

1997 REPORT

Ontario Soybean Variety Trials



Conducted in 1994 - 96
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; Ridgetown College of Agricultural Technology; Huron Research Station; University of Guelph; Kemptville College of Agricultural Technology; Research Centre, Ottawa.

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 choosing a variety you should select those varieties approximately equal to or less than the heat units available on your farm. Varieties may differ slightly for heat unit rating from one test area to another.

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), Gray (G), Buff (Bf), Brown (Br), Black (Bl), or Imperfect Black (IBI). Hilum colour may also be Light (L) or Very Light (VL). Yellow hilum soybeans are generally the only type accepted for the export market. In certain years, however, discolouration of the hilum 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 3-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 2-3 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.

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

INTERPRETATION OF TABLE 1 NOTES

* Varieties with resistance to most races of the Phytophthora root rot organism in Ontario.

** Varieties with resistance to all races of the Phytophthora root rot organism in Ontario.

Phytophthora Root Rot % Plant Loss:

Three-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.

2 Metribuzin herbicide should not be used on these varieties.

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

TABLE 1. SOYBEAN VARIETY RECOMMENDATIONS & DESCRIPTION

<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>
Autan	2	2275	Y	5600	11	102	Semences Prograin
Corona		2425	BR	5900	2	99	Hyland Seeds
PS32		2425	BR	6200	6	95	Pride Brand Seeds
9008		2450	Y	7000	6	97	Pioneer Hi-Bred Ltd.
OAC Salem		2450	Y	5200	3	103	Agrocentre Belcan
Riel		2450	Y	6300	8	97	First Line Seeds Ltd.
AC Harmony		2475	BR	6500	10	94	SeCan Members
Aquilon		2500	BL	4800	2	102	Advantage Seed Grow&Proc
HS 2578		2500	Y	5000	5	101	Growmark Inc.
PS33		2525	BR	6100	5	91	Pride Brand Seeds
S 00-55		2525	Y	5400	4	97	Northrup King Seeds Ltd.
Maple Glen		2550	VLBR	5000	5	104	SeCan Members
Medallion		2550	BR	5300	8	98	Heartland Seeds
Quest		2550	BR	4500	5	107	Hyland Seeds
S 00-66		2550	BR	5100	7	97	Northrup King Seeds Ltd.
022		2575	BR	5700	3	99	Mycogen Canada
OAC Erin		2575	Y	7000	9	99	C&M Seeds
AC Brant	2	2625	Y	5000	4	100	First Line Seeds Ltd.
Korada		2625	Y	5400	5	102	First Line Seeds Ltd.
KG41		2650	Y	5300	6	99	Pride Brand Seeds
PS42		2650	LBF	5000	4	102	Pride Brand Seeds
9042		2675	GR	6700	13	102	Pioneer Hi-Bred Ltd.
OAC Atwood		2675	Y	5600	8	100	Advantage Seed Grow&Proc
OAC Libra		2675	BL	6000	4	98	SeCan Members
040		2700	Y	7200	6	96	Mycogen Canada
Beck		2700	BR	5100	7	97	First Line Seeds Ltd.
OAC Brussels		2700	BR	5100	5	98	SeCan Members
Trooper		2700	VLBR	5300	4	101	Hyland Seeds
Achiever		2725	Y	5000	5	100	Mapleseed Inc.
Enterprise		2725	VLBR	5500	2	100	Hyland Seeds
HS 2778	2	2725	LBR	5400	4	104	Growmark Inc.
Maitland		2725	BR	4900	9	100	C&M Seeds
OAC Bayfield		2725	BR	5000	2	99	SeCan Members
S 02-30	*	2725	VLBR	5000	6	101	Northrup King Seeds Ltd.
9071	*	2750	Y	6400	9	94	Pioneer Hi-Bred Ltd.
AC Bravor	*	2750	BR	5300	8	100	First Line Seeds Ltd.
J-083		2750	Y	6200	16	98	Mycogen Canada
OAC Arthur		2750	Y	5000	3	102	Advantage Seed Grow&Proc
OAC Embro		2750	BR	5300	6	99	Heartland Seeds
PS50		2750	BR	4900	3	99	Pride Brand Seeds
S 07-57		2750	BR	5600	5	100	Northrup King Seeds Ltd.
9063		2775	GR	5300	2	98	Pioneer Hi-Bred Ltd.
KG60	*	2775	BF	5400	8	102	Pride Brand Seeds
MS0747		2775	BR	5300	5	100	Mapleseed Inc.
Maverick		2775	VLBR	4900	1	103	Hyland Seeds
OAC Auburn		2775	LBR	5200	13	94	Advantage Seed Grow&Proc
OAC Eclipse	*	2775	BR	5200	5	98	SeCan Members
Bounty	2	2800	Y	5500	12	102	Hyland Seeds
HS 2868		2825	Y	5600	5	99	Growmark Inc.
Marathon		2825	Y	5300	8	100	Hyland Seeds
OAC Exeter		2825	Y	5000	2	104	First Line Seeds Ltd.
PS63		2825	LBF	6000	9	100	Pride Brand Seeds
Sentry		2825	VLBR	5400	9	102	Hyland Seeds
A1139	**	2850	IBL	6200	3	101	Cargill Hybrid Seeds
CX145		2850	BL	6700	9	105	Dekalb Canada Inc.
M-080	**	2850	BR	5600	8	98	Mycogen Canada
OAC Dorado		2850	BR	5700	9	98	SeCan Members
9132		2875	BL	5800	6	99	Pioneer Hi-Bred Ltd.
KG62		2875	Y	5800	1	100	Pride Brand Seeds
PRO 280	2	2875	BR	5800	3	98	PRO Seeds of Canada
RCAT Bobcat		2875	Y	5500	2	97	SeCan Members
S 12-49	*	2875	GR	5300	6	98	Northrup King Seeds Ltd.
Secord		2875	Y	5700	4	105	First Line Seeds Ltd.
T8902		2900	Y	5500	5	98	Hyland Seeds
9173		2925	BR	4900	10	99	Pioneer Hi-Bred Ltd.
AP1347		2925	Y	6500	6	101	Mapleseed Inc.
S 15-20	*	2925	VLBR	5100	4	100	Northrup King Seeds Ltd.
140	**	2950	BR	6100	5	101	Mycogen Canada

TABLE 1. SOYBEAN VARIETY RECOMMENDATIONS & DESCRIPTION (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>
OAC Shire		2950	BL	5900	6	103	SeCan Members
RS1493	**	2950	BL	5300	2	108	Renk Seed/Mapleseed
9163		2975	Y	6700	1	95	Pioneer Hi-Bred Ltd.
T8508		2975	BR	5500	7	98	Hyland Seeds
A1931	**	3000	BF	6200	4	99	Cargill Hybrid Seeds
CX173	*	3000	BL	7600	8	98	Dekalb Canada Inc.
M-210		3000	Y	6200	10	99	Mycogen Canada
MS1855		3000	BL	5900	8	99	Mapleseed Inc.
Spitfire	**	3000	BF	6400	5	100	First Line Seeds Ltd.
Zest		3000	LBR	5800	3	101	Hyland Seeds
A1875	**	3025	BR	5300	3	101	Cargill Hybrid Seeds
Blackjack 21		3025	BL	6100	4	100	Southwest Seeds
Carr	*	3025	Y	6400	5	100	First Line Seeds Ltd.
S 19-90	*	3025	GR	5200	1	101	Northrup King Seeds Ltd.
S 20-20	*	3025	Y	5600	2	99	Northrup King Seeds Ltd.
T9103		3025	BR	6200	7	96	Hyland Seeds
9202		3050	Y	5400	7	97	Pioneer Hi-Bred Ltd.
A1923	**	3050	BL	5800	4	101	Cargill Hybrid Seeds
Sterling		3050	Y	6600	18	99	Hyland Seeds
Tornaco		3050	VLBR	5500	5	105	Hyland Seeds
Ayr		3075	BL	5500	4	97	Advantage Seed Grow&Proc
DB1926		3075	BR	5000	4	101	Advantage Seed Grow&Proc
HS 3168		3075	BF	5900	5	102	Growmark Inc.
OAC Glencoe		3075	BR	6000	2	93	SeCan Members
S 20-91		3075	GR	5200	3	100	Northrup King Seeds Ltd.
TS205		3075	LBR	6700	7	102	Terra International
CX232		3100	BR	6100	7	101	Dekalb Canada Inc.
Conrad 94	**	3100	BR	5900	4	99	SeCan Members
G-3202		3100	IBL	5500	5	103	Ciba Seeds
J-212		3100	BR	6800	8	101	Mycogen Canada
Kenwood 94	**	3100	BL	6400	1	101	SeCan Members
Nankino		3100	IBL	6300	6	100	Hyland Seeds
PS83		3100	Y	5900	17	102	Pride Brand Seeds
PS85		3100	BL	5900	6	103	Pride Brand Seeds
S 24-92		3100	BL	6400	6	100	Northrup King Seeds Ltd.
Sals 93		3100	BF	5500	15	99	Sals Seeds Ltd.
9244		3125	Y	6200	8	97	Pioneer Hi-Bred Ltd.
CX228	*	3125	IBL	6200	6	97	Dekalb Canada Inc.
Hammer	3	3125	BR	6800	4	103	Hyland Seeds
S 24-12	*	3125	Y	5500	2	101	Northrup King Seeds Ltd.
Tecumseh		3125	BL	7200	6	100	First Line Seeds Ltd.
9242		3150	BR	5600	5	100	Pioneer Hi-Bred Ltd.
9273		3150	BL	6300	5	99	Pioneer Hi-Bred Ltd.
A2242	**	3150	GR	7100	3	99	Cargill Hybrid Seeds
A2506	**	3150	BL	6100	5	103	Cargill Hybrid Seeds
A2615	**	3150	IBL	6000	7	100	Cargill Hybrid Seeds
1-251		3150	BR	6100	3	100	Mycogen Canada
KG92		3150	Y	5700	3	94	Pride Brand Seeds
RCAT Angora	*	3150	Y	6200	4	96	SeCan Members
9281	**	3175	BL	6500	4	100	Pioneer Hi-Bred Ltd.
A2349	3	3175	IBL	6800	3	104	Cargill Hybrid Seeds
TS255		3175	BR	6100	8	100	Terra International
2240		3200	BR	5700	4	99	Ferguson Seeds
A2540	3	3200	BF	7100	5	103	Cargill Hybrid Seeds
Avenger		3200	Y	6100	5	103	Hyland Seeds
Quantum		3200	BL	6400	4	99	Hyland Seeds
AP2880		3225	LBF	6300	5	99	Mapleseed Inc.
Hallmark		3225	BL	5900	5	99	Heartland Seeds
Hanlon		3225	IBL	6000	7	96	First Line Seeds Ltd.
RCAT Calico		3225	Y	5700	6	104	SeCan Members
9305	**	3250	Y	5600	3	99	Pioneer Hi-Bred Ltd.
AP2588		3250	Y	4900	6	100	Mapleseed Inc.
RCAT Columbus		3250	BL	5800	3	99	Ferguson Seeds
TS282		3250	IBL	5400	3	98	Terra International
A2604	**	3275	IBL	5900	3	101	Cargill Hybrid Seeds
IA2007	*	3275	BR	5500	2	98	Ferguson Seeds

TABLE 2. AGRONOMIC DATA 2500 - 2800 HEAT UNIT AREAS

<i>Variety</i>	<i>Days</i>	<i>Yield Index (%)</i>					<i>Plant</i>	<i>Lodging</i>
	<i>to</i> <i>Mature</i>	<i>Brussels</i>	<i>Elora</i>	<i>Ottawa</i>	<i>Winchester</i>	<i>Average</i>	<i>Height</i> <i>(cm)</i>	<i>1=Standing</i> <i>5 = Flat</i>
Autan	102	79	72	73	83	77	77	2.3
Corona	108	92	99	89	90	92	84	2.1
P532	108	93	87	98	89	93	78	1.6
OAC Salem	109	92	92	100	97	96	77	1.7
Riel	109	90	89	87	89	89	82	1.7
9008	109	95	81	91	92	91	72	1.5
AC Harmony	110	88	90	99	96	94	74	1.2
Aquilon	111	97	92	99	99	97	85	2.5
HS 2578	111	100	93	98	95	97	85	2.2
PS33	112	92	80	103	102	97	70	1.5
S 00-55	112	91	82	98	96	93	70	1.4
Maple Glen	113	99	100	104	95	100	77	1.6
Medallion	113	91	92	89	100	93	77	1.8
Quest	113	96	101	92	98	96	75	1.7
S 00-66	113	100	97	106	100	102	85	1.4
022	114	100	101	94	99	98	86	1.7
AC Brant	116	98	96	101	103	100	86	1.9
Korada	116	106	103	108	97	104	73	1.3
KG41	117	100	98	108	99	102	82	1.2
PS42	117	98	106	105	104	103	80	1.8
OAC Atwood	118	106	112	98	109	105	80	1.8
9042	118	102	113	100	98	102	89	1.9
OAC Brussels	119	102	106	109	102	105	75	1.5
Trooper	119	100	101	101	93	98	81	1.6
040	119	100	97	98	106	101	81	1.7
Achiever	120	108	116	110	106	109	96	2.6
Beck	120	106	110	103	101	104	91	2.1
Enterprise	120	108	107	103	103	105	83	1.6
HS 2778	120	109	103	105	106	106	72	1.7
Maitland	120	104	99	98	105	102	89	2.4
AC Bravor	121	106	103	112	102	106	91	2.5
OAC Arthur	121	100	111	102	104	103	82	2.3
OAC Bayfield	121	113	117	111	109	112	85	2.0
S 02-30	121	97	111	93	102	99	81	1.6
S 07-57	121	108	107	106	108	107	82	1.8
OAC Eclipse	122	108	110	106	104	106	92	1.8
PS50	122	109	108	95	104	103	97	2.5
9063	122	108	116	105	110	109	84	1.6
9071	122	109	104	101	106	105	88	2.1
Average yield	(T/ha)	3.53	2.89	4.10	3.58	3.58		
	(bu/ac)	53.5	43.8	62.1	54.2	54.2		

Testing areas: Brussels - Average of 3 trials in 1994 1995 1996.
Elora - Average of 2 trials in 1994 1996.
Ottawa - Average of 3 trials in 1994 1995 1996.
Winchester - Average of 3 trials in 1994 1995 1996.
Average - Average of 11 trials in 1994 1995 1996.

TABLE 3. AGRONOMIC DATA 2700 - 2900 HEAT UNIT AREAS

<i>Variety</i>	<i>Days</i>	<i>Yield Index (%)</i>					<i>Plant</i>	<i>Lodging</i>
	<i>to</i> <i>Mature</i>	<i>Exeter</i>	<i>St. Pauls</i>	<i>Winchester</i>	<i>Woodstock</i>	<i>Average</i>	<i>Height</i> <i>(cm)</i>	<i>1=Standing</i> <i>5 = Flat</i>
OAC Erin	109	98	101	94	98	97	79	1.5
OAC Libra	113	98	94	98	95	96	90	2.1
9071	114	96	97	100	92	96	82	1.5
Beck	114	94	99	98	99	98	88	1.4
OAC Bayfield	114	109	97	101	104	102	84	1.7
S 02-30	114	100	87	90	90	91	79	1.2
OAC Embro	115	96	94	104	97	98	86	1.6
J-083	116	95	99	99	96	97	89	1.4
Maverick	116	110	101	98	100	102	80	1.9
OAC Auburn	116	105	104	101	103	103	88	1.3
PS50	116	99	99	99	92	97	90	2.0
Bounty	117	100	96	98	96	97	83	1.1
KG60	117	100	86	90	87	90	80	1.8
MS0747	117	105	99	102	104	102	93	1.7
OAC Eclipse	117	103	96	93	101	98	87	1.2
HS 2868	118	102	96	99	96	98	89	1.3
Marathon	118	96	101	99	99	99	95	1.8
OAC Exeter	118	101	101	101	107	102	84	1.5
PS63	118	101	99	99	101	100	95	1.5
Sentry	118	106	103	101	100	102	89	1.7
A1139	119	98	102	96	102	100	93	1.4
CX145	119	98	99	104	103	101	83	1.2
M-080	119	99	103	106	105	104	89	1.1
OAC Dorado	119	99	99	96	102	99	91	1.1
RCAT Bobcat	119	105	107	105	108	106	92	1.3
9132	120	101	102	97	98	99	83	1.3
KG62	120	98	101	103	100	101	87	1.4
PRO 280	120	104	106	104	106	105	91	1.3
S 12-49	120	98	102	105	96	101	86	1.1
Secord	120	99	97	98	101	99	90	1.4
T8902	120	98	103	103	100	101	102	2.0
9173	122	97	111	106	108	106	101	1.7
AP1347	122	98	102	107	101	102	105	1.8
S 15-20	122	97	101	102	101	101	82	1.2
OAC Shire	123	107	107	100	106	105	85	1.6
RS1493	123	96	105	99	103	101	82	1.3
T8508	123	95	103	104	103	102	94	1.5
Average yield	(T/ha)	3.71	3.63	3.58	3.48	3.59		
	(bu/ac)	56.2	55.0	54.2	52.7	54.4		

Testing areas: Exeter - Average of 2 trials in 1994 1995.
 St. Pauls - Average of 3 trials in 1994 1995 1996.
 Winchester - Average of 3 trials in 1994 1995 1996.
 Woodstock - Average of 3 trials in 1994 1995 1996.
 Average - Average of 11 trials in 1994 1995 1996.

TABLE 4. AGRONOMIC DATA 2900 - 3300 HEAT UNIT AREAS

Variety	Days to Mature	CLAY			LOAM			Plant Height (cm)	Lodging 1=Standing 5 = Flat
		Dutton	Inwood	Average	Ridgetown	Talbotville	Average		
RCAT Bobcat	111	100	102	101	98	103	101	78	1.5
S 15-20	112	98	98	98	95	102	99	70	1.0
140	112	96	103	100	98	106	102	82	1.3
OAC Shire	113	99	103	101	105	86	95	72	1.4
9163	113	101	105	103	97	104	101	81	1.8
A1931	114	99	103	101	100	100	99	81	1.4
CX173	114	97	102	100	100	103	102	82	1.3
MS1855	114	100	98	99	101	103	102	76	1.5
M-210	114	103	98	100	102	100	101	78	1.5
Spitfire	114	98	103	101	92	94	93	80	1.8
S 20-20	114	95	101	99	96	97	97	78	1.1
T8508	114	99	100	100	99	101	100	80	1.3
A1875	115	99	100	100	99	98	98	75	1.2
Blackjack 21	115	97	100	99	93	107	101	90	1.7
Carr	115	97	96	96	95	98	96	82	1.7
T9103	115	103	101	102	97	103	100	83	2.4
A1923	116	102	105	104	112	100	105	73	1.2
Sterling	116	90	91	91	102	101	102	78	1.5
S 19-90	116	102	98	99	105	107	106	78	1.2
Tornado	116	103	98	100	102	103	103	74	1.1
Ayr	117	100	97	98	101	99	100	81	2.1
DB1926	117	100	94	96	104	104	104	80	1.6
HS 3168	117	108	103	105	103	97	99	77	1.3
OAC Glencoe	117	100	101	101	101	101	101	94	1.4
S 20-91	117	99	99	99	103	98	100	76	1.1
TS205	117	97	96	96	105	94	99	81	1.7
Conrad 94	118	99	101	100	94	91	92	79	1.9
CX232	118	105	108	107	109	94	101	72	1.1
J-212	118	99	100	99	99	90	94	82	2.1
Kenwood 94	118	104	106	105	101	96	98	85	2.2
PS83	118	97	94	95	100	106	103	88	1.7
PS85	118	106	100	103	101	99	100	80	1.6
S 24-92	118	107	104	105	105	106	105	78	1.3
CX228	119	104	105	104	95	102	99	88	1.6
RCAT Angora	120	107	100	103	88	98	94	78	2.9
9242	120	102	100	101	109	112	111	97	1.8
9273	120	101	102	101	98	96	97	76	1.1
A2349	121	89	86	87	94	100	97	84	1.6
Average yield	(T/ha)	3.28	2.86	3.03	4.27	3.68	3.91		
	(bu/ac)	49.7	43.3	45.9	64.7	55.8	59.2		

Testing areas: Dutton - Average of 2 trials in 1995 1996.
 Inwood - Average of 3 trials in 1994 1995 1996.
 Ridgetown - Average of 2 trials in 1994 1995.
 Talbotville - Average of 3 trials in 1994 1995 1996.
 CLAY - Average of 5 trials in 1994 1995 1996.
 LOAM - Average of 5 trials in 1994 1995 1996.

TABLE 5. AGRONOMIC DATA 3300 - 3500 HEAT UNIT AREAS

Variety	Days to Mature	CLAY			LOAM			Plant Height (cm)	Lodging 1=Standing 5= Flat
		Tilbury	Woodslee	Average	Chatham	Malden	Average		
Zest	110	95	96	96	99	93	97	75	1.6
S 19-90	111	91	97	94	105	107	106	79	1.3
S 20-20	111	99	104	101	101	99	100	82	1.6
9202	112	91	98	94	102	102	102	76	1.7
Conrad 94	114	98	97	98	92	97	94	80	2.0
CX232	114	100	103	101	103	105	104	74	1.3
G-3202	114	99	99	99	100	106	103	80	1.6
Nankino	114	101	103	102	99	103	101	83	1.5
Sals 93	114	93	100	97	97	98	98	85	1.9
Hammer	115	98	90	94	95	90	93	88	2.2
Kenwood 94	115	107	97	102	99	105	101	87	2.2
S 24-12	115	106	103	104	100	110	104	83	1.5
S 24-92	115	102	98	100	104	102	103	78	1.5
Tecumseh	115	96	97	97	101	94	98	83	1.6
9244	115	100	103	101	101	98	100	77	1.5
A2242	116	101	100	100	98	92	96	76	1.5
A2506	116	99	99	99	101	103	102	77	1.3
A2615	116	109	102	105	103	101	103	76	1.3
J-251	116	100	99	99	103	94	100	74	1.5
KG92	116	103	98	100	99	92	96	78	2.1
RCAT Angora	117	102	96	99	95	86	91	83	2.7
TS255	117	105	106	106	102	105	103	81	2.0
9273	117	100	99	100	97	103	100	79	1.6
9281	117	106	103	105	101	102	101	76	1.4
Avenger	118	100	103	102	98	106	101	80	2.0
A2540	118	90	94	92	95	97	96	84	1.9
Quantum	118	101	100	100	99	106	102	84	1.9
2240	118	99	105	102	103	105	104	87	2.2
AP2880	119	99	95	97	100	105	102	73	1.1
Hallmark	119	102	102	102	101	78	92	93	2.3
Hanlon	119	102	101	101	106	104	105	94	1.8
RCAT Calico	119	91	102	96	105	106	105	82	1.4
AP 2588	120	100	99	100	99	102	100	80	1.6
RCAT Columbus	120	102	101	102	103	106	104	88	1.7
TS282	120	104	105	105	100	97	99	83	2.7
9305	120	103	103	103	102	111	105	83	1.7
A2604	121	105	98	102	93	98	95	85	1.8
IA2007	121	102	104	103	98	88	94	92	2.1
Average yield	(T/ha)	3.42	3.29	3.36	3.87	3.95	3.90		
	(bu/ac)	51.8	49.9	50.9	58.6	59.9	59.1		

Tilbury - Average of 3 trials in 1994 1995 1996.

Testing areas: Woodslee - Average of 3 trials in 1994 1995 1996.

Chatham - Average of 3 trials in 1994 1995 1996.

Malden - Average of 2 trials in 1994 1996.

CLAY - Average of 6 trials in 1994 1995 1996.

LOAM - Average of 5 trials in 1994 1995 1996.

**TABLE 6. VARIETY PERFORMANCE
IN SOYBEAN CYST NEMATODE
INFESTED SOIL
AVERAGED OVER 2 TESTS (1996)**

<i>Cultivar</i>	<i>Heat Unit Rating</i>	<i>Days to Mature</i>	<i>Yield t/ha</i>	<i>Yield Index (%)</i>	<i>Plant Height (cm)</i>	<i>Seed Weight (gm/100)</i>
S 18-11	3025	114	2.99	139	58	20.01
Hammer	3125	115	3.22	149	68	13.53
*A2349	3175	122	2.83	131	73	13.59
A2540	3200	122	3.55	164	70	13.37
**Susceptible						
Average	3100	116	2.16	100	54	15.07

* Single location only

** Average represents the mean of 3 susceptible varieties with above average yield potential.

**TEST LOCATIONS & SOIL
TYPES - 1996 TRIALS**

<i>Location</i>	<i>Heat Unit Rating</i>	<i>Soil Type</i>	<i>Row Width (cm)</i>	<i>Seeding Rate plants/ac</i>	<i>Co-operator</i>
Malden	3500	Clay Loam	60	160,000	Maury Hutchins
Woodslee	3400	Clay	60	240,000	Research Centre
Tilbury	3350	Clay	60	240,000	Robert Farquharson
Chatham	3300	Clay Loam	60	160,000	Stan Wonnacott
Inwood	3050	Clay	43	200,000	Ray Lloyd
Ridgetown	3250	Clay Loam	60	160,000	R.C.A.T.
Dutton	3100	Clay	60	200,000	Joe Krebs
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	Jack 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
180 Mt. Ste. Marie, Ste. Marthe QC, JOP 1W0
Tel: 1-800-537-5157 Fax: 514-459-4216

C & M Seeds
RR#3, Palmerston, ON, NOG 2P0
Tel: 519-343-2126 Fax: 519-343-3792

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

Ciba Seeds
RR#3, Cottam, ON, NOR 1 BO
Tel: 519-839-4851 Fax: 519-839-4991

Dekalb Canada Inc.
301 Richmond St, Chatham ON, N7M 1 P5
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, N1H 6H8
Tel: 1-800-361-2326 Fax: 519-821-9755

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.
P.O. Box 1417, Chatham ON, N7M 5W8
Tel: 1-800-265-5289 Fax: 519-354-5004

Northrup King Seeds Ltd.
RR#1, Arva, ON
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: 519-537-5157 Fax: 519-537-5169

Renk Seed Company of Canada
RR#4, Blenheim ON, NOP 1A0
Tel: 519-676-4202 Fax: 519-354-8603

Sals Seeds Ltd.
RR#6, Wallaceburg ON,
Tel: 519-627-2681 Fax: 519-352-6315

SeCan Association
200-57 Auriga Drive, Nepean ON, K2E 8B2
Tel: 613-225-6891 Fax :613-225-6422

Semences Prograin Inc.
145 Bas Riviere-Nord, St-Cesaire PQ, J0L 1T0
Tel: 1-800-817-3732 Fax: 514-469-4547

Southwest Seeds Inc.
RR#1, Ridgetown, ON
Tel: 519-674-0054 / 519-674-3876

Terra International, c/o Mergl Seeds Ltd.
RR#1, Maidstone, ON, NOR 1K0
Tel: 519-737-6851 Fax: 519-737-9601