI88788
CX260C	121	88	143	R	PI88788
Susceptible Yield Index is			100	which is 2.81 T/ha or 42 bu/ac	
Average of 3 tests (1997-1998)					
9234	114	78	122	R	Peking
92B91	120	89	138	R	P188788
Susceptible Yield Index is			100	which is 3.21 T/ha or 48 bu/ac	

* Yield Index based on average yield of 3 susceptible high yielding varieties.

**Ratings - R=resistant, MR=moderately resistant, to Race 3.

TEST LOCATIONS & SOIL

TYPES - 1998 TRIALS

Location	Heat Unit	Soil	Row Width (cm)	Seeding Rate plants/ac	Co-operator
	Rating	Type			
Chatham	3300	Clay Loam	60	160,000	Stan Wonnacott
Woodslee	3400	Clay	60	240,000	Research Centre
Tilbury	3350	Clay	60	240,000	Grant Guy
Inwood	3050	Clay	43	200,000	Jeff Lassoline
Ridgetown	3250	Clay Loam	43	160,000	R.C.A.T.
Dutton	3100	Clay	43	200,000	Dougal McCallum
Talbotville	2900	Clay Loam	35	200,000	Tom Oegema
Woodstock	2700	Clay Loam	35	200,000	O.A.C.
St. Paul's	2750	Clay Loam	35	200,000	Bernard Murray
Winchester	2825	Clay Loam	35	200,000	K.C.A.T.
Elora	2550	Silt Loam	35	200,000	O.A.C.
Brussels	2600	Clay Loam	35	200,000	Scott Cardiff
Ottawa	2650	Sandy Loam	40	200,000	Research Centre

SOYBEAN VARIETY DISTRIBUTORS

If you do not know who your local supplier is for a soybean variety listed in Table 1, then contact the distributor for information

Advantage Seed Growers & Processors Inc.

Box 29, 505 Canning St., Lucknow, ON, NOG 2H0
Tel: 1-800-651-7333 Fax: 519-528-3542

Agrocentre Belcan Inc.

180 Mt. Ste. Marie, Ste. Marthe QC, JOP 1WO
Tel: 1-800-537-5157 Fax: 514-459-4216

Cargill Hybrid Seeds

P.O. Box 490, Princeton ON, NOJ 1 B0
Tel: 519-458-4336 Fax: 519-458-4330

Cooperative Federee de Quebec

9001, boul. de l'Acadie, Suite 200, Montreal QC, H4N 3H7
Tel: 514-858-2667 Fax: 514-385-5142

DEKALB Canada Inc.

301 Richmond St, Chatham ON, N7M 1P5
Tel: 519-352-5310 Fax: 519-352-6259

Ferguson Seeds

RR#1, Essex ON, N8M 2X5
Tel: 519-776-5779 Fax: 519-776-9319

First Line Seeds Ltd.

RR#2, Guelph ON, N1 H 6H8
Tel: 1-800-361-2326 Fax: 519-821-9755

GROWMARK Inc.

P.O. Box 634, Mississauga ON, L5L 2C1
Tel: 905-890-4266 Fax: 905-890-4316

Heartland Seeds

RR#5, Wallaceburg, ON, N8A 4L2
Tel: 1-800-265-5242 Fax: 519-627-2990

Hyland Seeds, Div. of W.G. Thompson & Sons Ltd.

P.O. Box 130, Blenheim ON, NOP 1A0
Tel: 519-676-8146 Fax: 519-676-5674

Mapleseed Inc.

Box 1068, Lindsay ON, K9V 5N4
Tel: 1-800-461-7645 Fax: 705-324-1803

Mycogen Canada Inc.

305 Consortium Court, London ON, N6E 2S8
Tel: 1-800-265-5289

Novartis Seeds Ltd.

RR#1, Arva, ON NOM 1C0
Tel: 1-800-711-5511 Fax: 519-461-0405

Pioneer Hi-Bred Ltd.

Box 730, Chatham ON, N7M 5L1
Tel: 519-352-6350 Fax: 519-436-6753

Pride Brand Seeds

P.O. Box 1088, Chatham ON, N7M 5L6
Tel: 519-354-3210 Fax: 519-354-8155

PRO Seeds of Canada

RR#6, Woodstock ON, N4S 7W1
Tel: 1-888-537-5157 Fax: 519-537-5169

Renk Seed Company of Canada

RR#4, Blenheim ON, NOP 1A0
Tel: 519-676-4202 Fax: 519-354-8603

SeCan Association

200-57 Auriga Drive, Nepean ON, K2E 8B2
Tel: 1-800-764-5487 Fax: 613-225-6422

Semences Laguerre Inc.

999 Boulevard Lamontagne, Saint-Casimir QC, GOA 3L0
Tel: 819-339-2474 Fax: 819-339-2474

Semican Atlantic Inc.

353 Ranglo, Plessisville QC, G6L 2Y2
Tel: 819-362-8823 Fax: 819-362-3385

Southwest Seeds Inc.

RR# 1, Ridgetown, ON
Tel: 519-674-0054 / 519-674-3876