

Department of Crop Science

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1991 PROGRESS REPORT

BARLEY, OATS, WINTER BARLEY, SOFT WHITE AND HARD RED WINTER WHEAT, SPRING WHEAT ONTARIO REGIONAL TESTS



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Prepared by the Ontario Cereal Crops Committee from tests conducted by representatives of the following organizations:

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SEED TRADE

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The Regional Trials reported in this book are coordinated by Dr. L.A. Hunt and Dr. D.E. Falk, Crop Science Department, OAC, University of Guelph under the mandate of the OMAF Cereals Project (Program 20). Glen Meatherall, Darius Summers and Zorka Szlavnic conduct the data analysis, prepare and distribute the Progress Reports which are the basis for recommendations in OMAF Publication 296.

INTRODUCTION

In 1991, Regional Tests of spring barley, oats, wheat, winter wheat and winter barley were conducted in cooperation with the members of the Ontario Soil and Crop Improvement Association, commercial plant breeders, CAT Colleges and Agriculture Canada. Certified seed for registered cultivars was generously provided by W.G. Thompson and Sons Ltd., King Agro, U.C.O. and First Line Seeds.

SPRING CEREALS

Reliable test data were obtained from 12 machine planted and harvested locations for spring barley, and 17 for oats across the province in 1991. This year the 3rd year entries in the Registration trials were also included in the Regional Tests so that two years of data would be available by the time cultivars would be commercially available in Ontario. The yields in 1991 were up from the 1990 yields with barley averaging 4.32 t/ha and oats averging 3.4 t/ha across the test locations. Area VI had the highest average yields for barley and for oats. Area IV had the lowest barley yields while Areas I and III had the lowest yields for oats.

Spring Barley. No data is reported for Area I because of poor conditions in 1991. Across the province, BT490 at 4.72 t/ha was the highest yielding six-rowed barley. In two-rowed barley, Lester at 4.41 t/ha was higher yielding than the other entries. Overall, Chapais was the highest yielding six-rowed barley in the Areas II at 4.57 t/ha, IV at 4.37 t/ha; BT490 in Area III at 4.79 t/ha, AC Burman in Area V at 5.16 t/ha and Leger in Area VI at 5.77 t/ha. Cultivar Albany was the highest yielding two-rowed cultivar in Areas II, and IV while Winthrop was the highest in Areas III and V, and MB-88-3 was highest in Area VI. The six-rowed barley generally out-yielded the two-rowed barleys across the province in 1991. There was reasonable lodging and disease data from several sites in 1991.

Oats. Data for normal, hulled oats is reported separately from hullless oats in the Mean Yield Tables. The highest yielding oat cultivar in 1991 across the province was Ultima at 4.03 t/ha. AC Stewart was the highest yielding cultivar in Area I and Area II, Ultima in Area III and V, Ogle in Area IV, and Marion in Area VI. Lodging and disease were obtained from several locations in 1991. The milling quality of the crop should be good. Exports of oats to the U.S. will probably be somewhat up from the past with a scarce crop in the Midwest this year.

Spring Red Wheat. Yield data were obtained from 5 locations in 1991, 3 from Area II, and 1 from each of Areas III and V. The average yield was 2.96 t/ha with Norseman having the highest average yield of 3.34 t/ha. Norseman also exhibited the best resistance to leaf rust.

Spring Durum Wheat. The average yield for the 1991 test was 3.54 t/ha and was based on only 2 locations, namely, Elora and Harriston. Medora outyielded Edmore by 0.26 t/ha as calculated by the average of these two sites. Medora had an advantage over Edmore with respect to midlew, leaf rust and septoria scores.

WINTER CEREALS

Winter Barley. Test data were obtained from 4 sites for winter barley in 1990-91. Winter kill was low in most areas. The crop averaged about 3.85 t/ha, Area I being lower than Area II. The highest yielding cultivar across the 1990-91 test sites was OAC Elmira. OAC Acton had the lowest hectolitre weight, and poorest lodging resistance, possibly stemming from its high susceptibility to mildew. Severe BYDV was noted at Elora with OAC Elmira showing significantly better tolerance than other cultivars.

Soft, White Winter Wheat. There were a total of 9 sites reporting yield in the 1991 season, 4 from each of Areas I and II, and one location from Area III. Poor winter survival in Area III resulted in the loss of yield data at two sites. The average yield of the regional trial was 4.11 t/ha. The highest yield in Areas I and III as well as on a provincial average was obtained by Zavitz; in Area II Karena had a slight yield advantage over Zavitz by a margin of 0.12 t/ha. On a provincial basis Zavitz had the highest kernel weight as well as the lowest lodging and leaf rust score. Fredrick had the highest test weight, and Annette had the lowest mildew and BYDV score. Ena showed the best resistance to glume blotch, head blight, and equalled Annette in BYDV ratings.

Red Winter Wheat. Yield data were obtained from 9 test sites. Ruby outyielded all of the other registered red wheat cultivars in all three test Areas. The provincial average for this crop in the regional trials in 1991 was 4.38 t/ha with Ruby yielding 5.01 t/ha. Karat had the lowest head blight and mildew scores. Ruby exhibited the highest resistance to leaf rust, glume blotch, and BYDV.

GROWING CONDITIONS

The autumn of 1990 was good in most districts with most of the intended winter cereal acreage being sown. Because of the good fall conditions, there was good hardening. Mid winter warmth and early spring cold conditions resulted in winter kill in some isolated areas, but crops were generally in good condition going into spring.

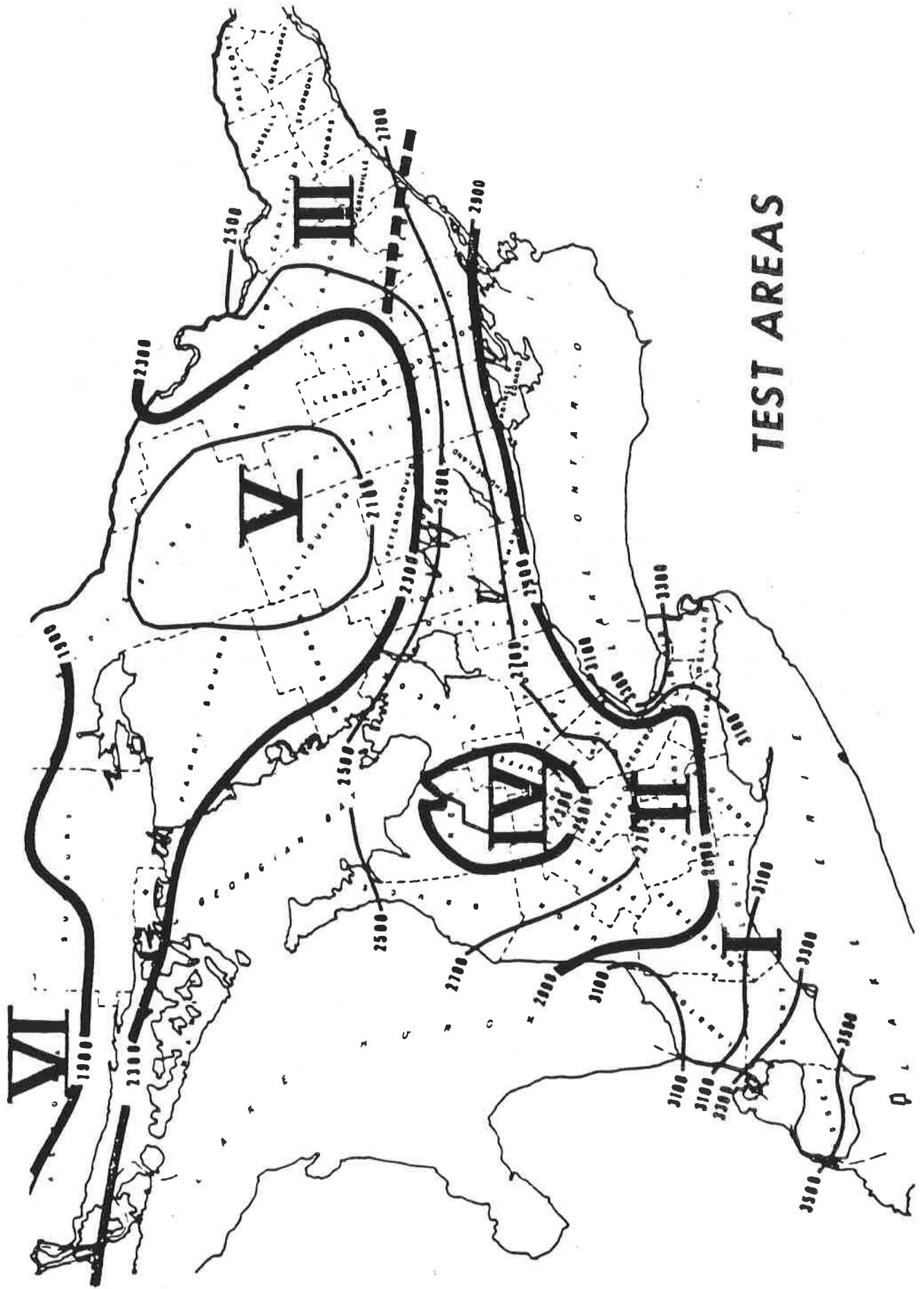
Spring sowing conditions were generally cold and wet for most spring cereals. After a fairly cool spring, heat came in early June. July was hot with thunderstorms in many areas. There was some lodging due to severe thunderstorms throughout the summer. Yields tended to be average, overall quality was only fair. Harvest dates were quite early in most of the province however rains did cause some weathering damage.

The testing areas for the Regional Testing program in Ontario are outlined by using the enclosed heat unit map as a guide.

- Test Area I - Southwest of the 2900 heat unit lines
- Test Area II - West of Frontenac, between the 2900 and 2300 heat unit lines.
- Test Area III - East of Frontenac, between the 2900 and 2300 heat unit lines.
- Test Area IV - The Dundalk plane (Grey, Dufferin and Wellington) within the 2500 heat unit lines.
- Test Area V - Northern Ontario between the 2300 and 1900 heat unit lines.
- Test Area VI - Northern Ontario - north of the 1900 heat unit lines

The results of the 1991 tests and the average performance of cultivars over the past several years are published in this report. The long term averages of Regional Tests are combined with other tests to form the basis of variety recommendations for different areas of Ontario.

For specific recommendations in your area, consult the Ontario Ministry of Agriculture and Food Publication 296 - "1992 Field Crop Recommendations for Ontario".



TEST AREAS

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1991

BARLEY

- | | |
|-------------------------|---|
| Albany | - two-rowed, rough awned, barley developed by Agriculture Canada, Charlottetown, P.E.I. from the cross of Summit/I.B.6-3 (rh). Large kernels with a midseason maturity. Resistant to mildew. Registered in 1987. |
| Craig | - two-rowed, rough awned, barley developed by W.G. Thompson (TBM 34-2) from a cross of Rodeo/Aramir. Registered in 1988. |
| Helena | - two-rowed, rough awned, barley introduced to Canada by King Agro. High yield, good thousand kernel weight and hectolitre weight, shorter than other two-rowed barley cultivars. Resistant to mildew. Registered in 1987. |
| Iona
(AB 93-2) | - two-rowed, rough awned, barley developed by Agriculture Canada, Charlottetown from the cross CGB80-33/AB53-8. Registered in 1990. |
| Lester
(TBR 579-5) | - a two-rowed, rough awned barley developed by W.G. Thompson from the cross UPBS60/UPBS66//Rodeo. Registered in 1990. |
| Micmac | - two-rowed, rough awned, barley developed by Charlottetown P.E.I. from the cross 1B6-3/Volla/2/Mazurka. May have some tolerance to net blotch and mildew. Registered in 1983. |
| Morrison | - two-rowed, rough awned, barley developed by Agriculture Canada, Ottawa from the cross Rodeo/Gitane. Registered in 1989. |
| Rodeo | - two-rowed, rough awned, barley developed by Ciba-Geigy Seeds Ltd. from the cross UPBS60 x UBPS76 using the doubled haploid method. High yield, large kernels and good hectolitre weight. Resistant to mildew, susceptible to scald and net blotch. Owned and distributed by W.G. Thompson and Sons Ltd. Registered in 1983. |
| Symko | - two-rowed, rough awned, barley developed by Agriculture Canada, Ottawa from the cross Rodeo/Gitane. Registered in 1989. |
| Winthrop | - two-rowed, rough awned, barley developed by W.G. Thompson from the cross Micmac/BR.7735-5. Registered in 1989. |
| TR 941 | - a two-rowed, rough awned barley developed by W.G. Thompson from a cross of Rodeo/TR462. Registered in 1991. |
| MB-88-3 | - a two-rowed, rough awned barley introduced by C & M Seeds. Pedigree not revealed. Not registered for sale in Canada. |
| QB 243.13 | - a two-rowed, rough awned barley developed by Agriculture Canada at Ste-Foy from a cross AB53-4/Rodeo//OB440/Rodeo. Not registered for sale in Canada. |
| AC Burman
(OB907-33) | - a six-rowed, smooth awned barley developed by Agriculture Canada, Ottawa, from a cross of Leger/Bruce//2* Leger. AC Burman is being marketed by C & M Seeds. Registered in 1991. |

- Chapais - six-rowed, rough awned, barley developed by Agriculture Canada, Ste. Foy from the cross QB58.14/Beacon//BT904. Registered in 1988.
- Etienne - six-rowed, smooth awned, barley developed by W.G. Thompson from the cross of Perth/R10-501. Registered in 1988.
- Joly - six-rowed, smooth awned, barley developed by Semico from a cross of Laurier/QB 139.7. Joly is somewhat shorter and earlier than Leger and has tolerance to mildew. Registered in 1986.
- Leger - six-rowed, smooth awned, barley developed by the Ottawa Research Station from the cross Trent/Vanier. It has high yield, long but strong straw and large kernels. Susceptible to new races of mildew. Registered in 1982.
- Maskot - six-rowed, rough awned, barley developed by King Agro from the cross QB167.21/OB193-11. Registered in 1989.
- OAC Kippen - six-rowed, semi-rough awned, barley developed by OAC, University of Guelph from a cross of OB141-1/Perth. High yielding, good hectolitre weight, similar to Leger in height, lodging resistance and maturity. Resistant to mildew and new races of smut, susceptible to old races of smut. Tolerance to most foliar diseases. Registered in 1987.
- Sabina - six-rowed, rough awned, barley developed by King Agro from the cross QB167.21/OB193.11. Registered in 1989.
- CD Buck - a six-rowed, rough awned hulless barley developed by the Crop Development Center, Saskatoon, from the cross Tupper/SB 80128. Registered in 1991.
- BT490 - a six-rowed, rough awned barley introduced by OAC from the Western Six-Row Registration test. The line was developed by the Crop Development Center, Saskatoon, from the cross Diamond/Duke. Not registered for sale in Canada.
- OB 956-13 - a six-rowed barley developed by Agriculture Canada, Ottawa from the cross OAC Kippen/Leger. Not registered for sale in Canada.
- OB 959-7 - a six-rowed barley developed by Agriculture Canada, Ottawa from the cross Leger/Rodeo//Leger. Not registered for sale in Canada.
- TBC 891-6 - a six-rowed barley developed by W.G. Thompson from the cross Vanier/Keystone//421/3/3-51. Not registered for sale in Canada.
- QB 232.7 - a six-rowed barley developed by Agriculture Canada, Ste-Foy from the cross Leger/QB 173.26. Not registered for sale in Canada.
- OS86-03.31 - a six-rowed barley developed by Semico from the germplasm Trent/R10-1983 released by OAC. Not registered for sale in Canada.

BARLEY
MEAN YIELDS IN DIFFERENT AREAS*, 1991

CULTIVAR	I (-)**		II (2)		III (4)		IV (1)		V (4)		VI (1)		PROVINCE*** (12)		
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a	bu/a
Albany	-	-	4.08	4	4.22	14	4.32	2	4.54	22	4.92	19	4.37	3902	81.3
Craig	-	-	3.69	14	4.11	19	3.98	8	4.22	28	4.72	25	4.12	3679	76.6
Helena	-	-	3.99	7	4.11	19	3.97	9	4.47	23	5.19	13	4.29	3880	79.8
Iona	-	-	3.37	22	4.09	21	3.30	19	4.57	21	4.78	24	4.12	3679	76.6
Lester	-	-	3.90	11	4.21	15	4.11	4	4.69	16	5.37	8	4.41	3938	82.0
Micmac	-	-	3.65	15	4.07	22	3.24	21	4.39	25	4.87	21	4.11	3670	76.5
Morrison	-	-	3.64	17	4.20	16	3.54	12	4.80	12	5.43	2	4.35	3884	80.9
Rodeo	-	-	3.20	25	3.91	26	3.02	24	4.33	26	4.70	27	3.93	3509	73.1
Synko	-	-	3.83	12	4.12	18	3.40	16	4.80	12	4.94	18	4.30	3839	80.0
Winthrop	-	-	3.36	23	4.33	8	2.88	25	4.91	11	5.32	10	4.32	3857	80.4
TR 941	-	-	3.00	26	3.74	27	3.38	17	4.73	15	5.41	5	4.26	3804	79.2
MB-88-3	-	-	4.01	6	3.95	23	4.04	5	4.61	20	5.42	4	4.31	3848	80.2
QB 243.13	-	-	3.65	15	4.23	13	3.22	22	4.63	19	4.60	28	4.21	3759	78.3
AC Burman	-	-	3.98	8	4.27	11	3.49	13	5.16	1	5.35	9	4.54	4054	84.5
Chapais	-	-	4.57	1	4.44	3	4.37	1	4.78	14	5.41	5	4.65	4152	86.5
Etienne	-	-	4.07	5	4.32	9	3.47	14	5.04	9	5.17	14	4.52	4036	84.0
Joly	-	-	3.48	20	4.15	17	2.64	26	4.43	24	5.29	12	4.10	3661	76.3
Leger	-	-	3.78	13	4.42	4	3.45	15	5.07	6	5.77	1	4.56	4071	84.8
Maskot	-	-	3.46	21	3.92	25	4.01	7	5.07	6	4.95	16	4.32	3857	80.4
OAC Kippen	-	-	3.95	9	4.31	10	3.59	11	5.10	5	5.31	11	4.54	4054	84.5
Sabina	-	-	3.56	18	4.41	5	3.29	20	5.02	10	5.39	7	4.46	3982	83.0
CD Buck	-	-	2.70	28	3.42	28	2.24	27	4.26	27	4.91	20	3.61	3223	-
BT 490	-	-	3.91	10	4.79	1	3.66	10	5.15	2	5.43	2	4.72	4214	87.8
OB 956-13	-	-	4.34	2	4.38	7	4.02	6	4.66	18	4.84	22	4.47	3991	83.1
OB 959-7	-	-	3.31	24	4.26	12	3.34	18	5.07	6	5.09	15	4.36	3893	81.1
TBC 891-6	-	-	4.08	3	4.66	2	4.30	3	5.14	3	4.71	26	4.69	4188	87.3
QB 232.7	-	-	3.56	18	4.39	6	3.13	23	5.12	4	4.95	16	4.44	3964	82.6
OS 86-03.31	-	-	2.82	27	3.93	24	2.04	28	4.68	17	4.84	22	3.91	3491	72.7
Mean	-	-	3.68	-	4.19	-	3.48	-	4.67	-	5.11	-	4.32	3858	80.9

*See attached map

** No. of locations

*** Weighted average

BARLEY
MEAN YIELDS IN DIFFERENT AREAS*, 1991

CULTIVAR	I (-)**		II (2)		III (4)		IV (1)		V (4)		VI (1)		PROVINCE*** (12)		
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a	bu/a
Albany	-	-	4.08	2	4.22	8	4.32	2	4.54	13	4.92	14	4.37	3902	81.3
Craig	-	-	3.69	10	4.11	13	3.98	5	4.22	18	4.72	17	4.12	3679	76.6
Helena	-	-	3.99	4	4.11	13	3.97	6	4.47	14	5.19	10	4.29	3830	79.8
Iona	-	-	3.37	16	4.09	15	3.30	13	4.57	12	4.78	16	4.12	3679	76.6
Lester	-	-	3.90	7	4.21	9	4.11	3	4.69	11	5.37	5	4.41	3938	82.0
Micmac	-	-	3.65	11	4.07	16	3.24	15	4.39	16	4.87	15	4.11	3670	76.5
Morrison	-	-	3.64	12	4.20	10	3.54	8	4.80	8	5.43	2	4.35	3884	80.9
Rodeo	-	-	3.20	18	3.91	18	3.02	16	4.33	17	4.70	18	3.93	3509	73.1
Symko	-	-	3.83	8	4.12	12	3.40	12	4.80	8	4.94	13	4.30	3839	80.0
Winthrop	-	-	3.36	17	4.33	4	2.88	17	4.91	7	5.32	7	4.32	3857	80.4
AC Burman	-	-	3.98	5	4.27	7	3.49	9	5.16	1	5.35	6	4.54	4054	84.5
Chapais	-	-	4.57	1	4.44	1	4.37	1	4.78	10	5.41	3	4.65	4152	86.5
Etienne	-	-	4.07	3	4.32	5	3.47	10	5.04	5	5.17	11	4.52	4036	84.0
Joly	-	-	3.48	14	4.15	11	2.64	18	4.43	15	5.29	9	4.10	3661	76.3
Leger	-	-	3.78	9	4.42	2	3.45	11	5.07	3	5.77	1	4.56	4071	84.8
Maskot	-	-	3.46	15	3.92	17	4.01	4	5.07	3	4.95	12	4.32	3857	80.4
OAC Kippen	-	-	3.95	6	4.31	6	3.59	7	5.10	2	5.31	8	4.54	4054	84.5
Sabina	-	-	3.56	13	4.41	3	3.29	14	5.02	6	5.39	4	4.46	3982	83.0
Mean	-	-	3.75	-	4.20	-	3.56	-	4.74	-	5.16	-	4.33	3870	80.6

* See attached map

** no. of locations

*** weighted average

BARLEY
RELATIVE YIELDS IN DIFFERENT AREAS, 1991

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
Albany	-	109	100	121	95	95	101
Craig	-	99	98	112	89	91	95
Helena	-	107	98	112	94	101	99
Iona	-	91	97	93	96	93	95
Lester	-	104	102	115	97	104	102
Micmac	-	96	97	91	92	94	95
Morrison	-	97	99	99	101	105	100
Rodeo	-	85	93	85	91	91	91
Symko	-	103	97	96	101	96	99
Winthrop	-	89	104	81	103	103	100
AC Burman	-	107	101	98	110	104	105
Chapais	-	121	105	123	102	105	107
Etienne	-	109	105	97	107	100	104
Joly	-	92	96	74	94	103	95
Leger	-	100	105	97	108	112	105
Maskot	-	92	93	113	108	96	100
OAC Kippen	-	105	104	101	107	103	105
Sabina	-	94	105	92	106	104	103
Mean yield t/ha	-	3.75	4.20	3.56	4.74	5.16	4.33

BARLEY
MEAN YIELDS IN DIFFERENT AREAS, 1990-91

CULTIVAR	**I (1)*		II (5)		III (8)		IV (2)		V (8)		VI (2)		PROVINCE (26)		
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a	bu/a
Albany	3.53	3	3.93	3	3.51	8	4.73	6	4.48	13	3.33	15	3.99	3563	74.2
Craig	2.95	13	3.65	11	3.30	17	4.48	10	4.16	18	3.21	17	3.73	3330	69.4
Helena	3.09	10	3.86	7	3.42	12	4.62	7	4.35	14	3.39	14	3.89	3473	72.4
Iona	3.09	10	3.49	16	3.44	11	4.38	12	4.26	16	3.25	16	3.78	3375	70.3
Lester	3.49	4	3.91	5	3.47	9	4.86	2	4.54	12	3.67	8	4.04	3607	75.1
Micmac	3.17	6	3.63	13	3.35	15	3.94	18	4.33	15	3.40	13	3.78	3375	70.3
Morrison	3.92	1	3.75	10	3.41	13	4.31	14	4.68	8	3.77	6	4.01	3580	74.6
Rodeo	3.10	9	3.43	18	3.26	18	4.03	16	4.22	17	3.20	18	3.67	3277	68.3
Symko	3.55	2	3.80	9	3.54	6	4.20	15	4.77	6	3.47	12	4.02	3489	74.8
Winthrop	3.16	7	3.46	17	3.53	7	4.03	16	4.61	9	3.48	11	3.91	3491	72.7
AC Burman	3.22	5	3.90	6	3.38	14	4.60	8	5.19	1	3.68	7	4.17	3723	77.6
Chapais	3.07	12	4.54	1	3.45	10	5.22	1	5.11	2	4.11	1	4.36	3893	81.1
Etienne	2.95	13	4.14	2	3.67	3	4.85	3	5.01	4	3.57	9	4.25	3795	79.1
July	3.15	8	3.62	14	3.49	5	4.32	13	4.59	10	3.79	5	3.97	3545	73.9
Leger	2.86	15	3.86	7	3.75	1	4.47	11	5.03	3	4.02	2	4.24	3786	78.9
Maskot	2.54	17	3.53	15	3.33	16	4.81	4	4.56	11	3.52	10	3.88	3464	72.2
OAC Kippen	2.69	16	3.93	3	3.62	4	4.60	8	4.91	5	3.80	4	4.16	3714	77.4
Sabina	2.36	18	3.65	11	3.68	2	4.74	5	4.77	6	3.83	3	4.08	3643	75.9
Mean	3.10	-	3.78	-	3.48	-	4.51	-	4.64	-	3.58	-	4.00	3568	74.3

* No. of locations

** 1990 data only

*** 1990 data only

BARLEY
RELATIVE YIELDS IN DIFFERENT AREAS, 1990-91

CULTIVAR	*I	II	III	IV	V	VI	PROVINCE
Albany	114	103	101	108	96	91	100
Craig	95	96	94	101	89	88	93
Helena	100	102	98	104	93	90	97
Iona	100	93	99	96	91	89	95
Lester	113	103	101	109	97	101	101
Micmac	102	96	96	88	93	95	95
Morrison	127	100	97	96	101	105	100
Rodeo	100	91	94	89	91	88	92
Symko	115	101	102	94	103	98	101
Winthrop	102	91	101	88	99	92	97
AC Burman	104	103	95	101	112	102	103
Chapais	99	119	97	117	112	122	109
Etienne	95	109	107	106	109	99	107
Joly	102	96	103	92	100	108	100
Leger	93	102	109	99	109	113	106
Maskot	82	93	95	108	98	100	96
OAC Kippen	87	104	105	102	106	108	104
Sabina	76	96	106	103	102	109	102
Mean yield t/ha	3.10	3.78	3.48	4.51	4.64	3.58	4.00

*1990 Data only

BARLEY
MEAN YIELDS IN DIFFERENT AREAS, 1989-91

CULTIVAR	**I (2)*		II (8)		III (10)		IV (3)		V (11)		VI (3)		PROVINCE (37)		
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a	bu/a
Albany	3.91	3	4.00	4	3.68	6	4.87	2	4.53	12	4.13	13	4.16	3714	77.4
Craig	3.27	16	3.77	12	3.43	16	4.60	5	4.43	15	4.07	15	3.96	3536	73.7
Helena	3.78	8	3.92	8	3.61	8	4.71	4	4.34	17	4.09	14	4.04	3607	75.1
Iona	3.49	12	3.72	13	3.56	12	4.47	9	4.48	13	3.95	17	4.00	3571	74.4
Lester	4.03	2	4.07	3	3.56	12	4.83	3	4.68	10	4.30	8	4.22	3768	78.5
Micmac	3.54	11	3.84	10	3.55	14	4.36	13	4.48	13	4.19	12	4.03	3598	75.0
Morrison	4.40	1	3.93	7	3.70	4	4.53	7	4.83	7	4.56	4	4.27	3813	79.4
Rodeo	3.77	9	3.67	15	3.41	17	4.28	15	4.41	16	4.05	16	3.94	3518	73.3
Symko	3.85	5	3.90	9	3.69	5	4.45	11	4.80	8	4.23	10	4.19	3741	77.9
Winthrop	3.79	6	3.63	17	3.62	7	4.20	16	4.73	9	4.23	10	4.09	3652	76.1
Chapais	3.79	6	4.40	1	3.59	10	5.04	1	5.17	1	4.74	2	4.46	3982	83.0
Etienne	3.60	10	4.10	2	3.57	11	4.37	12	5.02	4	4.42	6	4.28	3821	79.6
July	3.90	4	3.72	13	3.80	3	4.09	17	4.93	5	4.68	3	4.21	3759	78.3
Leger	3.48	13	3.94	6	4.04	1	4.36	13	5.04	3	4.82	1	4.38	3911	81.5
Maskot	3.30	15	3.66	16	3.55	14	4.47	9	4.65	11	4.32	7	4.05	3616	75.3
OAC Kippen	3.24	17	4.00	4	3.60	9	4.56	6	4.91	6	4.27	9	4.22	3788	78.5
Sabina	3.32	14	3.83	11	3.87	2	4.52	8	5.12	2	4.56	4	4.33	3866	80.5
Mean	3.67	-	3.89	-	3.64	-	4.51	-	4.74	-	4.33	-	4.17	3720	77.5

* no. of locations
** 1989-90 data only

BARLEY
RELATIVE YIELDS IN DIFFERENT AREAS, 1989-91

CULTIVAR	*I	II	III	IV	V	VI	PROVINCE
Albany	106	103	102	110	95	94	100
Craig	89	97	94	103	92	92	94
Helena	101	101	98	105	90	91	97
Iona	95	96	99	98	93	90	96
Lester	109	105	100	108	97	99	101
Micmac	96	99	97	97	94	97	97
Morrison	119	101	99	101	102	105	102
Rodeo	101	95	94	94	92	91	94
Symko	105	100	102	99	102	98	101
Winthrop	102	93	100	92	99	94	97
Chapais	101	112	97	113	110	116	107
Etienne	96	105	103	96	107	101	103
Joly	104	96	104	88	103	109	101
Leger	93	101	111	96	107	112	105
Maskot	87	94	97	100	97	100	96
OAC Kippen	87	103	102	101	104	102	102
Sabina	90	98	107	99	106	107	103
Mean yield t/ha	3.67	3.89	3.64	4.51	4.74	4.33	4.17

*1989-90 Data only

**TESTING AREA I
BARLEY
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (-)*	hl/wt kg (1)	Height cm (1)	Lodging 0-9 (1)	Maturity ^a days (1)	Leaf rust 0-9 (1)	B.Y.D.V. 0-9 (1)
Albany	-	61.1	75	1.7	86	1	0.7
Craig	-	61.7	76	1.0	87	2	1.3
Helena	-	63.4	72	0.3	86	4	1.7
Iona	-	61.4	85	1.7	87	1	2.3
Lester	-	62.0	77	1.0	86	2	1.7
Micmac	-	47.3	81	1.7	87	1	1.0
Morrison	-	59.2	78	1.0	86	3	1.3
Rodeo	-	50.2	82	1.7	87	1	1.7
Symko	-	50.3	85	1.7	86	3	1.3
Winthrop	-	64.7	81	0.3	87	1	1.7
TR 941	-	57.1	84	0.0	90	2	1.0
MB-88-3	-	66.8	70	0.7	84	2	1.0
QB 243.13	-	64.8	83	2.0	84	2	1.3
AC Burman	-	61.1	89	4.0	84	9	2.0
Chapais	-	60.5	71	1.3	88	4	3.0
Etienne	-	65.6	82	1.7	87	8	1.3
Joly	-	59.1	88	4.3	86	7	2.0
Leger	-	64.0	95	2.3	87	7	2.3
Maskot	-	53.4	95	2.0	89	6	1.7
OAC Kippen	-	55.7	90	1.3	88	4	2.0
Sabina	-	64.3	87	1.7	88	7	1.3
CD Buck	-	57.3	76	1.7	90	8	1.0
BT 490	-	61.4	76	1.3	86	4	2.0
OB 956-13	-	55.4	89	3.0	87	4	2.7
OB 959-7	-	56.3	92	2.0	88	5	2.0
TBC 891-6	-	57.0	80	1.7	88	2	1.7
QB 232.7	-	60.8	86	1.3	88	6	2.3
OS 86-03.31	-	58.9	71	2.3	87	4	2.3

^ano. of days from seeding to maturity

*no. of locations

**TESTING AREA I
BARLEY
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha*	hl/wt kg	Height cm	Lodging 0-9**	Maturity ^a days
Albany	3.53	62.5	76	1.7	89
Craig	2.95	63.0	75	1.0	90
Helena	3.09	64.7	71	0.3	89
Iona	3.09	62.3	82	1.7	89
Lester	3.49	65.0	76	1.0	89
Micmac	3.17	55.9	80	1.7	90
Morrison	3.92	63.9	76	1.0	90
Rodeo	3.10	57.4	80	1.7	90
Symko	3.55	59.6	82	1.7	89
Winthrop	3.16	64.9	78	0.3	90
AC Burman	3.22	59.1	87	4.0	91
Chapais	3.07	62.7	72	1.3	88
Etienne	2.95	63.2	83	1.7	89
Joly	3.15	60.0	88	4.3	88
Leger	2.86	61.0	77	2.3	90
Maskot	2.54	64.8	80	2.0	90
OAC Kippen	2.69	62.2	86	1.3	89
Sabina	2.35	64.3	89	1.7	90

^ano. of days from seeding to maturity

*1990 data only

**1991 data only

AGRONOMIC DATA, 1989-91

Cultivar	Yield t/ha*	hl/wt kg	Kernel weight g/1000**	Height cm	Lodging 0-9***	Maturity ^a days
Albany	3.91	64.2	43.4	81	1.9	91
Craig	3.27	64.4	41.0	80	2.0	92
Helena	3.78	66.3	41.7	77	0.2	91
Iona	3.49	62.3	37.1	88	1.9	90
Lester	4.03	66.2	44.6	81	0.5	91
Micmac	3.54	58.3	35.9	84	3.4	92
Morrison	4.40	64.7	41.0	82	1.5	92
Rodeo	3.77	60.4	41.4	85	1.9	92
Symko	3.85	61.8	38.0	88	3.4	92
Winthrop	3.79	65.0	39.4	83	1.2	92
Chapais	3.79	60.0	45.3	79	0.7	93
Etienne	3.60	63.1	40.9	89	0.9	94
Joly	3.90	59.1	40.4	94	3.2	92
Leger	3.48	61.8	37.6	98	2.2	92
Maskot	3.30	60.5	39.6	94	1.5	94
OAC Kippen	3.24	62.4	39.7	92	1.2	93
Sabina	3.32	64.7	42.0	92	1.9	93

^a no. of days from seeding to maturity

* 1989-90 data only

** 1989 data only

*** 1989, 1991 data only

**TESTING AREA II
BARLEY
AGRONOMIC DATA, 1991**

Cultivar	Yield	hl/wt	Kernel weight	Height	Lodging	Maturity*	Leaf rust	Helm
	t/ha (2)*	kg (2)	g/1000 (2)	cm (3)	0-9 (1)	days (2)	0-9 (2)	0-9 (1)
Albany	4.08	63.6	41.5	72	3.5	87	2.3	2.0
Craig	3.69	64.1	40.0	68	2.0	87	2.5	1.0
Helena	3.99	64.3	43.1	71	2.0	86	3.5	1.5
Iona	3.37	60.9	37.0	73	2.5	87	1.0	2.5
Lester	3.90	64.0	43.8	68	6.5	86	2.5	2.5
Micmac	3.65	62.4	40.6	75	6.0	87	1.3	3.0
Morrison	3.64	65.0	42.1	72	2.0	86	1.8	2.5
Rodeo	3.20	61.5	40.7	74	1.0	88	3.3	3.0
Symko	3.83	65.3	42.4	75	3.5	87	5.3	1.5
Winthrop	3.36	61.7	39.1	74	1.5	88	2.0	2.5
TR 941	3.00	62.6	42.7	72	1.0	89	3.8	4.0
MB-88-3	4.01	63.9	42.1	63	1.0	87	2.0	3.5
QB 243.13	3.65	62.4	41.9	72	4.5	86	2.0	2.5
AC Burman	3.98	57.6	34.1	74	3.0	86	5.3	1.0
Chapais	4.57	60.4	43.2	67	2.0	86	1.8	2.5
Etienne	4.07	57.8	33.7	77	1.5	87	3.8	1.0
Joly	3.48	52.7	33.3	80	2.5	86	4.8	1.5
Leger	3.78	59.2	35.9	77	2.5	87	3.5	1.5
Maskot	3.46	62.4	39.1	81	1.0	88	2.3	1.5
OAC Kippen	3.95	64.5	39.2	81	1.5	87	2.0	1.0
Sabina	3.56	58.9	36.1	71	2.0	86	4.0	2.5
CD Buck	2.70	62.4	32.4	76	1.0	86	5.8	1.0
BT 490	3.91	54.0	34.8	73	3.5	86	4.0	2.0
OB 956-13	4.34	62.0	38.9	74	1.5	87	2.5	2.0
OB 959-7	3.31	55.5	35.5	77	1.0	86	4.0	3.0
TBC 891-6	4.08	60.4	35.3	71	1.0	86	1.5	4.0
QB 232.7	3.56	57.8	34.8	68	2.0	87	3.5	2.0
OS 86-03.31	2.82	58.4	34.2	60	1.0	86	4.3	1.0

*no. of days from seeding to maturity

*no. of locations

**TESTING AREA II
BARLEY
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity* days	Leaf rust 0-9
Albany	3.93	62.9	41.0	78	4.2	92	3.9
Craig	3.65	63.8	38.7	75	2.8	92	4.5
Helena	3.86	64.6	41.1	74	2.6	92	5.8
Iona	3.49	61.4	37.7	80	3.6	93	4.8
Lester	3.91	63.8	42.9	75	5.0	91	4.3
Micmac	3.63	62.9	39.6	80	5.4	92	4.2
Morrison	3.75	64.3	41.5	78	3.3	91	3.9
Rodeo	3.43	62.0	39.8	79	2.5	93	5.2
Symko	3.80	65.6	41.2	82	4.4	93	6.4
Winthrop	3.46	61.5	38.1	81	2.6	94	4.3
AC Burman	3.90	58.6	34.4	83	3.7	91	7.2
Chapais	4.54	60.9	44.1	74	3.3	90	4.4
Etienne	4.14	59.2	34.8	83	2.6	92	6.4
Joly	3.62	54.8	33.9	87	3.8	91	6.9
Leger	3.86	58.8	35.1	88	3.9	92	6.3
Maskot	3.53	62.5	37.7	84	2.2	93	5.2
OAC Kippen	3.93	62.9	37.2	88	3.2	92	5.3
Sabina	3.65	59.2	36.7	83	2.4	92	6.5

*no. of days from seeding to maturity

AGRONOMIC DATA, 1989-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity* days	Leaf rust 0-9
Albany	4.00	63.9	41.9	81	3.4	92	5.1
Craig	3.77	65.0	39.6	78	2.1	92	5.5
Helena	3.92	65.8	41.9	78	1.9	92	6.5
Iona	3.72	62.8	38.7	83	2.8	92	5.3
Lester	4.07	65.1	44.0	77	3.8	91	4.8
Micmac	3.84	63.7	40.1	84	4.1	91	5.1
Morrison	3.93	65.2	42.4	80	2.8	91	5.3
Rodeo	3.67	63.4	40.5	82	2.3	92	5.8
Symko	3.90	65.8	41.7	85	3.8	92	6.8
Winthrop	3.63	62.8	38.8	83	2.5	93	5.3
Chapais	4.40	62.0	44.4	78	2.3	89	5.5
Etienne	4.10	60.9	36.0	86	1.8	92	6.9
Joly	3.72	56.9	35.0	92	3.7	91	7.3
Leger	3.94	60.4	36.1	93	3.0	92	7.2
Maskot	3.66	63.3	37.6	89	1.6	93	6.3
OAC Kippen	4.00	63.8	37.7	93	2.7	91	6.0
Sabina	3.83	61.2	37.4	87	1.9	91	7.3

*no. of days from seeding to maturity

**TESTING AREA II
BARLEY
YIELD in kg per ha, 1991**

Cultivar	Oxford	* Middlesex I	Huron	Average			Rank
				t/ha	lbs/a	bu/a	
Albany	4690	1430	3459	4.08	3643	75.9	4
Craig	4161	1630	3224	3.69	3295	68.6	14
Helena	4504	1575	3477	3.99	3563	74.2	7
Iona	3773	942	2970	3.37	3009	62.7	22
Lester	4543	1756	3260	3.90	3482	72.5	11
Micmac	4487	1847	2807	3.65	3259	67.9	15
Morrison	4318	1159	2970	3.64	3250	67.7	17
Rodeo	3758	706	2644	3.20	2857	59.5	25
Symko	4269	1068	3387	3.83	3420	71.2	12
Winthrop	4081	1177	2644	3.36	3000	62.5	23
TR 941	3743	833	2246	3.00	2679	55.8	26
MB-88-3	4502	1521	3513	4.01	3580	74.6	6
QB 243.13	4672	1575	2626	3.65	3259	67.9	15
AC Burman	4495	652	3459	3.98	3554	74.0	8
Chapais	5429	1503	3713	4.57	4080	85.0	1
Etienne	4527	1050	3604	4.07	3634	75.7	5
Joly	4286	1068	2680	3.48	3107	64.7	20
Leger	4637	833	2916	3.78	3375	70.3	13
Maskot	4169	1141	2753	3.46	3089	64.4	21
OAC Kippen	4645	1322	3260	3.95	3527	73.5	9
Sabina	4334	706	2789	3.56	3179	66.2	18
CD Buck	3126	362	2282	2.70	2411	—	28
BT 490	4603	1358	3224	3.91	3491	72.7	10
OB 956-13	5178	1340	3495	4.34	3875	80.7	2
OB 959-7	4222	851	2390	3.31	2955	61.6	24
TBC 891-6	4949	1213	3205	4.08	3643	75.9	3
QB 232.7	4120	562	3006	3.56	3179	66.2	18
OS 86-03.31	3088	598	2553	2.82	2518	52.5	27
Mean	4332	1135	3020	3.68	3286	69.2	—
C.V. %	7.1	22.8	9.7	—	—	—	—
LSD (0.05)	432	367	416	—	—	—	—

* Data not included in mean

**TESTING AREA III
BARLEY
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (4)*	hl/wt kg (6)	Kernel weight g/1000 (5)	Height cm (5)	Lodging 0-9 (1)	Maturity ^a days (3)
Albany	4.22	65.3	45.4	63	2.0	78
Craig	4.11	65.8	42.2	62	1.0	79
Helena	4.11	68.5	46.3	63	1.0	78
Iona	4.09	65.4	44.8	70	1.0	80
Lester	4.21	66.3	47.8	64	2.0	78
Micmac	4.07	65.7	42.7	69	2.0	79
Morrison	4.20	67.0	46.7	64	1.0	79
Rodeo	3.91	66.2	45.1	68	1.0	80
Symko	4.12	66.8	46.1	70	1.0	80
Winthrop	4.33	65.2	43.6	69	1.5	80
TR 941	3.74	61.8	42.4	70	1.0	83
MB-88-3	3.95	64.2	46.2	61	1.0	79
QB 243.13	4.23	64.4	45.4	67	1.0	78
AC Burman	4.27	61.0	36.3	74	1.5	79
Chapais	4.44	59.7	44.6	65	1.0	79
Etienne	4.32	61.6	38.3	72	1.5	79
Joly	4.15	58.5	37.0	69	1.5	79
Leger	4.42	60.5	37.7	77	1.0	79
Maskot	3.92	63.6	41.1	76	1.0	80
OAC Kippen	4.31	63.2	39.5	78	2.5	79
Sabina	4.41	62.5	41.1	74	1.5	80
CD Buck	3.42	72.4	36.1	69	2.0	81
BT 490	4.79	57.3	38.1	66	2.0	80
OB 956-13	4.38	61.3	38.7	73	1.0	79
OB 959-7	4.26	61.0	39.7	77	1.0	81
TBC 891-6	4.66	61.8	36.7	69	1.0	80
QB 232.7	4.39	60.8	38.5	76	2.0	81
OS 86-03.31	3.93	61.1	39.0	61	1.5	79

*no. of days from seeding to maturity

*no. of locations

**TESTING AREA III
BARLEY
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Albany	3.51	63.2	44.1	70	2.7	86
Craig	3.30	64.5	41.7	70	1.8	86
Helena	3.42	65.6	43.7	68	2.3	86
Iona	3.44	63.5	43.2	75	1.4	87
Lester	3.47	64.5	45.7	69	3.5	85
Micmac	3.35	64.3	42.3	75	3.4	86
Morrison	3.41	64.7	46.0	70	2.8	86
Rodeo	3.26	65.3	44.5	74	2.3	87
Symko	3.54	64.9	45.4	76	2.9	87
Winthrop	3.53	62.5	43.4	76	1.7	87
AC Burman	3.38	60.4	36.9	80	0.8	86
Chapais	3.45	58.6	45.0	69	0.5	86
Etienne	3.67	60.4	38.1	76	0.9	86
Joly	3.59	57.3	38.2	77	1.4	86
Leger	3.75	59.8	37.8	82	1.0	86
Maskot	3.33	62.5	41.5	83	1.0	87
OAC Kippen	3.62	61.9	39.3	83	3.2	86
Sabina	3.68	61.7	41.0	81	1.7	87

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1989-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Albany	3.68	63.6	45.0	70	1.9	85
Craig	3.43	64.5	41.3	69	1.3	86
Helena	3.61	65.7	44.8	68	1.7	85
Iona	3.56	63.3	43.1	73	1.0	86
Lester	3.56	64.6	45.9	69	2.5	85
Micmac	3.55	64.0	42.2	75	2.5	85
Morrison	3.70	64.5	45.4	70	1.9	86
Rodeo	3.41	65.0	44.0	73	1.6	86
Symko	3.69	65.1	45.5	76	2.3	87
Winthrop	3.62	62.6	43.1	76	1.1	87
Chapais	3.59	58.7	45.2	68	0.5	86
Etienne	3.57	60.2	38.0	76	0.7	86
Joly	3.80	57.9	38.4	77	0.9	86
Leger	4.04	59.6	37.7	84	1.2	86
Maskot	3.55	62.3	40.9	82	0.7	86
OAC Kippen	3.60	61.5	39.2	83	2.6	86
Sabina	3.87	61.5	40.0	80	1.2	87

^ano. of days from seeding to maturity

**TESTING AREA III
BARLEY
YIELD in kg per ha, 1991**

Cultivar	Carleton I	Renfrew I	* Lanark	Prescott &		Average			Rank
				Russell	Grenville	t/ha	lb/s	bu/a	
Albany	2665	3773	2403	6055	4385	4.22	3768	78.5	14
Craig	2609	3808	2562	5638	4372	4.11	3670	76.5	19
Helena	2800	3307	2795	5683	4629	4.11	3670	76.5	19
Iona	2589	3694	2403	5725	4362	4.09	3652	76.1	21
Lester	2965	3607	2513	5995	4533	4.21	3759	78.3	15
Micmac	2418	3773	2733	5466	4625	4.07	3634	75.7	22
Morrison	2722	3098	1775	5967	5018	4.20	3750	78.1	16
Rodeo	2546	3529	2330	5494	4077	3.91	3491	72.7	26
Symko	2376	3677	2473	5770	4637	4.12	3679	76.6	18
Winthrop	2807	3999	2479	5749	4744	4.33	3866	80.5	8
TR 941	1624	3364	2800	5409	4561	3.74	3339	69.6	27
MB-88-3	2463	3203	2765	5579	4563	3.95	3527	73.4	23
QB 243.13	2928	3211	2182	6241	4542	4.23	3777	78.7	13
AC Burman	2800	3577	1902	5752	4932	4.27	3813	79.4	11
Chapais	2961	3368	2239	6233	5183	4.44	3964	82.6	3
Etienne	3311	3551	2337	5520	4879	4.32	3857	80.4	9
Joly	2263	3107	2127	6403	4839	4.15	3705	77.2	17
Leger	2900	3496	2653	6403	4859	4.42	3946	82.2	4
Maskot	2585	2985	2422	5890	4232	3.92	3500	72.9	25
OAC Kippen	2970	3995	2396	5911	4376	4.31	3848	80.2	10
Sabina	2470	4356	2271	5987	4814	4.41	3938	82.0	5
CD Buck	2083	3233	2072	4889	3455	3.42	3054	—	28
BT 490	3168	3882	2169	6537	5565	4.79	4277	89.1	1
OB 956-13	2833	3529	2666	6130	5011	4.38	3911	81.5	7
OB 959-7	2881	3634	2339	5546	4986	4.26	3804	79.2	12
TBC 891-6	3015	4021	2509	6279	5307	4.66	4161	86.7	2
QB 232.7	2400	3877	2691	6179	5099	4.39	3920	81.7	6
OS 86-03.31	2344	3581	2350	5557	4234	3.93	3509	73.1	24
Mean	2661	3580	2405	5858	4672	4.19	3741	78.4	—
C.V. %	8.6	13.0	20.9	8.7	8.5	—	—	—	—
LSD (0.05)	321	957	707	720	556	—	—	—	—

* Data not included in mean

**TESTING AREA IV
BARLEY
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (1)*	hl/wt kg (1)	Kernel weight g/1000 (1)	Height cm (1)	Lodging 0-9 (1)	Maturity ^a days (1)	Leaf rust 0-9 (1)
Albany	4.32	63.0	43.2	63	0.0	84	3.0
Craig	3.98	63.6	37.4	55	0.0	82	3.5
Helena	3.97	64.2	42.6	63	0.0	82	6.0
Iona	3.30	59.2	39.0	60	0.0	85	2.0
Lester	4.11	56.1	43.2	58	0.0	83	3.5
Micmac	3.24	63.6	39.4	58	5.0	84	2.0
Morrison	3.54	63.0	42.4	58	2.0	83	3.0
Rodeo	3.02	58.0	34.4	58	0.0	85	3.5
Symko	3.40	61.1	38.0	65	3.0	85	6.0
Winthrop	2.88	59.2	39.8	63	0.0	85	4.0
TR 941	3.38	59.9	39.6	68	0.0	86	6.0
MB-88-3	4.04	61.1	42.8	53	0.0	84	4.0
QB 243.13	3.22	62.4	40.8	63	2.0	81	5.0
AC Burman	3.49	55.5	32.4	73	0.0	82	8.0
Chapais	4.37	60.5	42.2	65	0.0	81	3.0
Etienne	3.47	53.6	32.6	63	0.0	84	7.0
Joly	2.64	54.3	31.0	68	0.0	82	6.0
Leger	3.45	56.8	33.4	78	2.0	83	6.0
Maskot	4.01	62.4	36.0	80	0.0	86	6.0
OAC Kippen	3.59	58.6	35.4	75	4.0	84	4.0
Sabina	3.29	54.9	33.6	73	0.0	85	7.5
CD Buck	2.24	54.9	28.8	70	3.0	82	7.5
BT 490	3.66	51.8	34.2	65	1.5	81	3.0
OB 956-13	4.02	62.4	37.0	75	2.0	84	3.5
OB 959-7	3.34	53.0	32.2	73	0.0	82	4.0
TBC 891-6	4.30	61.7	33.8	65	0.0	82	5.5
QB 232.7	3.13	54.3	30.2	68	0.0	83	7.0
OS 86-03.31	2.04	49.3	25.0	58	0.0	83	8.0

*no. of days from seeding to maturity

*no. of locations

**TESTING AREA IV
BARLEY
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Albany	4.73	64.9	43.3	71	0.5	90
Craig	4.48	65.8	39.1	67	0.0	89
Helena	4.62	67.1	43.5	69	0.0	90
Iona	4.38	62.4	40.4	74	0.5	92
Lester	4.86	63.0	45.4	67	0.8	89
Micmac	3.94	65.8	41.9	70	2.5	90
Morrison	4.31	67.1	44.8	67	1.8	89
Rodeo	4.03	62.4	39.5	71	0.3	91
Symko	4.20	65.8	42.1	74	2.8	92
Winthrop	4.03	64.9	42.3	74	1.3	92
AC Burman	4.60	60.2	35.9	83	0.0	89
Chapais	5.22	61.5	44.7	76	1.3	87
Etienne	4.85	58.3	36.9	77	0.5	90
Joly	4.32	58.4	36.9	79	0.0	88
Leger	4.47	60.9	37.7	88	1.0	89
Maskot	4.81	64.9	39.1	88	0.5	92
OAC Kippen	4.60	63.3	38.5	83	2.8	90
Sabina	4.74	60.5	39.1	88	0.0	91

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1989-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Albany	4.87	64.6	43.3	68	0.3	89
Craig	4.60	65.6	39.5	67	0.0	88
Helena	4.71	66.7	43.9	72	0.0	87
Iona	4.47	62.1	40.1	77	0.3	89
Lester	4.83	64.0	46.4	72	0.7	88
Micmac	4.36	65.7	42.0	75	1.9	88
Morrison	4.53	66.5	44.7	71	1.3	88
Rodeo	4.28	63.2	41.0	75	0.2	90
Symko	4.45	65.6	42.5	78	1.9	89
Winthrop	4.20	64.1	41.5	76	0.9	89
Chapais	5.04	60.7	44.7	79	0.9	86
Etienne	4.37	58.5	36.7	83	0.4	87
Joly	4.09	58.1	35.9	85	0.2	87
Leger	4.36	60.3	36.4	89	0.9	87
Maskot	4.47	63.7	38.1	91	0.4	89
OAC Kippen	4.56	63.7	39.0	88	1.9	87
Sabina	4.52	60.6	38.5	92	0.1	89

^ano. of days from seeding to maturity

**TESTING AREA IV
BARLEY
YIELD in kg per ha, 1991**

Cultivar	Wellington I	Average			Rank
		t/ha	lbs/a	bu/a	
Albany	4315	4.32	3857	80.4	2
Craig	3983	3.98	3554	74.0	8
Helena	3973	3.97	3545	73.8	9
Iona	3304	3.30	2946	61.4	19
Lester	4109	4.11	3670	76.4	4
Micmac	3238	3.24	2893	60.3	21
Morrison	3540	3.54	3161	65.8	12
Rodeo	3020	3.02	2696	56.2	24
Symko	3402	3.40	3036	63.2	16
Winthrop	2880	2.88	2571	53.6	25
TR 941	3378	3.38	3018	62.9	17
MB-88-3	4043	4.04	3607	75.1	5
QB 243.13	3224	3.22	2875	59.9	22
AC Burman	3485	3.49	3116	64.9	13
Chapais	4373	4.37	3902	81.3	1
Etienne	3466	3.47	3098	64.5	14
Joly	2640	2.64	2357	49.1	26
Leger	3446	3.45	3080	64.2	15
Maskot	4014	4.01	3580	74.6	7
OAC Kippen	3586	3.59	3205	66.8	11
Sabina	3292	3.29	2938	61.2	20
CD Buck	2237	2.24	2000	—	27
BT 490	3659	3.66	3268	68.1	10
OB 956-13	4021	4.02	3589	74.8	6
OB 959-7	3342	3.34	2982	62.1	18
TBC 891-6	4299	4.30	3839	80.0	3
QB 232.7	3130	3.13	2795	58.2	23
OS 86-03.31	2041	2.04	1821	37.9	28
Mean	3480	3.48	3107	65.6	—
C.V. %	8.0	—	—	—	—
LSD (0.05)	390	—	—	—	—

**TESTING AREA V
BARLEY
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (4)*	hl/wt kg (4)	Kernel weight g/1000 (3)	Height cm (5)	Maturity ^a days (4)
Albany	4.54	62.4	44.6	65	89
Craig	4.22	64.2	39.8	69	90
Helena	4.47	64.6	44.2	66	88
Iona	4.57	62.0	41.6	71	89
Lester	4.69	65.2	44.1	65	89
Micmac	4.39	64.1	41.0	74	89
Morrison	4.80	65.5	44.5	71	88
Rodeo	4.33	63.4	40.5	72	90
Symko	4.80	64.4	45.1	72	89
Winthrop	4.91	61.9	39.1	72	90
TR 941	4.73	61.4	43.8	73	90
MB-88-3	4.61	62.6	43.3	64	90
QB 243.13	4.63	64.6	43.6	72	87
AC Burman	5.16	60.6	35.7	74	88
Chapais	4.78	60.0	42.6	68	87
Etienne	5.04	61.0	40.7	74	88
Joly	4.43	58.5	35.6	73	88
Leger	5.07	60.2	36.7	81	88
Maskot	5.07	59.8	39.3	79	89
OAC Kippen	5.10	61.8	37.5	80	88
Sabina	5.02	60.9	40.7	76	89
CD Buck	4.26	63.4	36.2	77	90
BT 490	5.15	56.9	35.5	67	89
OB 956-13	4.66	60.2	39.3	75	88
OB 959-7	5.07	57.6	37.4	82	90
TBC 891-6	5.14	63.0	37.0	72	89
QB 232.7	5.12	60.8	39.6	78	89
OS 86-03.31	4.68	60.1	38.4	70	90

^ano. of days from seeding to maturity

*no. of locations

**TESTING AREA V
BARLEY
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Albany	4.48	61.5	39.6	72	0.5	90
Craig	4.16	62.5	33.3	74	0.5	91
Helena	4.35	63.7	38.2	72	1.0	89
Iona	4.26	61.2	37.4	78	1.0	89
Lester	4.54	63.7	39.7	74	1.0	90
Micmac	4.33	62.9	36.8	79	1.0	91
Morrison	4.68	64.5	39.3	76	0.5	89
Rodeo	4.22	63.1	37.2	78	0.5	91
Symko	4.77	64.2	39.7	79	1.0	90
Winthrop	4.61	61.2	34.9	78	1.0	91
AC Burman	5.19	59.9	33.6	82	1.0	90
Chapais	5.11	59.4	41.0	73	0.5	89
Etienne	5.01	60.0	38.0	79	1.0	90
Joly	4.59	57.2	33.7	80	0.5	90
Leger	5.03	59.8	34.9	88	1.0	91
Maskot	4.56	60.2	35.1	82	1.0	91
OAC Kippen	4.91	61.5	33.6	84	2.5	89
Sabina	4.77	60.2	36.4	85	1.0	92

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1989-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Albany	4.53	61.1	42.3	74	1.0	91
Craig	4.43	61.7	37.3	76	0.9	92
Helena	4.34	62.9	41.1	73	1.0	91
Iona	4.48	61.4	40.9	79	1.3	90
Lester	4.68	62.5	42.7	75	1.6	91
Micmac	4.48	62.1	40.5	81	1.3	92
Morrison	4.83	63.4	42.2	77	0.9	90
Rodeo	4.41	62.5	40.9	79	0.9	92
Symko	4.80	63.3	42.8	79	1.3	91
Winthrop	4.73	61.2	39.2	80	1.2	93
Chapais	5.17	59.6	43.4	76	0.7	90
Etienne	5.02	59.1	40.3	82	0.9	91
Joly	4.93	57.4	36.5	82	1.3	91
Leger	5.04	59.2	37.6	91	1.5	91
Maskot	4.65	59.9	38.6	86	1.1	92
OAC Kippen	4.91	60.5	36.9	86	2.3	90
Sabina	5.12	60.6	40.3	87	1.0	92

^ano. of days from seeding to maturity

**TESTING AREA V
BARLEY
YIELD in kg per ha, 1991**

Cultivar	Temiskaming	Temiskaming	Nipissing	Thunder Bay	Rainy River	Average			
	I	II	Sudbury	District	District*	t/ha	lbs/a	bu/a	Rank
Albany	5898	2909	4129	5213	2058	4.54	4054	84.4	22
Craig	5160	2831	4167	4709	2538	4.22	3768	78.5	28
Helena	5567	2788	4932	4601	2456	4.47	3991	83.1	23
Iona	5069	3172	4361	5665	2074	4.57	4080	85.0	21
Lester	6098	2833	4356	5480	2655	4.69	4188	87.2	16
Micmac	5195	2968	4246	5162	2687	4.39	3920	81.7	25
Morrison	5479	3061	4861	5792	2987	4.80	4286	89.3	12
Rodeo	5027	2932	4449	4927	2662	4.33	3866	80.5	26
Symko	5716	3297	4988	5180	2414	4.80	4286	89.3	12
Winthrop	5936	3492	4485	5719	3194	4.91	4384	91.3	11
TR 941	5746	2756	5121	5297	2332	4.73	4223	88.0	15
MB-88-3	5279	2843	5097	5238	2726	4.61	4116	85.8	20
QB 243.13	5709	2871	4490	5431	3448	4.63	4134	86.1	19
AC Burman	6753	4007	4719	5173	3542	5.16	4607	96.0	1
Chapais	5340	3613	4494	5685	4199	4.78	4268	88.9	14
Etienne	6194	3702	4976	5316	3066	5.05	4509	93.9	9
Joly	5188	3596	3906	5008	3861	4.43	3955	82.4	24
Leger	6235	3866	4668	5520	2664	5.07	4527	94.3	6
Maskot	5879	3750	5001	5640	2708	5.07	4527	94.3	6
OAC Kippen	6246	3450	5286	5412	2807	5.10	4554	94.9	5
Sabina	5901	3641	4871	5648	2481	5.02	4482	93.4	10
CD Buck	5030	2815	4107	5091	2671	4.26	3804	—	27
BT 490	6133	3347	5827	5305	3101	5.15	4598	95.8	2
OB 956-13	5617	3198	4529	5280	2904	4.66	4161	86.7	18
OB 959-7	5705	4199	4600	5765	2198	5.07	4527	94.3	6
TBC 891-6	6514	3354	4880	5793	3470	5.14	4589	95.6	3
QB 232.7	5981	3391	4818	6282	3203	5.12	4571	95.2	4
OS 86-03.31	5691	3594	4516	4899	3475	4.68	4179	87.1	17
Mean	5724	3295	4674	5365	2876	4.76	4250	89.0	—
C.V. %	9.6	11.8	13.6	9.4	24.5	—	—	—	—
LSD (0.05)	305	216	355	711	990	—	—	—	—

* Data not included in mean

**TESTING AREA VI
BARLEY
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (1)*	hl/wt kg (1)	Kernel weight g/1000 (1)	Height cm (1)	Lodging 0-9 (1)	Maturity* days (1)
Albany	4.92	67.7	47.4	64	0.0	100
Craig	4.72	68.3	44.5	66	0.3	101
Helena	5.19	69.2	48.7	68	1.5	99
Iona	4.78	66.4	46.1	70	1.0	100
Lester	5.37	67.9	50.6	66	2.0	99
Micmac	4.87	66.9	44.0	69	2.5	100
Morrison	5.43	69.1	48.8	69	2.0	101
Rodeo	4.70	68.2	46.3	74	0.8	100
Symko	4.94	68.7	48.0	71	0.8	101
Winthrop	5.32	67.6	46.5	75	1.0	102
TR 941	5.41	65.6	44.7	69	2.3	103
MB-88-3	5.42	67.5	49.5	63	0.8	101
QB 243.13	4.60	65.9	46.8	75	1.0	99
AC Burman	5.35	65.4	40.1	85	0.5	102
Chapais	5.41	61.5	45.6	60	1.5	97
Etienne	5.17	65.4	39.3	70	1.5	99
Joly	5.29	64.4	43.5	84	1.0	99
Leger	5.77	63.4	43.1	91	0.3	101
Maskot	4.95	66.3	43.0	86	0.0	101
OAC Kippen	5.31	64.9	40.6	84	1.5	100
Sabina	5.39	62.6	41.0	77	0.3	101
CD Buck	4.91	69.1	37.8	81	0.8	101
BT 490	5.43	60.3	41.4	69	2.5	99
OB 956-13	4.84	63.2	43.4	84	0.3	100
OB 959-7	5.09	64.9	43.8	98	0.3	104
TBC 891-6	4.71	64.5	40.6	79	1.5	102
QB 232.7	4.95	64.4	41.7	85	0.0	103
OS 86-03.31	4.84	63.1	41.7	71	0.0	101

*no. of days from seeding to maturity

*no. of locations

**TESTING AREA VI
BARLEY
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9*	Maturity* days
Albany	3.33	62.9	39.3	63	0.0	103
Craig	3.21	63.7	36.3	62	0.3	104
Helena	3.39	64.9	39.6	62	1.5	103
Iona	3.25	61.1	38.3	68	1.0	103
Lester	3.67	63.9	42.3	65	2.0	103
Micmac	3.40	62.5	35.8	65	2.5	104
Morrison	3.77	65.1	40.4	68	2.0	104
Rodeo	3.20	64.6	38.8	68	0.8	104
Symko	3.47	66.2	41.3	69	0.8	104
Winthrop	3.48	62.2	36.3	70	1.0	105
AC Burman	3.68	61.2	33.5	78	0.5	106
Chapais	4.11	59.9	40.0	60	1.5	102
Etienne	3.57	61.5	32.4	67	1.5	104
Joly	3.79	60.1	34.4	76	1.0	103
Leger	4.02	60.9	34.4	86	0.3	105
Maskot	3.52	63.3	35.9	73	0.0	104
OAC Kippen	3.80	61.6	34.6	76	1.5	104
Sabina	3.83	60.0	32.6	75	0.3	104

*no. of days from seeding to maturity

*1991 data only

AGRONOMIC DATA, 1989-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9*	Maturity* days
Albany	4.13	65.6	41.3	69	0.5	101
Craig	4.07	66.8	38.3	68	1.3	102
Helena	4.09	67.5	41.0	71	2.7	102
Iona	3.95	64.2	39.8	73	2.8	101
Lester	4.30	66.4	43.8	72	2.5	101
Micmac	4.19	65.3	37.6	72	3.3	102
Morrison	4.56	67.4	42.8	73	2.7	102
Rodeo	4.05	66.9	40.7	75	1.7	102
Symko	4.23	68.4	43.3	75	1.7	102
Winthrop	4.23	65.1	39.0	74	2.3	102
Chapais	4.74	62.3	42.5	69	1.7	100
Etienne	4.42	63.5	35.3	74	2.5	102
Joly	4.68	63.1	37.1	81	2.2	101
Leger	4.82	63.1	36.0	90	2.2	103
Maskot	4.32	65.4	37.3	81	1.7	102
OAC Kippen	4.27	62.9	36.2	81	3.2	101
Sabina	4.56	63.6	34.9	81	2.1	102

*no. of days from seeding to maturity

*1989, 1991 data only

**TESTING AREA VI
BARLEY
YIELD in kg per ha, 1991**

Cultivar	Cochrane	Average			Rank
		t/ha	lbs/a	bu/a	
Albany	4918	4.92	4393	91.5	19
Craig	4715	4.72	4214	87.8	25
Helena	5185	5.19	4634	96.5	13
Iona	4779	4.78	4268	88.9	24
Lester	5370	5.37	4795	99.9	8
Micmac	4871	4.87	4348	90.6	21
Morrison	5425	5.43	4848	101.0	2
Rodeo	4696	4.70	4196	87.4	27
Symko	4936	4.94	4411	91.9	18
Winthrop	5324	5.32	4750	99.0	10
TR 941	5407	5.41	4830	100.6	5
MB-88-3	5416	5.42	4839	100.8	4
QB 243.13	4604	4.60	4107	85.6	28
AC Burman	5351	5.35	4777	99.5	9
Chapais	5407	5.41	4830	100.6	5
Etienne	5167	5.17	4616	96.2	14
Joly	5287	5.29	4723	98.4	12
Leger	5766	5.77	5152	107.3	1
Maskot	4945	4.95	4420	92.1	16
OAC Kippen	5305	5.31	4741	98.8	11
Sabina	5388	5.39	4813	100.3	7
CD Buck	4908	4.91	4384	—	20
BT 490	5434	5.43	4848	101.0	2
OB 956-13	4844	4.84	4321	90.0	22
OB 959-7	5093	5.09	4545	94.7	15
TBC 891-6	4705	4.71	4205	87.6	26
QB 232.7	4954	4.95	4420	92.1	16
OS 86-03.31	4844	4.84	4321	90.0	22
Mean	5109	5.11	4563	95.2	—
C.V. %	10.7	—	—	—	—
LSD (0.05)	755	—	—	—	—

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1991

OATS

- AC Stewart (OA 796-15) - a yellow-hulled oat developed by Agriculture Canada, Ottawa from the cross 4*Ogle/OT219. AC Stewart is essentially a rust resistant Ogle. Registered in 1991.
- Donald - a daylength insensitive Ottawa selection from a complex hybrid having three oat species in its lineage. Parentage - CAV2700/Gemini/2/Rodney/2/CAV2700/Gemini. It is early, high yielding resistant to smut and tolerant to BYD but susceptible to rust and septoria. Large kernels, thin hull and low % of double oats. Acceptable for milling. Registered in 1982.
- Donegal (TO 85025) - an oat developed by W.G. Thompson and Sons from the cross Ogle/QO183.3. Registered in 1991.
- Marion - a Quebec (Ste. Foy) high yielding, early selection from the cross QO130.4/Q051.27. Maturity range between Ogle and OAC Woodstock. Large kernels high hectolitre weight and low % hull. Resistant to Victoria blight. Susceptible to smut, crown rust and septoria. Acceptable for milling. Registered in 1984.
- Newman - daylength insensitive white oat developed by Agriculture Canada, Ottawa from rust resistant backcross to Donald (Donald*4/OT219).
- Ogle - an Illinois selection (ILL73-2664, CI9401) from the cross BRAVE2 x TYLER EDGOLON23. It is an early, yellow oat with short straw and resistance to BYD, tolerant to crown rust, susceptible to smut. Acceptable for milling. Registered in 1984.
- Robert - a tan-hulled oat developed by Agriculture Canada, Winnipeg from the cross OT212/RL3064. Robert has good crown rust resistance and tolerance to BYDV. Registered in 1988.
- Ultima - an oat cultivar developed by Agriculture Canada (Ste. Foy), from the cross Manic//RL-2892/Kent. Registered in 1989.
- OA 804-5 - a white-hulled oat developed by Agriculture Canada, Ottawa from the cross 01146-9/OT210. Not registered for sale in Canada.
- QO 256.39 - an oat developed by Agriculture Canada, Ste-Foy from the cross Ogle//2897/Kent/3/QO174.19. Not registered for sale in Canada.
- AC Hill (NO 826-3) - a hulless oat developed by Agriculture Canada, Ottawa from the cross 01146-9/OT210. Registered in 1991.
- AC Lotta (NO 820-3) - a hulless oat developed by Agriculture Canada, Ottawa from the cross 04186/OA501-1. Registered in 1991.

- Tibor** - a hulless (naked) Ottawa selection with a complex parentage. It has good lodging resistance coupled with tall plant height and early maturity. Resistant to smut and Victoria blight and a "slow rust" to prevalent races in E. Canada. Registered in 1985.
- NO 825-1** - a hulless oat developed by Agriculture Canada, Ottawa from the cross 04109/01394. Not registered for sale in Canada.

OATS
MEAN YIELDS IN DIFFERENT AREAS*, 1991

CULTIVAR	I (2)**		II (3)		III (6)		IV (1)		V (4)		VI (1)		PROVINCE*** (17)			
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a
AC Stewart	2.94	1	3.36	1	3.44	4	5.21	2	4.69	6	5.94	5	3.71	5	3.71	3313
Donald	2.44	4	3.30	5	3.33	7	4.23	7	4.86	4	6.16	3	3.62	3	3.62	3232
Donegal	2.57	3	2.18	7	3.59	3	4.82	5	5.26	3	6.42	2	3.85	2	3.85	3438
Marion	2.06	6	2.30	5	3.63	2	4.95	3	5.45	2	6.66	1	3.89	1	3.89	3473
Newman	2.25	5	2.64	3	3.44	4	4.62	6	4.72	5	5.82	6	3.67	6	3.67	3277
Ogle	2.63	2	2.72	2	3.39	6	5.31	1	4.48	7	6.11	4	3.71	4	3.71	3313
Ultima	1.89	7	2.39	4	4.05	1	4.88	4	5.65	1	5.82	6	4.03	6	4.03	3598
mean	2.40	-	2.56	-	3.55	-	4.86	-	5.02	-	6.13	-	3.78	-	3.78	3378
AC Hill ¹	0.55	2	1.70	2	2.62	2	3.24	2	3.23	3	4.41	3	2.50	3	2.50	2232
AC Lotta ¹	0.84	1	2.20	1	2.70	1	3.61	1	3.72	1	5.05	1	2.83	1	2.83	2527
Tibor ¹	0.50	3	1.69	3	2.46	3	3.20	3	3.28	2	4.70	2	2.46	2	2.46	2196
mean ¹	0.63	-	1.86	-	2.59	-	3.35	-	3.41	-	4.72	-	2.60	-	2.60	2318
TOTAL MEAN	1.87	-	2.35	-	3.27	-	4.41	-	4.53	-	5.71	-	3.43	-	3.43	3060

* See attached map

** no. of locations

*** weighted average

¹ hullless oats

RELATIVE YIELDS IN DIFFERENT AREAS, 1991

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
AC Stewart	123	131	97	107	93	97	98
Donald	102	90	94	87	97	100	96
Donegal	107	85	101	99	105	105	102
Marion	86	90	102	102	109	109	103
Newman	94	103	97	95	94	95	97
Ogle	110	106	95	109	89	100	98
Ultima	79	93	114	100	113	95	107
mean yield t/ha	2.40	2.56	3.55	4.86	5.02	6.13	3.78
AC Hill ¹	87	91	101	97	95	93	95
AC Lotta ¹	133	118	104	108	109	107	109
Tibor ¹	79	91	95	96	96	100	95
mean yield t/ha ¹	0.63	1.86	2.59	3.35	3.41	4.72	2.60

¹ hullless oats

OATS
MEAN YIELDS IN DIFFERENT AREAS*, 1991

CULTIVAR	I (2)**		II (3)		III (6)		IV (1)		V (4)		VI (1)		PROVINCE*** (17)	
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a
AC Stewart	2.94	1	3.36	2	3.44	7	5.21	2	4.69	9	5.94	8	3.71	3313
Donald	2.44	7	2.30	8	3.33	10	4.23	10	4.86	7	6.16	5	3.62	3232
Donegal	2.57	3	2.18	10	3.59	6	4.82	7	5.26	5	6.42	2	3.85	3438
Marion	2.06	9	2.30	8	3.63	5	4.95	4	5.45	4	6.66	1	3.89	3473
Newman	2.25	8	2.64	6	3.44	7	4.62	8	4.72	8	5.82	9	3.67	3277
Ogle	2.63	2	2.72	5	3.39	9	5.31	1	4.48	10	6.11	3	3.71	3313
Robert	2.50	6	3.42	1	3.73	4	4.99	3	5.10	6	6.03	7	4.08	3643
Ultima	1.89	10	2.39	7	4.05	1	4.88	6	5.65	2	5.82	9	4.03	3598
OA 804-5	2.57	3	3.07	3	3.83	2	4.48	9	5.46	3	6.11	3	4.10	3661
QO 256.39	2.53	5	2.96	4	3.77	3	4.93	5	5.72	1	6.09	6	4.14	3696
mean yield t/ha	2.44	-	2.73	-	3.62	-	4.84	-	5.14	-	6.12	-	3.88	3464
AC Hill ¹	0.55	3	1.70	3	2.62	2	3.24	2	3.23	3	4.41	4	2.50	2232
AC Lotta ¹	0.84	2	2.20	1	2.70	1	3.61	1	3.72	1	5.05	1	2.83	2527
Tibor ¹	0.50	4	1.69	4	2.46	3	3.20	3	3.28	2	4.70	2	2.46	2196
NO 825-1 ¹	0.88	1	1.95	2	2.27	4	3.18	4	3.18	4	4.45	3	2.45	2188
mean ¹ yield t/ha	0.69	-	1.88	-	2.51	-	3.31	-	3.35	-	4.65	-	2.56	2286
TOTAL MEAN	1.94	-	2.49	-	3.30	-	4.40	-	4.63	-	5.70	-	3.51	3128

* See attached map
 ** No. of locations
 *** Weighted Average
¹ Hulless oats

OATS
MEAN YIELDS IN DIFFERENT AREAS, 1990-91

CULTIVAR	I (3)*		II (6)		III (11)		IV (2)		V (8)		**VI (1)		PROVINCE*** (31)	
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a
Donald	3.18	3	2.90	6	3.19	6	4.64	6	4.65	5	6.16	3	3.68	3286
Donegal	3.67	2	3.11	3	3.53	2	5.13	2	4.95	1	6.42	2	4.00	3571
Marion	2.80	5	3.01	4	3.47	3	5.07	4	4.95	1	6.66	1	3.83	3420
Newman	3.07	4	3.13	2	3.25	5	4.80	5	4.43	6	5.82	5	3.68	3286
Ogle	3.80	1	3.49	1	3.28	4	5.41	1	4.78	3	6.11	4	3.98	3554
Ultima	2.61	6	2.93	5	3.60	1	5.13	2	4.67	4	5.82	5	3.79	3384
mean	3.19	-	3.10	-	3.39	-	5.03	-	4.74	-	6.17	-	3.83	3417
Tibor ¹	0.72	1	1.80	1	2.14	1	3.48	1	2.64	1	4.70	1	2.21	1973
TOTAL MEAN	2.84	-	2.91	-	3.21	-	4.81	-	4.44	-	5.96	-	3.60	3214

* no. of locations

** 1991 Data only

¹ hullless oat

RELATIVE YIELDS IN DIFFERENT AREAS, 1990-91

CULTIVAR	I	II	III	IV	V	VI*	PROVINCE
Donald	102	94	96	92	100	100	97
Donegal	113	99	104	102	105	104	104
Marion	88	97	106	101	100	108	100
Newman	97	102	95	96	95	94	97
Ogle	117	112	92	108	103	99	103
Ultima	82	96	107	102	99	94	99
mean yield t/ha	3.19	3.10	3.39	5.03	4.74	6.17	3.83
Tibor ¹	100	100	100	100	100	100	100
mean yield t/ha ¹	0.72	1.80	2.14	3.48	2.64	4.70	2.21

* 1991 Data only

¹ hullless oat

OATS
MEAN YIELDS IN DIFFERENT AREAS, 1988-91

CULTIVAR	I (6)*		II (13)		III (20)		IV (8)		V (14)		**VI (3)		PROVINCE (64)	
	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	RANK	t/ha	lbs/a
Donald	3.31	3	2.92	5	3.36	5	3.89	5	4.04	5	4.79	4	3.54	3161
Marion	3.31	3	3.15	4	3.74	2	4.46	3	4.93	2	5.21	2	3.91	3491
Newman	3.34	2	3.16	3	3.55	4	4.40	4	4.28	4	4.97	3	3.73	3330
Ogle	3.80	1	3.49	1	3.59	3	4.49	2	4.42	3	4.78	5	3.95	3527
Ultima	3.17	5	3.24	2	3.98	1	4.50	1	5.00	1	5.67	1	4.00	3571
mean yield t/ha	3.39	-	3.19	-	3.64	-	4.35	-	4.53	-	5.08	-	3.82	3416
Tibor ¹	1.00	1	1.95	1	2.38	1	3.08	1	2.70	1	3.41	1	2.30	2054
TOTAL MEAN	2.99	-	2.98	-	3.43	-	4.14	-	4.23	-	4.81	-	3.57	3189

* no. of locations
** 1988-89, 1991 data only
¹ hullless oat

RELATIVE YIELDS IN DIFFERENT AREAS, 1988-91

CULTIVAR	I	II	III	IV	V	*VI	PROVINCE
Donald	101	91	83	92	92	94	93
Marion	97	100	104	103	106	102	103
Newman	100	98	96	97	94	98	97
Ogle	109	108	95	100	97	97	100
Ultima	91	102	109	102	109	109	104
mean yield t/ha	3.39	3.19	3.64	4.35	4.53	5.08	3.82
Tibor ¹	100	100	100	100	100	100	100
mean yield t/ha ¹	1.00	1.95	2.38	3.08	2.70	3.41	2.30

* 1988-89, 1991 Data only
¹ hullless oat

**TESTING AREA I
OATS
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (2)*	hl/wt kg (2)	Height cm (2)	Lodging 0-9 (1)	Maturity* days (1)	Leaf rust 0-9 (1)	B.Y.D.V. 0-9 (2)
AC Stewart	2.94	41.7	78	0.0	88	1.3	0.4
Donald	2.44	43.4	90	1.8	90	6.0	1.9
Donegal	2.57	40.5	92	1.0	95	4.7	0.3
Marion	2.06	38.8	98	2.0	90	5.5	2.3
Newman	2.25	43.3	91	0.8	93	1.3	2.8
Ogle	2.63	40.7	79	0.5	88	3.7	0.3
Robert	2.50	42.2	84	0.5	94	0.0	2.1
Ultima	1.89	37.4	89	0.0	94	3.5	4.7
OA 804-5	2.57	38.3	91	0.2	97	0.0	2.7
QO 256.39	2.53	39.6	87	0.0	97	4.0	1.9
AC Hill	0.55	52.5	99	0.0	99	0.7	4.8
AC Lotta	0.84	55.0	92	0.0	97	1.7	3.7
Tibor	0.50	54.5	93	0.0	97	3.7	5.5
NO 825-1	0.88	56.4	109	0.5	98	2.3	3.9

*no. of days from seeding to maturity

*no. of locations

**TESTING AREA I
OATS
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Height cm	Lodging 0-9	Maturity ^a days	Leaf rust 0-9	B.Y.D.V. 0-9
Donald	3.18	43.5	103	1.9	97	3.0	1.5
Donegal	3.67	42.3	104	2.0	102	2.4	0.2
Marion	2.80	39.0	108	2.0	99	2.8	1.7
Newman	3.07	43.5	101	1.9	98	0.7	1.9
Ogle	3.80	43.2	90	1.3	95	1.9	0.2
Ultima	2.61	38.8	97	1.0	101	2.4	3.4
Tibor	0.72	50.5	99	0.5	101	1.9	3.8

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1988-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000*	Height cm	Lodging 0-9	Maturity ^a days
Donald	3.31	44.8	34.9	103	2.7	100
Marion	3.31	41.7	35.1	109	2.8	101
Newman	3.34	44.7	36.5	101	2.2	101
Ogle	3.80	43.3	30.3	93	0.7	99
Ultima	3.17	40.4	31.0	98	1.3	103
Tibor	1.00	52.9	25.4	105	1.5	102

^ano. of days from seeding to maturity

*1988-89 data only

**TESTING AREA I
OATS
YIELD in kg per ha, 1991**

Cultivar	Kent I	Lambton	Average			Rank
			t/ha	lbs/a	bu/a	
AC Stewart	2630	3240	2.94	2625	77.2	1
Donald	2440	2430	2.44	2179	64.1	7
Donegal	2370	2770	2.57	2295	67.5	3
Marion	2240	1870	2.06	1839	54.1	9
Newman	2240	2260	2.25	2009	59.1	8
Ogle	2710	2550	2.63	2348	69.1	2
Robert	2140	2860	2.50	2232	65.7	6
Ultima	2190	1590	1.89	1688	49.6	10
OA 804-5	2450	2690	2.57	2295	67.5	3
QO 256.39	2430	2620	2.53	2259	66.4	5
AC Hill	260	840	0.55	491	—	13
AC Lotta	550	1130	0.84	750	—	12
Tibor	260	740	0.50	446	—	14
NO 825-1	320	1440	0.88	786	—	11
Mean	1800	2070	1.94	1732	64.0	—
C.V. %	12.9	14.3	—	—	—	—
L.S.D. (0.05)	400	310	—	—	—	—

**TESTING AREA II
OATS
AGRONOMIC DATA, 1991**

Cultivar	Yield	hl/wt	Kernel weight	Height	Lodging	Maturity ^a	Leaf	B.Y.D.V.	Septoria
	t/ha (3)*	kg (3)	g/1000 (3)	cm (1)	0-9 (2)	days (2)	rust 0-9 (1)	0-9 (2)	0-9 (2)
AC Stewart	3.36	42.0	37.0	78	3.5	87	1.5	2.0	3.3
Donald	2.30	39.6	31.2	80	4.5	87	8.0	2.0	4.8
Donegal	2.18	36.1	28.0	90	2.5	89	6.8	1.0	1.8
Marion	2.30	37.7	30.3	87	4.5	88	7.5	2.5	2.8
Newman	2.64	43.1	34.0	84	4.5	88	2.3	2.0	4.0
Ogle	2.72	40.3	28.8	74	3.5	87	5.8	1.0	3.3
Robert	3.42	43.9	38.3	79	2.0	89	0.0	2.0	2.8
Ultima	2.39	38.6	28.5	85	2.5	90	6.8	3.0	3.8
OA 804-5	3.07	40.5	35.7	90	3.0	90	0.0	1.5	2.3
QO 256.39	2.96	40.6	36.4	87	4.0	89	5.3	2.0	3.0
AC Hill	1.70	50.6	27.5	97	3.0	89	0.8	2.0	3.0
AC Lotta	2.20	53.3	24.6	91	4.0	88	1.3	1.5	2.8
Tibor	1.69	52.4	26.0	95	4.0	87	5.8	2.0	3.3
NO 825-1	1.95	56.1	29.6	107	4.0	89	1.5	2.5	3.8

^ano. of days from seeding to maturity

*no. of locations

**TESTING AREA II
OATS
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity* days	Leaf rust 0-9	B.Y.D.V. 0-9	Septoria 0-9
Donald	2.90	43.2	33.8	97	4.4	94	6.9	3.4	5.6
Donegal	3.11	42.5	32.4	98	2.8	95	6.2	1.5	3.4
Marion	3.01	42.2	33.5	101	4.0	95	6.8	3.7	4.2
Newman	3.13	44.8	35.0	95	4.4	95	1.2	3.0	5.2
Ogle	3.49	45.3	31.4	83	2.0	94	5.3	1.5	4.6
Ultima	2.93	41.5	30.0	93	2.0	97	5.7	3.5	4.9
Tibor	1.80	54.9	27.5	105	3.5	94	4.9	4.2	4.7

*no. of days from seeding to maturity

AGRONOMIC DATA, 1988-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Lodging 0-9	Maturity* days	Septoria 0-9
Donald	2.92	45.5	34.4	95	3.5	97	4.7
Marion	3.15	44.6	35.6	100	3.5	100	4.0
Newman	3.16	47.5	36.4	93	3.7	94	4.8
Ogle	3.49	46.3	31.4	84	1.4	87	3.5
Ultima	3.24	44.2	31.8	90	2.2	91	—
Tibor	1.95	55.3	27.7	103	3.3	101	3.9

*no. of days from seeding to maturity

**TESTING AREA II
OATS
YIELD in kg per ha, 1991**

Cultivar	Oxford	Middlesex I	Huron	Average			Rank
				t/ha	lbs/a	bu/a	
AC Stewart	4537	3513	2028	3.36	3000	88.2	2
Donald	2138	2608	2155	2.30	2054	60.4	8
Donegal	1872	2409	2246	2.18	1946	57.2	11
Marion	2420	2564	1919	2.30	2054	60.4	8
Newman	3042	3079	1811	2.64	2357	69.3	6
Ogle	2840	3187	2137	2.72	2429	71.4	5
Robert	4208	3531	2517	3.42	3054	89.8	1
Ultima	2550	2590	2028	2.39	2134	62.8	7
OA 804-5	4129	3151	1919	3.07	2741	80.6	3
QO 256.39	3597	2916	2354	2.96	2643	77.7	4
AC Hill	2297	1738	1050	1.70	1518	—	13
AC Lotta	2646	2336	1630	2.20	1964	—	10
Tibor	1788	1847	1430	1.69	1509	—	14
NO 825-1	2410	2246	1195	1.95	1741	—	12
Mean	2891	2694	1888	2.49	2223	71.8	—
C.V. %	5.7	9.0	9.8	—	—	—	—
L.S.D. (0.05)	234	345	263	—	—	—	—

**TESTING AREA III
OATS
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (6)*	hl/wt kg (6)	Kernel weight g/1000 (6)	Height cm (6)	Lodging 0-9 (2)	Maturity ^a days (3)
AC Stewart	3.44	47.9	38.9	83	0.8	79
Donald	3.33	51.0	36.2	85	2.5	80
Donegal	3.59	47.5	33.5	89	1.0	82
Marion	3.63	49.1	35.0	92	2.0	80
Newman	3.44	51.5	38.1	84	2.0	80
Ogle	3.39	48.7	29.5	75	0.5	78
Robert	3.73	49.4	38.0	83	2.5	81
Ultima	4.05	49.0	33.3	86	0.5	81
OA 804-5	3.83	51.1	37.3	88	0.8	82
QO 256.39	3.77	49.5	36.3	89	0.5	81
AC Hill	2.62	54.6	29.1	101	0.5	82
AC Lotta	2.70	53.3	29.1	94	0.5	80
Tibor	2.46	54.5	32.0	100	1.0	80
NO 825-1	2.27	57.5	32.6	107	0.5	82

^ano. of days from seeding to maturity

*no. of locations

**TESTING AREA III
OATS
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel Weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Donald	3.19	49.9	37.4	99	3.3	89
Donegal	3.53	47.7	36.3	97	3.5	91
Marion	3.47	48.7	37.4	103	2.9	90
Newman	3.25	50.6	38.4	94	3.5	89
Ogle	3.28	48.2	31.0	85	2.0	88
Ultima	3.60	41.2	33.4	93	2.0	91
Tibor	2.14	43.5	32.2	108	1.7	89

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1988-91

Cultivar	Yield t/ha	hl/wt kg	Kernel Weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Donald	3.36	48.4	36.1	93	3.3	91
Marion	3.74	47.8	36.5	100	3.6	91
Newman	3.55	49.0	37.3	92	3.0	91
Ogle	3.59	47.4	30.3	82	1.9	89
Ultima	3.98	46.2	32.9	89	1.7	92
Tibor	2.38	52.5	30.4	103	1.8	92

^ano. of days from seeding to maturity

**TESTING AREA III
OATS
YIELD in kg per ha, 1991**

Cultivar	Carleton I	Renfrew I	Lanark	Prescott &		Stormont Dundas & Glengarry	Average			Rank
				Russell	Grenville		t/ha	lbs/a	bu/a	
AC Stewart	2454	2530	2207	5426	4572	3284	3.44	3071	90.3	7
Donald	2391	3070	2324	4522	4268	3372	3.33	2973	87.4	10
Donegal	1744	3586	2532	5653	4633	3368	3.59	3205	94.3	6
Marion	2872	3433	2649	4769	4663	3375	3.63	3251	95.3	5
Newman	2737	3290	2358	4661	4215	3376	3.44	3071	90.3	7
Ogle	2107	2874	2244	5601	4399	3085	3.39	3027	89.0	9
Robert	2383	3551	2600	5905	4266	3655	3.73	3330	98.0	4
Ultima	2935	3647	2950	6057	5033	3692	4.05	3616	106.4	1
OA 804-5	2170	4086	2540	5772	4865	3517	3.83	3420	100.6	2
QO 256.39	2507	3518	2950	5610	4495	3539	3.77	3366	99.0	3
AC Hill	1696	2461	2070	4063	2984	2423	2.62	2339	—	12
AC Lotta	1976	2385	1769	4318	3258	2481	2.70	2411	—	11
Tibor	1852	2380	1677	3776	2660	2394	2.46	2196	—	13
NO 825-1	1472	2252	1754	3131	2883	2126	2.27	2027	—	14
Mean	2235	3076	2330	4947	4083	3121	3.30	2946	95.1	—
C.V. %	11.0	7.6	8.5	7.3	8.5	9.6	—	—	—	—
L.S.D. (0.05)	351	335	284	517	500	429	—	—	—	—

**TESTING AREA IV
OATS
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (1)*	hl/wt kg (1)	Kernel weight g/1000 (1)	Height cm (1)	Lodging 0-9 (1)	Maturity ^a days (1)	Leaf rust 0-9 (1)	Septoria 0-9 (1)
AC Stewart	5.21	49.3	44.2	78	1.0	81	0.5	3.5
Donald	4.23	52.4	37.4	80	5.5	83	5.5	7.0
Donegal	4.82	51.8	41.4	93	1.5	88	7.0	6.0
Marion	4.95	49.9	42.2	93	5.0	84	5.0	4.0
Newman	4.62	52.4	38.6	78	3.0	85	1.0	6.0
Ogle	5.31	51.1	36.6	80	0.5	82	3.5	4.5
Robert	4.99	51.1	45.0	85	0.5	87	0.0	4.0
Ultima	4.88	49.9	35.6	80	0.0	87	3.5	3.5
OA 804-5	4.48	48.0	36.8	93	5.5	88	0.0	4.0
QO 256.39	4.93	52.4	37.2	93	5.5	87	3.0	1.5
AC Hill	3.24	61.7	33.6	100	4.5	87	1.0	3.5
AC Lotta	3.61	59.9	30.0	90	1.5	84	1.0	4.0
Tibor	3.20	60.5	35.0	98	3.5	84	3.0	5.5
NO 825-1	3.18	65.5	38.2	105	2.5	86	2.0	6.0

^ano. of days from seeding to maturity

*no. of locations

**TESTING AREA IV
OATS
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Maturity ^a days	Leaf rust 0-9	Septoria 0-9
Donald	4.64	51.5	37.4	93	91	6.3	7.0
Donegal	5.13	50.9	39.8	97	95	6.5	5.5
Marion	5.07	50.5	41.1	101	92	4.3	4.5
Newman	4.80	52.4	39.2	89	93	0.5	6.5
Ogle	5.41	50.2	34.8	88	91	3.0	4.5
Ultima	5.13	48.7	34.8	86	95	3.3	4.3
Tibor	3.48	60.8	32.5	103	92	3.5	5.0

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1988-91

Cultivar	Yield t/ha	hl/wt kg	Kernel weight g/1000	Height cm	Maturity ^a days	Septoria 0-9
Donald	3.89	47.5	35.4	91	87	4.8
Marion	4.46	47.8	38.5	97	89	3.6
Newman	4.40	49.9	39.1	89	88	4.4
Ogle	4.49	46.4	34.3	83	87	3.5
Ultima	4.50	44.8	33.9	85	89	4.5
Tibor	3.08	55.5	30.4	98	90	3.5

^ano. of days from seeding to maturity

**TESTING AREA IV
OATS
YIELD in kg per ha, 1991**

Cultivar	Wellington I	Average			Rank
		t/ha	lbs/a	bu/a	
AC Stewart	5209	5.21	4652	136.8	2
Donald	4231	4.23	3777	111.1	10
Donegal	4816	4.82	4304	126.6	7
Marion	4951	4.95	4420	130.0	4
Newman	4623	4.62	4125	121.3	8
Ogle	5314	5.31	4741	139.4	1
Robert	4990	4.99	4455	131.0	3
Ultima	4877	4.88	4357	128.2	6
OA 804-5	4477	4.48	4000	117.6	9
QO 256.39	4929	4.93	4402	129.4	5
AC Hill	3241	3.24	2893	—	12
AC Lotta	3605	3.61	3223	—	11
Tibor	3202	3.20	2857	—	13
NO 825-1	3183	3.18	2839	—	14
Mean	4403	4.40	3929	127.1	—
C.V. %	5.3	—	—	—	—
L.S.D. (0.05)	333	—	—	—	—

**TESTING AREA V
OATS
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (4)*	hl/wt kg (4)	Kernel Weight g/1000 (4)	Height cm (5)	Lodging 0-9 (2)	Maturity ^a days (4)
AC Stewart	4.69	47.7	36.8	85	1.0	88
Donald	4.86	51.0	34.2	93	1.5	89
Donegal	5.26	49.0	35.5	101	2.5	92
Marion	5.45	51.6	37.1	103	2.5	89
Newman	4.72	49.7	34.9	94	3.0	89
Ogle	4.48	48.2	30.2	81	0.5	89
Robert	5.10	50.8	36.8	93	1.0	91
Ultima	5.65	49.4	32.3	94	1.5	91
OA 804-5	5.46	49.2	34.1	104	3.0	93
QO 256.39	5.72	52.3	35.9	102	2.0	91
AC Hill	3.23	57.7	27.7	114	2.0	93
AC Lotta	3.72	57.9	28.2	103	1.5	90
Tibor	3.28	56.2	29.8	107	2.0	90
NO 825-1	3.18	59.1	30.9	120	2.5	92

^ano. of days from seeding to maturity

*no. of locations

**TESTING AREA V
OATS
AGRONOMIC DATA, 1990-91**

Cultivar	Yield t/ha	hl/wt kg	Kernel Weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Donald	4.65	47.8	37.1	102	1.8	93
Donegal	4.95	46.3	34.2	102	2.3	96
Marion	4.95	48.1	38.6	105	1.8	93
Newman	4.43	46.7	37.7	102	2.5	93
Ogle	4.78	46.1	32.0	86	1.3	93
Ultima	4.67	44.0	33.7	98	0.8	95
Tibor	2.64	54.1	29.1	108	1.5	94

^ano. of days from seeding to maturity

AGRONOMIC DATA, 1988-91

Cultivar	Yield t/ha	hl/wt kg	Kernel Weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Donald	4.04	47.7	35.4	94	2.6	96
Marion	4.93	49.0	37.3	98	2.4	96
Newman	4.28	47.8	36.3	93	2.9	96
Ogle	4.42	46.9	31.0	81	0.8	95
Ultima	5.00	45.4	32.1	90	1.4	97
Tibor	2.70	46.4	29.5	101	1.5	96

^ano. of days from seeding to maturity

**TESTING AREA V
OATS
YIELD in kg per ha, 1991**

Cultivar	Temiskaming	Temiskaming	Nipissing-	Thunder Bay	Rainy River	Average			
	I	II	Sudbury	District	District*	t/ha	lbs/a	bu/a	Rank
AC Stewart	5612	3871	4043	5228	1429	4.69	4188	123.2	9
Donald	5964	4075	4186	5211	1923	4.86	4339	127.6	7
Donegal	5539	4094	4538	6854	2376	5.26	4696	138.1	5
Marion	6358	4131	4849	6460	1689	5.45	4866	143.1	4
Newman	5197	3944	4077	5554	2118	4.72	4214	124.0	8
Ogle	4771	3601	3957	5584	1334	4.48	4000	117.6	10
Robert	6039	4015	4300	6050	1805	5.10	4554	133.9	6
Ultima	6710	4806	4662	6401	2173	5.65	5045	148.4	2
OA 804-5	6573	4231	4934	6085	2135	5.46	4875	143.4	3
QO 256.39	5979	5268	4766	6853	1851	5.72	5107	150.2	1
AC Hill	3173	2571	3119	4057	1113	3.23	2884	—	13
AC Lotta	4358	3105	3618	3808	1021	3.72	3321	—	11
Tibor	3727	2467	3353	3565	842	3.28	2929	—	12
NO 825-1	2965	2488	3537	2710	604	3.18	2839	—	14
Mean	5290	3762	4138	5316	1601	4.63	4134	135.0	—
C.V. %	9.7	13.1	6.8	8.1	14.1	—	—	—	—
L.S.D. (0.05)	434	417	238	618	323	—	—	—	—

*Data not included in mean

**TESTING AREA VI
OATS
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha (1)*	hl/wt kg (1)	Kernel Weight g/1000 (1)	Height cm (1)	Lodging 0-9 (1)	Maturity ^a days (1)
AC Stewart	5.94	48.5	36.6	94	0.5	98
Donald	6.16	53.9	34.4	100	2.5	97
donegal	6.42	50.8	39.8	112	2.8	105
Marion	6.66	53.4	36.7	115	0.8	98
Newman	5.82	54.3	36.5	103	1.5	97
Ogle	6.11	48.4	31.0	90	0.3	97
Robert	6.03	50.8	38.3	101	1.8	104
Ultima	5.82	49.8	33.3	102	2.3	105
OA 804-5	6.11	49.3	34.3	113	3.0	105
QO 256.39	6.09	51.6	36.7	108	2.0	104
AC Hill	4.41	62.0	31.3	121	1.5	107
AC Lotta	5.05	58.8	28.6	114	1.8	102
Tibor	4.70	59.2	32.5	119	1.5	101
NO 825-1	4.45	65.6	32.8	129	1.3	107

*no. of days from seeding to maturity

*no. of locations

**TESTING AREA VI
OATS
AGRONOMIC DATA, 1990-91***

Cultivar	Yield t/ha	hl/wt kg	Kernel Weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Donald	6.16	53.9	34.4	100	2.5	97
Donegal	6.42	50.8	39.8	112	2.8	105
Marion	6.66	53.4	36.7	115	0.8	98
Newman	5.82	54.3	36.5	103	1.5	97
Ogle	6.11	48.4	31.0	90	0.3	97
Ultima	5.82	49.8	33.3	102	2.3	105
Tibor	4.70	59.2	32.5	119	1.5	101

*no. of days from seeding to maturity

*1991 data only

AGRONOMIC DATA, 1988-91*

Cultivar	Yield t/ha	hl/wt kg	Kernel Weight g/1000	Height cm	Lodging 0-9	Maturity ^a days
Donald	4.79	53.4	33.8	96	3.7	100
Marion	5.21	52.4	34.2	104	2.5	100
Newman	4.97	52.2	36.5	96	3.0	101
Ogle	4.78	49.0	29.3	82	0.6	99
Ultima	5.67	49.9	32.2	93	2.6	104
Tibor	3.41	60.3	31.3	108	1.4	102

*no. of days from seeding to maturity

*1988-89, 1991 data only

**TESTING AREA VI
OATS
YIELD in kg per ha, 1991**

Cultivar	Cochrane	Average			Rank
		t/ha	lbs/a	bu/a	
AC Stewart	5942	5.94	5304	156.0	8
Donald	6163	6.16	5500	161.8	3
Donegal	6421	6.42	5732	168.6	2
Marion	6661	6.66	5946	174.9	1
Newman	5822	5.82	5196	152.8	9
Ogle	6108	6.11	5455	160.5	4
Robert	6034	6.03	5384	158.4	7
Ultima	5822	5.82	5196	152.8	9
OA 804-5	6108	6.11	5455	160.5	4
QO 256.39	6089	6.09	5438	159.9	6
AC Hill	4410	4.41	3938	—	14
AC Lotta	5047	5.05	4509	—	11
Tibor	4696	4.70	4196	—	12
NO 825-1	4447	4.45	3973	—	13
Mean	5698	5.70	5089	160.6	—
C.V. %	6.7	—	—	—	—
L.S.D. (0.05)	525	—	—	—	—

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1991**WINTER BARLEY**

- OAC Elmira - a six-rowed, rough awned, high yielding Guelph selection from the cross WB74-69//WB74-69/Huron with good scald, mildew and leaf rust resistance. Good tolerance to BYDV. Registered in 1987.
- OAC Halton - a six-rowed rough awned, high yielding Guelph selection from the cross WB3-20/Purdue B466-7-4, resistant to mildew, tolerant to net blotch, susceptible to BYDV. Registered in 1979.
- OAC Acton - a six-rowed, rough awned, high yielding Guelph selection from the cross WB74-69//WB74-69/Huron with improved scald and net blotch resistance. It is susceptible to new mildew races, tolerant to BYDV. Registered in 1984.
- Huron - a six-rowed, early rough awned Guelph selection with good lodging resistance and good winter hardiness. Resistant to mildew, tolerant to scald, net blotch and leaf rust. Registered in 1974.

**WINTER BARLEY
TESTING AREA I & II
AGRONOMIC DATA, 1991**

Cultivar	Yield t/ha		hl/wt kg (4)	Kemel weight g/1000 (3)	Height cm (4)	Lodging 0-9 (4)	Date		Scald 0-9 (3)	Leaf rust 0-9 (3)	B.Y.D.V. 0-9 (3)
	Area I (2)*	Area II (4)					Head (4)	Ripe (2)			
OAC Elmira	4.42	4.00	63.4	29.7	99	2.8	May 24	June 24	0.5	3.7	2.3
OAC Halton	3.95	3.11	59.8	32.4	86	1.7	22	21	5.3	4.8	3.9
OAC Acton	3.62	2.84	58.0	32.5	98	2.8	24	21	1.8	6.0	1.1
Huron	3.90	2.69	62.5	33.7	87	1.2	21	20	4.0	4.2	5.0

*no. of locations

AGRONOMIC DATA, 1985-91

Cultivar	Yield t/ha			hl/wt kg	Height cm	Lodging 0-9	Winter Survival 0-9**
	Area I (14)*	Area II (20)	Mean (34)				
OAC Elmira	4.95	4.38	4.61	63.4	99	2.8	7.0
OAC Halton	4.78	4.05	4.35	63.2	91	3.1	7.4
OAC Acton	4.61	3.89	4.19	60.0	101	3.2	6.9
Huron	4.39	3.76	4.02	63.0	88	2.4	7.3

*no. of locations

**1985-90 data only

**WINTER BARLEY
TESTING AREA I, SUMMARY 1991**

Cultivar	Yield t/ha (2)*	hl/wt kg (2)	Kernel weight g/1000 (1)	Height cm (2)	Lodging 0-9 (2)	Date		Mildew 0-9 (1)	Scald 0-9 (2)	Leaf rust 0-9 (2)	B.Y.D.V. 0-9 (1)	Helm 0-9 (1)
						Head May (2)	Ripe June (1)					
OAC Elmira	4.42	66.6	31.5	106	3.6	20	26	0	1.0	1.8	2.5	6
OAC Halton	3.95	61.1	34.0	101	1.5	19	22	0	3.0	2.5	2.5	0
OAC Acton	3.62	59.5	34.0	111	2.8	21	22	5	0.0	4.0	0.0	4
Huron	3.90	65.2	34.5	100	0.5	17	22	0	1.5	2.3	4.5	3

*no. of locations

WINTER BARLEY, TESTING AREA II, SUMMARY 1991

Cultivar	Yield t/ha (2)*	hl/wt kg (2)	Kernel weight g/1000 (2)	Height cm (2)	Lodging 0-9 (2)	Date		Scald 0-9 (1)	Leaf rust 0-9 (1)	B.Y.D.V. 0-9 (2)	Helm 0-9 (1)
						Head May (2)	Ripe June (1)				
OAC Elmira	4.00	60.1	27.8	91	1.9	27	22	0.0	5.5	2.0	4.5
OAC Halton	3.11	58.5	30.7	71	1.8	25	20	7.5	7.0	5.3	3.5•
OAC Acton	2.84	56.5	31.0	84	2.8	26	20	3.5	8.0	2.1	3.0
Huron	2.69	59.8	32.8	73	1.8	24	18	6.5	6.0	5.3	4.0

*no. of locations

**TESTING AREAS I & II
SUMMARY t/ha, 1991**

Cultivar	AREA I		AREA II		Mean Area I & II
	Kent I	Kent II	Wellington I	Middlesex I	
OAC Elmira	4.37	4.46	3.99	4.01	4.21
OAC Halton	3.28	4.62	2.28	3.93	3.53
OAC Acton	3.23	4.01	2.16	3.52	3.23
Huron	3.39	4.40	1.44	3.93	3.29
Mean	3.57	4.37	2.47	3.85	3.56
C.V. %	14.7	12.1	9.4	17.4	14.2
L.S.D. (0.05)	.25	.85	.28	1.08	.81

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

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LEGEND

 YLD - YIELD (T/HA; 1 T/HA = 14.87 BU/AC)
 TSTW - TEST WEIGHT (KG/HL)
 KW - KERNEL WEIGHT (MG)
 SUR - SURVIVAL (%)
 LOG - LODGING
 HGT - HEIGHT (CM)
 HDT - HEADING DATE
 MIL - MILDEW
 LRS - LEAF RUST
 SEP - SEPTORIA
 GLB - GLUME BLOTCH
 HBL - HEAD BLIGHT
 SSM - SPINDLE STREAK MOSAIC VIRUS
 BYD - BARLEY YELLOW DWARF VIRUS

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

LOCATIONS ABBREVIATIONS

BH	BATH
EA	ELORA
HW	HARROW
ID	INWOOD
KE	KEMPTVILLE
LN	LONDON
MH	MORPETH
NN	NAIRN
O1	OTTAWA-1
O2	OTTAWA-2
RW	RENFREW
RN	RIDGTOWN
WE	WOODSLEE
WK	WOODSTOCK

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

DESCRIPTION OF REGISTERED VARIETIES

FREDRICK:

REDCOAT (C.D.6707)/5/GENESEE/4/(WASHINGTON-1)/RIO/REX//BREVOR/3/NORIN-10/BREVOR. FROM AGRICULTURE CANADA, OTTAWA RESEARCH STATION. SOFT WHITE TYPE WITH GOOD MILLING QUALITY BUT A TENDENCY FOR TOO HIGH GRAIN PROTEIN FOR THE BEST BAKING. MEDIUM HEIGHT VARIETY WITH MEDIUM TO GOOD LODGING RESISTANCE AND MEDIUM WINTER HARDINESS. MODERATELY RESISTANT TO LEAF RUST.

HOUSER:

BREVOR/NORIN 10/NY/WHEAT - RYE SELECTION (44 CHROMOSOME LINE)/3/HOPE HUSSAR/YORKWIN/4/GENESEE//CI12658/ALASKAN/3/AVON. DEVELOPED AT CORNELL UNIVERSITY, ITHACA, NEW YORK, MARKETED IN CANADA BY W.G. THOMPSON AND SONS LTD. HIGH YIELDING, SOFT, WHITE, BEARDED TYPE, WITH GOOD MILLING AND BAKING QUALITY BUT A TENDENCY FOR LOW TEST WEIGHT. SHORT HEIGHT WITH GOOD LODGING RESISTANCE, AND WINTER HARDINESS. SUSCEPTIBLE TO LEAF RUST AND SEPTORIA.

AUGUSTA:

GENESEE/REDCOAT, A2747//YORKSTAR. DEVELOPED AT MICHIGAN STATE UNIVERSITY, CROP SCIENCE DEPT., EAST LANSING, MICHIGAN. MARKETED IN CANADA BY W.G. THOMPSON AND SONS LTD. GOOD YIELDING, SOFT WHITE VARIETY WITH GOOD MILLING AND BAKING QUALITY HOWEVER A TENDENCY FOR LOW TEST WEIGHT. SUSCEPTIBLE TO LEAF RUST.

FRANKENMUTH:

NORIN 10/BREVOR 14/YORKWIN/3/2* GENESEE, A3141/4/GENESEE *3/REDCOAT, A5115. DEVELOPED AT MICHIGAN STATE UNIVERSITY, CROP SCIENCE DEPT., EAST LANSING, MICHIGAN. MEDIUM HEIGHT, BEARDLESS, AND BROWN CHAFFED. ONE DAY LATER THAN FREDRICK. SELECTED FOR HESSIAN FLY RESISTANCE, SUSCEPTIBLE TO GLUME BLOTCH. RELATIVELY LOW GRAIN AND FLOUR PROTEIN CONTENT.

HARUS:

FREDRICK/YORKSTAR - FROM AGRICULTURE CANADA, HARROW RESEARCH STATION. GOOD YIELDING, SOFT WHITE, WITH FAIR MILLING AND GOOD BAKING QUALITY. SHORT, LODGING RESISTANT, AND EARLY. SOME RESISTANCE TO WHEAT SPINDLE STREAK MOSAIC VIRUS. TEST WEIGHT COMPARABLE TO FRANKENMUTH. SUSCEPTIBLE TO GLUME BLOTCH.

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

DESCRIPTION OF REGISTERED VARIETIES

ENA:

FREDRICK/HOUSER - FROM AGRICULTURE CANADA, HARROW RESEARCH STATION. BEARDED SOFT WHITE VARIETY WITH ACCEPTABLE QUALITY AND HIGH TEST WEIGHT. GOOD YIELDING IN AREAS WITH MORE THAN 2900 HEAT UNITS. OF MEDIUM HEIGHT AND WITH REASONABLE LODGING RESISTANCE. SUPERIOR TO OTHER RECOMMENDED VARIETIES IN SCAB, HOWEVER, SUSCEPTIBLE TO SEPTORIA.

ANNETTE:

N10/BVR//YW/3/2*GE(A3141)/4/GE*3/RCT(A5115)/5/FREDRICK/YORKSTAR - FROM AGRICULTURE CANADA, HARROW RESEARCH STATION. SOFT WHITE VARIETY WITH GOOD MILLING AND BAKING QUALITY. HIGH YIELDING IN AREAS 2 AND 3, OF MEDIUM HEIGHT. SUPERIOR TO OTHER RECOMMENDED VARIETIES IN MILDEW AND BYDV RESISTANCE, SUSCEPTIBLE TO LEAF RUST.

HARMIL, (OT.90.4.1):

8077B92-1/TECUMSEH//FREDRICK - FROM AGRICULTURE CANADA, OTTAWA RESEARCH STATION. Awnless soft white type with good milling and baking quality. High yielding in areas 1 and 2. A medium height variety with good lodging resistance and acceptable winter hardiness. Resistant to loose smut.

REBECCA, (TW839.3):

1A36.78.72(COLORADO COMPOSITE)/HOUSER - FROM W.G. THOMPSON & SONS LTD. BEARDED SOFT WHITE TYPE WITH GOOD MILLING AND BAKING QUALITY. VERY HIGH YIELDING IN AREAS 1 AND 2. A STRONG STRAWED, SHORT, VARIETY WITH GOOD RESISTANCE TO SEPTORIA, GLUME BLOTCH, AND HEAD BLIGHT. SUSCEPTIBLE TO LEAF RUST.

ZAVITZ, (OAC85-7s)

HOUSER/NY629817 - FROM O.A.C., UNIVERSITY OF GUELPH. A VERY HIGH YIELDING SOFT WHITE WHEAT WITH A HIGH THOUSAND KERNEL WEIGHT. TENDANCY FOR HIGHER GRAIN AND FLOUR PROTEIN LEVELS. GOOD COOKIE SPREAD. GOOD DISEASE RATINGS FOR ALL PREVALENT WHEAT DISEASES. HAS A 3 YEAR INTERIM REGISTRATION.

KARENA, (TW85.108)

AUGUSTA/H11(HARUS BULK) - FROM W.G. THOMPSON & SONS LTD. A HIGH YIELDING, WHITE CHAFFED, APICALLY AwnLETED SOFT WHITE VARIETY WITH VERY STRONG STRAW. LOW FLOUR PROTEIN CONTENT AND ACCEPTABLE BAKING QUALITY. GOOD MILDEW AND HEAD BLIGHT SCORES..

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S) : 88-91
 AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	HW88N	WE88N	RN88N	ID88N	HW89N	RN89N	ID89N	MH89N	RN90N
1 FREDRICK	4.04	4.51	5.45	4.61	3.08	3.86	4.15	3.98	3.67
2 HOUSER	5.43	5.20	6.93	5.24	3.75	3.07	3.84	3.41	4.91
3 AUGUSTA	4.99	5.05	6.35	4.93	3.49	2.43	4.12	4.20	4.19
4 FRANKENMUTH	5.53	4.81	6.06	4.89	3.78	2.82	4.43	4.01	4.20
5 HARUS	4.31	4.87	5.76	4.85	4.48	3.98	4.64	4.89	4.44
6 ENA	4.79	4.93	5.92	5.21	3.62	3.63	4.31	3.30	4.57
7 ANNETTE	4.82	4.91	6.25	5.01	4.31	3.01	4.32	4.65	4.59
8 HARMIL	4.60	4.57	6.15	4.69	4.42	4.06	4.38	4.98	4.25
9 REBECCA	5.72	5.09	7.10	5.07	4.80	3.50	4.62	4.83	5.08
10 ZAVITZ	6.12	4.72	5.85	4.85	4.07	4.32	3.86	5.13	4.69
11 KARENA	5.03	4.65	5.74	5.00	4.76	3.14	4.10	5.80	4.45
LOCATION MEAN	5.03	4.85	6.14	4.94	4.05	3.44	4.25	4.47	4.46

CULTIVAR NAME	WE91N	HW91N	RN91N	MH91N	MEAN
1 FREDRICK	3.69	3.68	3.13	3.25	3.93
2 HOUSER	3.41	4.00	3.93	2.84	4.30
3 AUGUSTA	3.09	3.06	3.66	3.03	4.05
4 FRANKENMUTH	3.23	2.71	3.23	2.84	4.04
5 HARUS	2.82	3.35	3.92	3.74	4.31
6 ENA	3.72	3.94	3.69	3.81	4.26
7 ANNETTE	2.89	3.05	3.47	3.30	4.20
8 HARMIL	2.76	3.21	3.50	2.86	4.19
9 REBECCA	3.05	3.96	4.13	3.49	4.65
10 ZAVITZ	3.65	3.89	4.13	4.08	4.57
11 KARENA	2.51	4.18	3.84	3.90	4.39
LOCATION MEAN	3.17	3.55	3.69	3.38	4.26

ONTARIO REGIONAL TRIALS;FALL WHITE WHEAT 1991

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
 YEAR(S) : 88-91
 AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY NAME	HW88N	WE88N	RN88N	ID88N	HW89N	RN89N	ID89N	MH89N	RN90N	WE91N
1 FREDRICK	80	93	89	93	76	112	98	89	82	117
2 HOUSER	108	107	113	106	93	89	90	76	110	108
3 AUGUSTA	99	104	103	100	86	71	97	94	94	98
4 FRANKENMUTH	110	99	99	99	93	82	104	90	94	102
5 HARUS	86	100	94	98	111	116	109	109	100	89
6 ENA	95	102	96	105	89	106	101	74	103	118
7 ANNETTE	96	101	102	101	106	88	102	104	103	91
8 HARMIL	91	94	100	95	109	118	103	111	95	87
9 REBECCA	114	105	116	103	118	102	109	108	114	96
10 ZAVITZ	122	97	95	98	100	126	91	115	105	115
11 KARENA	100	96	93	101	118	91	96	130	100	79
LOCATION MEAN	5.03	4.85	6.14	4.94	4.05	3.44	4.25	4.47	4.46	3.17

KEY NAME	HW91N	RN91N	MH91N	MEAN*
1 FREDRICK	104	85	96	93
2 HOUSER	113	106	84	100
3 AUGUSTA	86	99	90	94
4 FRANKENMUTH	76	87	84	94
5 HARUS	94	106	111	102
6 ENA	111	100	113	101
7 ANNETTE	86	94	98	98
8 HARMIL	90	95	85	98
9 REBECCA	112	112	103	109
10 ZAVITZ	110	112	121	108
11 KARENA	118	104	116	103
LOCATION MEAN	3.55	3.69	3.38	4.26

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S): 88-91
 AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	NN88N	LN88N	WK88N	EA88N	BH88N	NN89N	LN89N	WK89N	EA89N
1 FREDRICK	4.22	3.49	4.85	4.16	5.29	3.51	4.41	5.53	5.44
2 HOUSER	5.26	3.90	6.57	5.60	4.74	3.44	4.38	4.94	5.61
3 AUGUSTA	4.75	3.76	6.03	5.30	4.84	3.49	4.08	4.53	6.03
4 FRANKENMUTH	4.71	3.83	5.87	5.22	4.47	3.15	4.52	5.50	6.06
5 HARUS	4.56	4.16	5.45	4.81	4.71	3.93	4.91	5.99	6.06
6 ENA	4.38	3.74	4.31	4.95	4.86	2.97	4.43	5.77	6.12
7 ANNETTE	4.40	4.15	5.32	5.35	5.04	3.39	4.59	6.18	6.07
8 HARMIL	4.49	3.44	4.76	5.06	5.08	3.60	5.18	6.33	6.67
9 REBECCA	5.25	3.83	5.87	4.70	4.37	3.44	5.19	5.62	6.89
10 ZAVITZ	4.78	3.48	6.54	5.27	4.60	3.59	4.95	6.02	6.20
11 KARENA	4.73	4.22	6.53	5.27	5.04	3.89	5.19	5.82	6.19
LOCATION MEAN	4.68	3.82	5.65	5.06	4.82	3.49	4.71	5.66	6.12

CULTIVAR NAME	NN90N	LN90N	WK90N	EA90N	BH90N	NN91N	WK91N	EA91N	BH91N	MEAN
1 FREDRICK	5.02	3.60	3.79	5.78	4.65	4.24	5.41	5.35	4.29	4.61
2 HOUSER	5.44	4.76	4.16	6.09	4.78	4.38	5.58	5.75	4.73	5.01
3 AUGUSTA	5.47	3.95	4.29	6.75	4.84	4.29	5.92	5.86	4.82	4.94
4 FRANKENMUTH	5.15	3.62	3.63	6.28	4.67	4.04	5.76	5.50	4.83	4.82
5 HARUS	5.34	4.81	3.43	6.14	4.46	3.98	5.75	6.17	4.91	4.98
6 ENA	5.25	4.73	3.83	6.27	4.47	4.20	6.02	5.14	4.41	4.77
7 ANNETTE	5.27	4.52	3.69	6.39	4.77	4.47	6.28	5.05	4.97	4.99
8 HARMIL	5.25	4.30	3.84	5.99	5.26	4.09	6.28	4.65	4.77	4.95
9 REBECCA	5.44	4.71	4.40	6.89	5.08	4.45	6.36	5.80	4.56	5.16
10 ZAVITZ	5.61	4.55	3.58	6.14	4.53	4.07	6.43	6.52	4.80	5.09
11 KARENA	5.93	4.13	3.98	6.79	4.94	4.20	6.70	6.70	4.67	5.27
LOCATION MEAN	5.38	4.33	3.87	6.32	4.77	4.22	6.04	5.68	4.71	4.96

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
 YEAR(S): 88-91
 AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY NAME	NN88N	LN88N	WK88N	EA88N	BH88N	NN89N	LN89N	WK89N	EA89N
1 FREDRICK	90	91	86	82	110	101	94	98	89
2 HOUSER	112	102	116	111	98	99	93	87	92
3 AUGUSTA	101	98	107	105	100	100	87	80	99
4 FRANKENMUTH	101	100	104	103	93	90	96	97	99
5 HARUS	97	109	97	95	98	113	104	106	99
6 ENA	93	98	76	98	101	85	94	102	100
7 ANNETTE	94	109	94	106	105	97	97	109	99
8 HARMIL	96	90	84	100	105	103	110	112	109
9 REBECCA	112	100	104	93	91	99	110	99	113
10 ZAVITZ	102	91	116	104	95	103	105	106	101
11 KARENA	101	111	116	104	105	111	110	103	101
LOCATION MEAN	4.68	3.82	5.65	5.06	4.82	3.49	4.71	5.66	6.12

KEY NAME	NN90N	LN90N	WK90N	EA90N	BH90N	NN91N	WK91N	EA91N	BH91N	MEAN*
1 FREDRICK	93	83	98	91	98	100	90	94	91	93
2 HOUSER	101	110	107	96	100	104	92	101	101	101
3 AUGUSTA	102	91	111	107	102	102	98	103	102	100
4 FRANKENMUTH	96	84	94	99	98	96	95	97	103	97
5 HARUS	99	111	89	97	94	94	95	109	104	101
6 ENA	98	109	99	99	94	100	100	90	94	96
7 ANNETTE	98	104	95	101	100	106	104	89	106	101
8 HARMIL	98	99	99	95	110	97	104	82	101	100
9 REBECCA	101	109	114	109	107	105	105	102	97	104
10 ZAVITZ	104	105	92	97	95	96	106	115	102	102
11 KARENA	110	95	103	107	104	100	111	118	99	106
LOCATION MEAN	5.38	4.33	3.87	6.32	4.77	4.22	6.04	5.68	4.71	4.96

*MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S) : 88-91
 AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	O188N	KE88N	RW88N	O289N	KE90N	KE91N	MEAN
1 FREDRICK	3.92	3.12	3.26	3.43	3.67	2.29	3.28
2 HOUSER	5.23	4.07	4.83	3.27	3.45	2.80	3.94
3 AUGUSTA	5.05	3.39	3.99	3.35	3.97	2.83	3.76
4 FRANKENMUTH	4.99	3.63	3.74	3.69	3.13	2.41	3.60
5 HARUS	4.08	3.00	3.38	3.02	3.78	2.61	3.31
6 ENA	4.07	2.80	3.04	2.74	4.50	2.74	3.32
7 ANNETTE	4.73	3.32	3.46	4.25	4.30	2.90	3.83
8 HARMIL	4.19	2.99	3.89	3.54	2.64	1.76	3.17
9 REBECCA	4.87	3.51	3.73	2.43	4.60	2.53	3.61
10 ZAVITZ	4.59	3.45	3.49	3.02	4.51	3.05	3.69
11 KARENA	4.76	3.82	3.38	3.14	4.78	2.64	3.75
LOCATION MEAN	4.59	3.37	3.65	3.26	3.94	2.60	3.57

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	O188N	KE88N	RW88N	O289N	KE90N	KE91N	MEAN*
1 FREDRICK	85	93	89	105	93	88	92
2 HOUSER	114	121	132	100	88	108	110
3 AUGUSTA	110	101	109	103	101	109	105
4 FRANKENMUTH	109	108	102	113	79	93	101
5 HARUS	89	89	93	93	96	101	93
6 ENA	89	83	83	84	114	106	93
7 ANNETTE	103	98	95	130	109	112	108
8 HARMIL	91	89	106	109	67	68	88
9 REBECCA	106	104	102	74	117	97	100
10 ZAVITZ	100	102	96	93	114	117	104
11 KARENA	104	113	93	96	121	102	105
LOCATION MEAN	4.59	3.37	3.65	3.26	3.94	2.60	3.57

*MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S) : 88-91
 MGMT : NORMAL

KEY NAME	AREA 1 (13)*	AREA 2 (18)	AREA 3 (6)	PROVINCE (37)**
1 FREDRICK	3.93	4.61	3.28	4.16
2 HOUSER	4.30	5.01	3.94	4.59
3 AUGUSTA	4.05	4.94	3.76	4.44
4 FRANKENMUTH	4.04	4.82	3.60	4.35
5 HARUS	4.31	4.98	3.31	4.47
6 ENA	4.26	4.77	3.32	4.36
7 ANNETTE	4.20	4.99	3.83	4.53
8 HARMIL	4.19	4.95	3.17	4.39
9 REBECCA	4.65	5.16	3.61	4.73
10 ZAVITZ	4.57	5.09	3.69	4.68
11 KARENA	4.39	5.27	3.75	4.72
OVERALL MEAN	4.26	4.96	3.57	4.49

MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

KEY NAME	AREA 1	AREA 2	AREA 3	PROVINCE
1 FREDRICK	93.4	93.3	92.3	93.1
2 HOUSER	100.3	101.3	110.4	102.4
3 AUGUSTA	93.9	99.7	105.4	98.6
4 FRANKENMUTH	93.9	96.9	100.7	96.4
5 HARUS	101.8	100.5	93.2	99.8
6 ENA	101.0	96.1	93.1	97.3
7 ANNETTE	97.8	100.7	107.9	100.9
8 HARMIL	98.1	99.7	88.3	97.3
9 REBECCA	108.5	103.8	100.2	104.9
10 ZAVITZ	108.2	102.1	103.7	104.5
11 KARENA	103.2	106.0	104.8	104.8
OVERALL MEAN	4.26	4.96	3.57	4.49

* # OF LOCATIONS
 ** WEIGHTED AVERAGE

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

YEAR(S): 88-91
 MGMT : NORMAL
 AREA : 1

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	11	3.93	74.1	32	.	1.6	107	152	2.7	2.8	3.3	2.8	2.9	.	2.5
2 HOUSER	5	4.30	69.7	35	.	3.9	96	153	2.3	4.3	4.4	3.3	3.0	.	3.4
3 AUGUSTA	9	4.05	69.5	31	.	2.9	101	153	3.0	4.1	2.9	3.6	3.6	.	2.0
4 FRANKENMUTH	10	4.04	72.7	31	.	3.3	102	153	2.6	4.0	3.5	5.4	2.5	.	2.3
5 HARUS	4	4.31	73.7	33	.	2.0	97	151	2.0	3.6	2.9	3.9	2.5	.	2.7
6 ENA	6	4.26	74.0	32	.	1.6	101	152	2.8	3.9	3.8	1.9	1.5	.	2.0
7 ANNETTE	7	4.20	72.8	37	.	3.5	102	153	0.3	4.0	2.5	4.0	3.7	.	1.7
8 HARMIL	8	4.19	72.2	29	.	1.8	104	152	3.3	2.9	2.3	3.4	3.9	.	2.0
9 REBECCA	1	4.65	72.1	34	.	2.0	96	152	2.2	4.4	2.3	2.5	1.9	.	3.1
10 ZAVITZ	2	4.57	71.8	39	.	1.6	102	153	1.6	2.4	2.6	2.0	1.9	.	1.8
11 KARENA	3	4.39	72.9	33	.	1.4	101	152	1.6	2.5	3.0	3.3	2.4	.	2.2
LOCATIONS		13	10	6	0	7	15	14	10	7	4	4	4	0	4

YIELD AVERAGES WERE BASED ON DATA FROM:
 1988: HARROW, WOODSLEE, RIDGETOWN, INWOOD.
 1989: HARROW, RIDGETOWN, INWOOD, MORPETH.
 1990: RIDGETOWN.
 1991: HARROW, WOODSLEE, RIDGETOWN, MORPETH.

YEAR(S): 88-91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	11	4.61	74.0	35	96	1.7	107	158	3.1	4.8	4.5	2.3	4.1	.	2.8
2 HOUSER	4	5.01	70.6	37	96	2.4	94	159	2.5	5.5	4.7	2.0	4.3	.	2.2
3 AUGUSTA	8	4.94	70.7	34	96	1.9	101	159	3.9	5.4	4.1	2.5	4.3	.	2.5
4 FRANKENMUTH	9	4.82	73.4	34	97	2.8	102	159	2.6	5.6	4.5	4.0	3.3	.	1.5
5 HARUS	6	4.98	73.3	35	97	1.0	96	157	2.5	5.3	4.3	4.5	3.3	.	2.2
6 ENA	10	4.77	74.0	34	96	1.7	101	159	2.5	5.4	4.9	2.0	2.3	.	1.7
7 ANNETTE	5	4.99	73.0	39	96	2.8	101	159	0.8	5.8	4.4	1.1	4.4	.	1.8
8 HARMIL	7	4.95	71.9	33	96	1.6	103	158	3.6	5.6	3.6	1.9	5.4	.	1.5
9 REBECCA	2	5.16	72.5	35	96	1.4	94	158	2.9	6.0	4.0	2.0	3.6	.	2.3
10 ZAVITZ	3	5.09	71.9	39	96	1.3	100	159	2.2	5.1	4.2	2.8	2.4	.	1.8
11 KARENA	1	5.27	73.4	35	95	1.5	100	158	2.1	5.5	3.9	2.7	3.7	.	2.5
LOCATIONS		18	17	15	7	10	17	12	11	6	7	2	2	0	3

YIELD AVERAGES WERE BASED ON DATA FROM:
 1988: NAIRN, LONDON, WOODSTOCK, ELORA, BATH.
 1989: NAIRN, LONDON, WOODSTOCK, ELORA.
 1990: NAIRN, LONDON, WOODSTOCK, ELORA, BATH.
 1991: NAIRN, WOODSTOCK, ELORA, BATH.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

YEAR(S) : 88-91
 MGMT : NORMAL
 AREA : 3

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	10	3.28	80.1	39	66	2.4	98	162	7.0	4.0	4.5	.	.	.	.
2 HOUSER	1	3.94	77.3	40	68	2.7	87	163	7.5	8.0	4.0	.	.	.	.
3 AUGUSTA	3	3.76	77.7	38	68	2.5	95	163	7.3	8.0	4.5	.	.	.	.
4 FRANKENMUTH	7	3.60	80.0	38	69	2.7	92	163	7.0	8.0	2.5	.	.	.	.
5 HARUS	8	3.31	78.8	38	64	2.0	89	162	7.0	8.0	5.5	.	.	.	.
6 ENA	8	3.31	79.8	37	70	2.2	94	162	7.5	8.0	5.5	.	.	.	.
7 ANNETTE	2	3.83	79.5	43	67	2.2	93	163	5.0	8.0	5.0	.	.	.	.
8 HARMIL	11	3.17	78.5	36	64	2.1	94	162	7.3	8.0	4.0	.	.	.	.
9 REBECCA	6	3.61	78.3	38	70	2.2	87	162	7.5	8.0	4.0	.	.	.	.
10 ZAVITZ	5	3.68	77.2	42	70	2.3	94	163	7.5	8.0	5.5	.	.	.	.
11 KARENA	4	3.75	79.5	39	69	2.1	95	162	7.0	8.0	2.5	.	.	.	.
LOCATIONS		6	9	8	10	3	9	5	1	1	1	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM:
 1988: RENFREW, OTTAWA-1, KEMPTVILLE.
 1989: OTTAWA-2.
 1990: KEMPTVILLE.
 1991: KEMPTVILLE.

YEAR(S) : 88-91
 MGMT : NORMAL
 AREA(S) : 1- 3

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	11	4.16	75.5	36	78	1.8	105	156	3.1	3.7	4.1	2.6	3.3	.	2.6
2 HOUSER	4	4.59	72.0	37	80	3.0	93	157	2.6	5.0	4.6	2.8	3.4	.	2.9
3 AUGUSTA	7	4.44	72.1	35	80	2.3	100	157	3.7	5.0	3.7	3.3	3.9	.	2.2
4 FRANKENMUTH	10	4.35	74.9	34	81	3.0	100	157	2.8	5.0	4.0	4.9	2.8	.	2.0
5 HARUS	6	4.47	74.8	35	78	1.5	95	155	2.5	4.6	3.9	4.1	2.8	.	2.5
6 ENA	9	4.36	75.4	34	81	1.7	99	156	2.9	4.8	4.6	1.9	1.7	.	1.9
7 ANNETTE	5	4.53	74.6	40	79	3.0	99	157	0.8	5.0	3.8	3.0	3.9	.	1.7
8 HARMIL	8	4.39	73.6	33	77	1.7	101	156	3.6	4.4	3.2	2.9	4.4	.	1.9
9 REBECCA	1	4.73	73.8	36	81	1.7	93	156	2.8	5.3	3.5	2.3	2.5	.	2.8
10 ZAVITZ	3	4.68	73.2	40	81	1.6	99	157	2.2	4.0	3.8	2.3	2.1	.	1.8
11 KARENA	2	4.72	74.9	36	80	1.5	99	156	2.1	4.2	3.5	3.0	2.8	.	2.3
LOCATIONS		37	36	29	17	20	41	31	22	14	12	6	6	0	7

YIELD AVERAGES WERE BASED ON DATA FROM:
 1988: HARROW, WOODSLEE, RIDGETOWN, INWOOD, NAIRN, LONDON,
 ELORA, WOODSTOCK, BATH, RENFREW, OTTAWA-1, KEMPTVILLE.
 1989: HARROW, RIDGETOWN, INWOOD, MORPETH, LONDON, NAIRN,
 WOODSTOCK, ELORA, OTTAWA-2.
 1990: RIDGETOWN, NAIRN, LONDON, WOODSTOCK, ELORA, BATH, KEMPTVILLE.
 1991: HARROW, WOODSLEE, RIDGETOWN, MORPETH, NAIRN, WOODSTOCK, ELORA,
 BATH, KEMPTVILLE.

* DAYS FROM JAN.1
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S): 91
 AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	WE91N	HW91N	RN91N	MH91N	MEAN
1 FREDRICK	3.69	3.68	3.13	3.25	3.44
2 HOUSER	3.41	4.00	3.93	2.84	3.55
3 AUGUSTA	3.09	3.06	3.66	3.03	3.21
4 FRANKENMUTH	3.23	2.71	3.23	2.84	3.00
5 HARUS	2.82	3.35	3.92	3.74	3.46
6 ENA	3.72	3.94	3.69	3.81	3.79
7 ANNETTE	2.89	3.05	3.47	3.30	3.18
8 HARMIL	2.76	3.21	3.50	2.86	3.08
9 REBECCA	3.05	3.96	4.13	3.49	3.66
10 ZAVITZ	3.65	3.89	4.13	4.08	3.94
11 KARENA	2.51	4.18	3.84	3.90	3.61
LOCATION MEAN	3.17	3.55	3.69	3.38	3.45

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	WE91N	HW91N	RN91N	MH91N	MEAN*
1 FREDRICK	117	104	85	96	100
2 HOUSER	108	113	106	84	103
3 AUGUSTA	98	86	99	90	93
4 FRANKENMUTH	102	76	87	84	88
5 HARUS	89	94	106	111	100
6 ENA	118	111	100	113	110
7 ANNETTE	91	86	94	98	92
8 HARMIL	87	90	95	85	89
9 REBECCA	96	112	112	103	106
10 ZAVITZ	115	110	112	121	114
11 KARENA	79	118	104	116	104
LOCATION MEAN	3.17	3.55	3.69	3.38	3.45

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S): 91
 AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	NN91N	WK91N	EA91N	BH91N	MEAN
1 FREDRICK	4.24	5.41	5.35	4.29	4.82
2 HOUSER	4.38	5.58	5.75	4.73	5.11
3 AUGUSTA	4.29	5.92	5.86	4.82	5.22
4 FRANKENMUTH	4.04	5.76	5.50	4.83	5.03
5 HARUS	3.98	5.75	6.17	4.91	5.20
6 ENA	4.20	6.02	5.14	4.41	4.94
7 ANNETTE	4.47	6.28	5.05	4.97	5.19
8 HARMIL	4.09	6.28	4.65	4.77	4.95
9 REBECCA	4.45	6.36	5.80	4.56	5.29
10 ZAVITZ	4.07	6.43	6.52	4.80	5.45
11 KARENA	4.20	6.70	6.70	4.67	5.57
LOCATION MEAN	4.22	6.04	5.68	4.71	5.16

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	NN91N	WK91N	EA91N	BH91N	MEAN*
1 FREDRICK	100	90	94	91	94
2 HOUSER	104	92	101	101	100
3 AUGUSTA	102	98	103	102	101
4 FRANKENMUTH	96	95	97	103	98
5 HARUS	94	95	109	104	101
6 ENA	100	100	90	94	96
7 ANNETTE	106	104	89	106	101
8 HARMIL	97	104	82	101	96
9 REBECCA	105	105	102	97	102
10 ZAVITZ	96	106	115	102	105
11 KARENA	100	111	118	99	107
LOCATION MEAN	4.22	6.04	5.68	4.71	5.16

*MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

TRAIT : YIELD
 YEAR(S): 91
 AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	KE91N	MEAN
1 FREDRICK	2.29	2.29
2 HOUSER	2.80	2.80
3 AUGUSTA	2.83	2.83
4 FRANKENMUTH	2.41	2.41
5 HARUS	2.61	2.61
6 ENA	2.74	2.74
7 ANNETTE	2.90	2.90
8 HARMIL	1.76	1.76
9 REBECCA	2.53	2.53
10 ZAVITZ	3.05	3.05
11 KARENA	2.64	2.64
LOCATION MEAN	2.60	2.60

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	KE91N	MEAN*
1 FREDRICK	88	88
2 HOUSER	108	108
3 AUGUSTA	109	109
4 FRANKENMUTH	93	93
5 HARUS	101	101
6 ENA	106	106
7 ANNETTE	112	112
8 HARMIL	68	68
9 REBECCA	97	97
10 ZAVITZ	117	117
11 KARENA	102	102
LOCATION MEAN	2.60	2.60

*MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

YEAR : 91
 MGMT : NORMAL
 AREA : 1

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 FREDRICK	7	3.44	74.8	32	.	1.0	100	146	2.5	4.0	3.0	1.8	4.0	.	2.2
2 HOUSER	5	3.55	69.2	28	.	5.8	93	147	2.5	5.5	4.0	3.8	3.6	.	2.2
3 AUGUSTA	8	3.21	71.9	26	.	3.0	95	147	3.0	5.3	2.0	3.5	4.3	.	1.4
4 FRANKENMUTH	11	3.00	73.2	25	.	2.8	95	147	2.3	5.8	4.0	4.8	2.4	.	1.7
5 HARUS	6	3.46	74.7	34	.	1.5	90	146	1.5	4.8	3.0	4.0	2.8	.	2.4
6 ENA	2	3.79	74.6	32	.	1.5	95	147	3.3	5.0	3.0	1.0	1.8	.	1.0
7 ANNETTE	9	3.18	73.7	34	.	2.5	96	146	0.0	5.8	2.0	3.3	4.8	.	1.1
8 HARMIL	10	3.08	73.0	29	.	1.2	97	146	3.0	4.3	2.0	2.5	4.7	.	1.1
9 REBECCA	3	3.66	71.4	30	.	3.2	90	147	1.5	5.5	3.0	2.5	2.3	.	2.5
10 ZAVITZ	1	3.94	72.6	38	.	2.0	94	147	1.3	2.5	2.0	2.0	2.2	.	1.2
11 KARENA	4	3.61	74.3	32	.	2.0	96	146	0.8	3.5	3.0	3.0	2.8	.	1.7
LOCATIONS		4	2	1	0	1	4	4	2	4	1	2	2	0	3

YIELD AVERAGES WERE BASED ON DATA FROM: HARROW, WOODSLEE, RIDGETOWN, MORPETH.

YEAR : 91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 FREDRICK	11	4.82	75.6	36	.	1.7	108	151	.	5.2	6.5	2.7	.	.	2.0
2 HOUSER	7	5.11	70.8	37	.	1.9	92	152	.	5.1	7.0	2.0	.	.	3.5
3 AUGUSTA	4	5.22	69.8	34	.	0.4	101	152	.	4.7	4.5	3.0	.	.	4.0
4 FRANKENMUTH	8	5.03	73.3	36	.	2.2	104	152	.	5.0	6.0	6.0	.	.	2.0
5 HARUS	5	5.20	73.8	35	.	0.7	97	150	.	4.7	6.0	7.0	.	.	2.5
6 ENA	10	4.94	74.6	36	.	1.4	101	151	.	5.1	7.0	2.0	.	.	2.0
7 ANNETTE	6	5.19	72.9	41	.	1.9	102	152	.	5.1	5.0	0.3	.	.	2.0
8 HARMIL	9	4.95	71.9	35	.	2.1	104	150	.	3.9	4.5	1.7	.	.	2.0
9 REBECCA	3	5.29	72.3	37	.	0.9	93	151	.	5.3	5.5	2.0	.	.	3.5
10 ZAVITZ	2	5.45	72.4	41	.	0.3	100	152	.	2.5	6.5	2.7	.	.	2.0
11 KARENA	1	5.57	73.1	36	.	0.9	100	150	.	4.8	6.0	3.3	.	.	3.5
LOCATIONS		4	4	4	0	3	4	3	0	2	1	1	0	0	1

YIELD AVERAGES WERE BASED ON DATA FROM: NAIRN, WOODSTOCK, ELORA, BATH.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

YEAR : 91
 MGMT : NORMAL
 AREA : 3

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 FREDRICK	10	2.29	78.0	32	76	.	103	152	.	.	.	.	.	.	.
2 HOUSER	4	2.80	74.9	32	71	.	87	155	.	.	.	.	.	.	.
3 AUGUSTA	3	2.83	75.1	32	79	.	100	155	.	.	.	.	.	.	.
4 FRANKENMUTH	9	2.41	78.8	31	81	.	93	154	.	.	.	.	.	.	.
5 HARUS	7	2.61	77.5	31	66	.	92	154	.	.	.	.	.	.	.
6 ENA	5	2.74	78.0	31	76	.	99	154	.	.	.	.	.	.	.
7 ANNETTE	2	2.90	78.1	35	76	.	93	154	.	.	.	.	.	.	.
8 HARMIL	11	1.76	76.1	28	73	.	97	153	.	.	.	.	.	.	.
9 REBECCA	8	2.53	76.0	30	85	.	89	154	.	.	.	.	.	.	.
10 ZAVITZ	1	3.05	75.8	38	71	.	97	155	.	.	.	.	.	.	.
11 KARENA	6	2.64	76.5	32	76	.	98	153	.	.	.	.	.	.	.
LOCATIONS		1	2	2	2	0	2	1	0	0	0	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM: KEMPTVILLE.

YEAR : 91
 MGMT : NORMAL
 AREA(S): 1- 3

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 FREDRICK	9	3.93	76.0	34	76	1.5	104	149	2.5	4.4	4.8	2.1	4.0	.	2.1
2 HOUSER	5	4.16	71.4	34	71	2.9	91	150	2.5	5.4	5.5	3.2	3.6	.	2.5
3 AUGUSTA	7	4.06	71.7	32	79	1.1	98	150	3.0	5.0	3.3	3.3	4.3	.	2.1
4 FRANKENMUTH	10	3.84	74.7	33	81	2.4	98	150	2.3	5.5	5.0	5.2	2.4	.	1.8
5 HARUS	6	4.14	74.9	34	66	0.9	93	149	1.5	4.7	4.5	5.0	2.8	.	2.4
6 ENA	4	4.19	75.4	34	76	1.5	98	149	3.3	5.0	5.0	1.3	1.8	.	1.3
7 ANNETTE	8	4.04	74.4	38	76	2.1	98	149	0.0	5.5	3.5	2.3	4.8	.	1.3
8 HARMIL	11	3.76	73.2	32	73	1.9	100	149	3.0	4.1	3.3	2.2	4.7	.	1.3
9 REBECCA	3	4.26	73.0	34	85	1.5	91	149	1.5	5.5	4.3	2.3	2.3	.	2.8
10 ZAVITZ	1	4.51	73.3	40	71	0.8	97	150	1.3	2.5	4.3	2.2	2.2	.	1.4
11 KARENA	2	4.37	74.2	34	76	1.2	98	148	0.8	3.9	4.5	3.1	2.8	.	2.2
LOCATIONS		9	8	7	2	4	10	8	2	6	2	3	2	0	4

YIELD AVERAGES WERE BASED ON DATA FROM: HARROW, WOODSLEE, RIDGETOWN, MORPETH, NAIRN, WOODSTOCK, ELORA, BATH, KEMPTVILLE.

* DAYS FROM JAN.1
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

LOCATION - WOODSLEE
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	2	3.69	.	.	.	.	80	146	.	3.0	.	.	6.0	.	.
2 HOUSER	4	3.41	.	.	.	.	80	148	.	5.0	.	.	3.0	.	.
3 AUGUSTA	6	3.09	.	.	.	.	74	147	.	5.0	.	.	4.0	.	.
4 FRANKENMUTH	5	3.23	.	.	.	.	74	148	.	5.0	.	.	3.0	.	.
5 HARUS	9	2.82	.	.	.	.	72	147	.	4.0	.	.	4.0	.	.
6 ENA	1	3.72	.	.	.	.	77	147	.	4.0	.	.	2.0	.	.
7 ANNETTE	8	2.89	.	.	.	.	77	147	.	4.0	.	.	5.0	.	.
8 HARMIL	10	2.76	.	.	.	.	76	147	.	4.0	.	.	4.0	.	.
9 REBECCA	7	3.05	.	.	.	.	70	148	.	4.0	.	.	3.0	.	.
10 ZAVITZ	3	3.65	.	.	.	.	77	148	.	2.0	.	.	2.0	.	.
11 KARENA	11	2.51	.	.	.	.	79	147	.	4.0	.	.	2.0	.	.
MEANS		3.17	.	.	.	.	76	147	.	4.0	.	.	3.5	.	.

LOCATION - HARROW
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	6	3.68	.	.	.	.	107	143	.	3.0	.	1.5	2.0	.	2.5
2 HOUSER	2	4.00	.	.	.	.	98	144	.	3.0	.	4.5	4.2	.	2.5
3 AUGUSTA	9	3.06	.	.	.	.	100	144	.	3.0	.	4.0	4.5	.	2.3
4 FRANKENMUTH	11	2.71	.	.	.	.	98	144	.	3.0	.	2.5	1.8	.	2.0
5 HARUS	7	3.35	.	.	.	.	96	143	.	3.0	.	2.0	1.7	.	4.2
6 ENA	4	3.94	.	.	.	.	100	143	.	4.0	.	0.0	1.5	.	2.0
7 ANNETTE	10	3.05	.	.	.	.	105	143	.	4.0	.	2.5	4.5	.	2.3
8 HARMIL	8	3.21	.	.	.	.	103	143	.	3.0	.	2.0	5.3	.	1.2
9 REBECCA	3	3.96	.	.	.	.	97	143	.	4.0	.	3.0	1.7	.	2.5
10 ZAVITZ	5	3.89	.	.	.	.	98	143	.	1.0	.	2.0	2.3	.	1.7
11 KARENA	1	4.18	.	.	.	.	101	143	.	2.0	.	2.0	3.5	.	2.2
MEANS		3.55	.	.	.	.	100	143	.	3.0	.	2.4	3.0	.	2.3

LOCATION - RIDGETOWN
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	11	3.13	74.2	.	.	1.0	114	147	2.0	4.0	.	.	.	.	1.0
2 HOUSER	3	3.93	68.5	.	.	5.8	104	147	1.0	6.0	.	.	.	.	0.0
3 AUGUSTA	7	3.66	72.1	.	.	3.0	111	148	2.0	6.0	.	.	.	.	0.0
4 FRANKENMUTH	10	3.23	73.6	.	.	2.8	110	148	1.0	6.0	.	.	.	.	1.0
5 HARUS	4	3.92	73.3	.	.	1.5	107	146	1.0	5.0	.	.	.	.	1.0
6 ENA	6	3.69	74.1	.	.	1.5	110	148	2.0	6.0	.	.	.	.	0.0
7 ANNETTE	9	3.47	73.4	.	.	2.5	111	147	0.0	7.0	.	.	.	.	1.0
8 HARMIL	8	3.50	72.6	.	.	1.2	110	147	2.0	5.0	.	.	.	.	0.0
9 REBECCA	1	4.13	70.9	.	.	3.2	104	147	1.0	7.0	.	.	.	.	1.0
10 ZAVITZ	1	4.13	71.1	.	.	2.0	111	148	1.0	3.0	.	.	.	.	0.0
11 KARENA	5	3.84	73.5	.	.	2.0	109	147	0.0	5.0	.	.	.	.	0.0
MEANS		3.69	72.5	.	.	2.4	109	147	1.2	5.5	.	.	.	.	0.5

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

LOCATION - MORPETH
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	7	3.25	75.3	32	.	.	98	148	3.0	6.0	3.0	2.0	.	.	3.0
2 HOUSER	10	2.84	69.8	28	.	.	90	149	4.0	8.0	4.0	3.0	.	.	4.0
3 AUGUSTA	8	3.03	71.7	26	.	.	93	149	4.0	7.0	2.0	3.0	.	.	2.0
4 FRANKENMUTH	10	2.84	72.8	25	.	.	97	149	3.5	9.0	4.0	7.0	.	.	2.0
5 HARUS	4	3.74	76.0	34	.	.	85	147	2.0	7.0	3.0	6.0	.	.	2.0
6 ENA	3	3.81	75.0	32	.	.	91	149	4.5	6.0	3.0	2.0	.	.	1.0
7 ANNETTE	6	3.30	73.9	34	.	.	91	148	0.0	8.0	2.0	4.0	.	.	0.0
8 HARMIL	9	2.86	73.4	29	.	.	97	148	4.0	5.0	2.0	3.0	.	.	2.0
9 REBECCA	5	3.49	72.0	30	.	.	90	149	2.0	7.0	3.0	2.0	.	.	4.0
10 ZAVITZ	1	4.08	74.1	38	.	.	90	150	1.5	4.0	2.0	2.0	.	.	2.0
11 KARENA	2	3.90	75.1	32	.	.	96	148	1.5	3.0	3.0	4.0	.	.	3.0
MEANS		3.38	73.6	31	.	.	93	149	2.7	6.4	2.8	3.5	.	.	2.3

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	5	4.24	77.7	39	.	0.5	105	147	.	7.0	6.5	.	.	.	2.0
2 HOUSER	3	4.38	72.9	42	.	0.0	96	148	.	6.5	7.0	.	.	.	3.5
3 AUGUSTA	4	4.29	74.8	40	.	0.0	100	148	.	6.0	4.5	.	.	.	4.0
4 FRANKENMUTH	10	4.04	76.0	38	.	0.0	102	148	.	6.0	6.0	.	.	.	2.0
5 HARUS	11	3.98	76.8	39	.	0.0	93	147	.	6.0	6.0	.	.	.	2.5
6 ENA	6	4.20	76.1	39	.	0.0	103	147	.	6.5	7.0	.	.	.	2.0
7 ANNETTE	1	4.47	75.6	48	.	1.8	105	148	.	6.5	5.0	.	.	.	2.0
8 HARMIL	8	4.09	76.0	40	.	0.0	102	147	.	5.5	4.5	.	.	.	2.0
9 REBECCA	2	4.45	74.8	40	.	0.0	95	147	.	6.0	5.5	.	.	.	3.5
10 ZAVITZ	9	4.07	72.8	41	.	0.0	91	148	.	3.0	6.5	.	.	.	2.0
11 KARENA	6	4.20	76.4	43	.	0.0	99	147	.	6.5	6.0	.	.	.	3.5
MEANS		4.22	75.4	41	.	0.2	99	147	.	6.0	5.9	.	.	.	2.6

LOCATION - WOODSTOCK
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	11	5.41	73.6	32	.	2.0	118	152	.	3.3	.	2.7	.	.	.
2 HOUSER	10	5.58	65.5	29	.	2.3	90	152	.	3.7	.	2.0	.	.	.
3 AUGUSTA	7	5.92	65.5	27	.	0.0	110	152	.	3.3	.	3.0	.	.	.
4 FRANKENMUTH	8	5.76	70.5	31	.	2.7	115	152	.	4.0	.	6.0	.	.	.
5 HARUS	9	5.75	69.2	29	.	1.0	105	151	.	3.3	.	7.0	.	.	.
6 ENA	6	6.02	71.7	30	.	1.3	105	153	.	3.7	.	2.0	.	.	.
7 ANNETTE	4	6.28	71.7	38	.	1.3	108	152	.	3.7	.	0.3	.	.	.
8 HARMIL	4	6.28	70.5	32	.	1.0	115	150	.	2.3	.	1.7	.	.	.
9 REBECCA	3	6.36	69.2	32	.	0.0	94	152	.	4.7	.	2.0	.	.	.
10 ZAVITZ	2	6.43	71.1	37	.	0.0	109	153	.	2.0	.	2.7	.	.	.
11 KARENA	1	6.70	71.1	30	.	2.0	108	149	.	3.0	.	3.3	.	.	.
MEANS		6.04	70.0	31	.	1.2	107	152	.	3.4	.	3.0	.	.	.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	8	5.35	73.0	34	.	2.7	118	154	.	.	.	.	.	.	.
2 HOUSER	6	5.75	71.1	37	.	3.3	100	156	.	.	.	.	.	.	.
3 AUGUSTA	4	5.86	64.2	30	.	1.3	105	155	.	.	.	.	.	.	.
4 FRANKENMUTH	7	5.50	69.9	33	.	4.0	108	155	.	.	.	.	.	.	.
5 HARUS	3	6.17	73.0	33	.	1.0	103	153	.	.	.	.	.	.	.
6 ENA	9	5.14	74.2	33	.	3.0	112	154	.	.	.	.	.	.	.
7 ANNETTE	10	5.05	69.2	34	.	2.7	107	155	.	.	.	.	.	.	.
8 HARMIL	11	4.65	69.2	31	.	5.3	110	154	.	.	.	.	.	.	.
9 REBECCA	5	5.80	71.1	35	.	2.7	100	154	.	.	.	.	.	.	.
10 ZAVITZ	2	6.52	72.3	41	.	1.0	107	155	.	.	.	.	.	.	.
11 KARENA	1	6.70	68.6	32	.	0.7	104	153	.	.	.	.	.	.	.
MEANS		5.68	70.5	34	.	2.5	107	154	.	.	.	.	.	.	.

LOCATION - BATH
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	11	4.29	78.2	38	.	.	92	.	.	.	.	.	.	.	.
2 HOUSER	7	4.73	73.8	41	.	.	80	.	.	.	.	.	.	.	.
3 AUGUSTA	4	4.82	74.7	40	.	.	88	.	.	.	.	.	.	.	.
4 FRANKENMUTH	3	4.83	76.9	40	.	.	89	.	.	.	.	.	.	.	.
5 HARUS	2	4.91	76.0	40	.	.	85	.	.	.	.	.	.	.	.
6 ENA	10	4.41	76.3	40	.	.	83	.	.	.	.	.	.	.	.
7 ANNETTE	1	4.97	75.1	43	.	.	89	.	.	.	.	.	.	.	.
8 HARMIL	6	4.77	71.8	35	.	.	89	.	.	.	.	.	.	.	.
9 REBECCA	9	4.56	74.1	40	.	.	81	.	.	.	.	.	.	.	.
10 ZAVITZ	5	4.80	73.5	45	.	.	93	.	.	.	.	.	.	.	.
11 KARENA	8	4.67	76.1	39	.	.	88	.	.	.	.	.	.	.	.
MEANS		4.71	75.1	40	.	.	87	.	.	.	.	.	.	.	.

LOCATION - OTTAWA-1
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 FREDRICK	.	.	76.4	35	51	.	97	152	.	.	.	.	.	.	.
2 HOUSER	.	.	72.8	35	42	.	80	155	.	.	.	.	.	.	.
3 AUGUSTA	.	.	73.2	32	58	.	98	155	.	.	.	.	.	.	.
4 FRANKENMUTH	.	.	77.6	33	62	.	85	154	.	.	.	.	.	.	.
5 HARUS	.	.	76.0	33	33	.	83	154	.	.	.	.	.	.	.
6 ENA	.	.	75.4	31	52	.	92	154	.	.	.	.	.	.	.
7 ANNETTE	.	.	76.6	37	53	.	87	154	.	.	.	.	.	.	.
8 HARMIL	.	.	74.2	30	48	.	93	153	.	.	.	.	.	.	.
9 REBECCA	.	.	74.0	31	69	.	83	154	.	.	.	.	.	.	.
10 ZAVITZ	.	.	73.2	40	43	.	90	155	.	.	.	.	.	.	.
11 KARENA	.	.	75.0	33	52	.	93	153	.	.	.	.	.	.	.
MEANS		.	74.9	34	51	.	89	154	.	.	.	.	.	.	.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1991

LOCATION - KEMPTVILLE
 MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 FREDRICK	10	2.29	79.6	28	100	.	108	.	.	.	.	.	.	.	.
2 HOUSER	4	2.80	77.0	29	100	.	94	.	.	.	.	.	.	.	.
3 AUGUSTA	3	2.83	77.0	31	99	.	101	.	.	.	.	.	.	.	.
4 FRANKENMUTH	9	2.41	80.1	28	100	.	100	.	.	.	.	.	.	.	.
5 HARUS	7	2.61	79.0	28	98	.	100	.	.	.	.	.	.	.	.
6 ENA	5	2.74	80.6	31	100	.	105	.	.	.	.	.	.	.	.
7 ANNETTE	2	2.90	79.6	33	99	.	99	.	.	.	.	.	.	.	.
8 HARMIL	11	1.76	78.0	25	98	.	101	.	.	.	.	.	.	.	.
9 REBECCA	8	2.53	78.0	29	100	.	95	.	.	.	.	.	.	.	.
10 ZAVITZ	1	3.05	78.5	35	99	.	104	.	.	.	.	.	.	.	.
11 KARENA	6	2.64	78.0	30	99	.	103	.	.	.	.	.	.	.	.
MEANS		2.60	78.7	30	99	.	101	.	.	.	.	.	.	.	.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

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LEGEND

YLD - YIELD (T/HA; 1 T/HA = 14.87 BU/AC)
 TSTW - TEST WEIGHT (KG/HL)
 KW - KERNEL WEIGHT (MG)
 SUR - SURVIVAL (%)
 LOG - LODGING
 HGT - HEIGHT (CM)
 HDT - HEADING DATE
 MIL - MILDEW
 LRS - LEAF RUST
 SEP - SEPTORIA
 GLB - GLUME BLOTCH
 HBL - HEAD BLIGHT
 SSM - SPINDLE STREAK MOSAIC VIRUS
 BYD - BARLEY YELLOW DWARF VIRUS

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

LOCATIONS ABBREVIATIONS

CM	CHATHAM
BG	BEACHBURG
EA	ELORA
HW	HARROW
HN	HARRISTON
KE	KEMPTVILLE
LL	LISTOWEL
NN	NAIRN
O1	OTTAWA-1
O2	OTTAWA-2
RW	RENFREW
RN	RIDGETOWN
WE	WOODSLEE
WK	WOODSTOCK

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

DESCRIPTION OF REGISTERED VARIETIES

ABSOLVENT:

BEZ-1/KORMORAN. DEVELOPED IN GERMANY AND MARKETED IN CANADA BY C&M SEEDS, PALMERSTON, ONT. A GOOD YIELDING VARIETY WITH HIGH TEST WEIGHT AND THOUSAND KERNEL WEIGHT. HIGH GRAIN AND FLOUR PROTEIN LEVELS, HOWEVER, SUSCEPTIBLE TO MILDEW, LEAF RUST, SEPTORIA, AND HEAD BLIGHT.

KARAT:

P.EXTREM/BEZ-1. DEVELOPED IN AUSTRIA AND MARKETED IN CANADA BY C&M SEEDS, PALMERSTON, ONTARIO. A GOOD YIELDING VARIETY WITH GOOD TEST WEIGHT. HIGH FLOUR AND GRAIN PROTEIN AS WELL AS HIGH LOAF VOLUME. GOOD RESISTANCE TO MILDEW AND LEAF RUST, MODERATE RESISTANCE TO HEAD BLIGHT, SUSCEPTIBLE TO SEPTORIA.

RUBY, (TW84BU039):

FREDRICK/PRIBOY. DEVELOPED AT HYLAND FARMS CROP RESEARCH, MORPETH, CANADA. MARKETED IN CANADA BY W.G. THOMPSON AND SONS LTD. A VERY HIGH YIELDING, SHORT STRAWED, VARIETY WITH EXCELLENT WINTER SURVIVAL. A MIDDLE STRENGTH WHEAT WITH HIGH TEST WEIGHT AND FLOUR YIELD. GOOD LEAF RUST AND BYDV RESISTANCE, MODERATE SUSCEPTIBILITY TO OTHER PREVALENT DISEASES.

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR(S): 87-91
 AREA : 1

KEY NAME	WE87N	CM87N	RN87N	WE88N	RN88N	HW89N	RN89N	RN90N	WE91N	RN91N	MEAN
1 ABSOLVENT	3.18	3.07	4.74	4.49	5.51	2.65	3.09	3.70	2.64	2.77	3.58
2 KARAT	4.45	3.17	5.49	4.54	5.14	2.56	2.63	4.14	3.20	3.02	3.83
3 RUBY	5.27	3.72	5.73	4.94	6.56	4.70	4.84	5.00	4.20	4.00	4.90
LOCATION MEAN	4.30	3.32	5.32	4.66	5.74	3.30	3.52	4.28	3.35	3.26	4.10

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	WE87N	CM87N	RN87N	WE88N	RN88N	HW89N	RN89N	RN90N	WE91N	RN91N	MEAN*
1 ABSOLVENT	74	92	89	96	96	80	88	86	79	85	87
2 KARAT	103	95	103	97	90	77	75	97	96	93	93
3 RUBY	123	112	108	106	114	142	138	117	125	123	121
LOCATION MEAN	4.30	3.32	5.32	4.66	5.74	3.30	3.52	4.28	3.35	3.26	4.10

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

TRAIT : YIELD
 YEAR(S): 87-91
 AREA : 2

KEY NAME	NN87N	WK87N	NN88N	WK88N	EA88N	HN88N	LL88N	NN89N	WK89N	EA89N	HN89N
1 ABSOLVENT	2.25	2.60	4.22	4.55	4.78	3.87	4.01	2.59	4.55	3.65	4.11
2 KARAT	2.95	2.83	4.21	3.47	4.38	3.29	4.14	2.70	3.77	4.06	3.93
3 RUBY	3.21	4.10	4.51	5.28	4.91	4.13	4.22	3.28	5.73	5.72	4.96
LOCATION MEAN	2.80	3.18	4.31	4.43	4.69	3.76	4.12	2.86	4.68	4.48	4.33

KEY NAME	LL89N	NN90N	WK90N	EA90N	HN90N	NN91N	WK91N	EA91N	HN91N	LL91N	MEAN
1 ABSOLVENT	3.01	5.38	4.47	6.41	5.94	4.04	5.13	4.89	4.90	4.02	4.26
2 KARAT	3.13	6.02	4.39	7.50	6.45	3.88	4.29	4.57	4.70	4.30	4.24
3 RUBY	4.01	6.04	4.39	6.65	6.54	4.62	5.72	6.36	5.89	5.01	5.01
LOCATION MEAN	3.38	5.81	4.42	6.85	6.31	4.18	5.04	5.27	5.16	4.44	4.50

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR(S): 87-91
 AREA : 2

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	NN87N	WK87N	NN88N	WK88N	EA88N	HN88N	LL88N	NN89N	WK89N	EA89N	HN89N
1 ABSOLVENT	80	82	98	103	102	103	97	91	97	82	95
2 KARAT	105	89	98	78	93	87	100	95	80	91	91
3 RUBY	115	129	105	119	105	110	102	115	122	128	114
LOCATION MEAN	2.80	3.18	4.31	4.43	4.69	3.76	4.12	2.86	4.68	4.48	4.33

KEY NAME	LL89N	NN90N	WK90N	EA90N	HN90N	NN91N	WK91N	EA91N	HN91N	LL91N	MEAN*
1 ABSOLVENT	89	93	101	94	94	97	102	93	95	90	94
2 KARAT	93	104	99	109	102	93	85	87	91	97	94
3 RUBY	119	104	99	97	104	111	113	121	114	113	112
LOCATION MEAN	3.38	5.81	4.42	6.85	6.31	4.18	5.05	5.27	5.16	4.44	4.50

TRAIT : YIELD
 YEAR(S): 87-91
 AREA : 3

KEY NAME	KE87N	O187N	O287N	O188N	KE88N	RW89N	BG91N	KE91N	MEAN
1 ABSOLVENT	3.83	4.40	4.84	3.05	2.97	3.44	5.52	2.83	3.86
2 KARAT	3.95	5.02	5.36	3.03	2.94	5.05	5.74	2.73	4.23
3 RUBY	.	5.24	5.94	4.03	3.98	4.44	5.80	3.53	4.71
LOCATION MEAN	3.89	4.89	5.38	3.37	3.30	4.31	5.69	3.03	4.23

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	KE87N	O187N	O287N	O188N	KE88N	RW89N	BG91N	KE91N	MEAN*
1 ABSOLVENT	98	90	90	91	90	80	97	93	91
2 KARAT	102	103	100	90	89	117	101	90	99
3 RUBY	.	107	110	120	121	103	102	117	111
LOCATION MEAN	3.89	4.89	5.38	3.37	3.30	4.31	5.69	3.03	4.23

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

TRAIT : YIELD
 YEAR(S): 87-91
 MGMT : NORMAL

KEY NAME	AREA 1 (10)*	AREA 2 (21)	AREA 3 (8)	PROVINCE (39)**
1 ABSOLVENT	3.58	4.26	3.86	4.00
2 KARAT	3.83	4.24	4.23	4.13
3 RUBY	4.90	5.01	4.71	4.93
OVERALL MEAN	4.10	4.50	4.23	4.34

* # OF LOCATIONS
 ** WEIGHTED AVERAGE

MEAN OF THE RELATIVE YIELDS OVER ALL LOCATIONS

KEY NAME	AREA 1	AREA 2	AREA 3	PROVINCE
1 ABSOLVENT	86.6	94.1	91.2	91.6
2 KARAT	92.6	93.7	98.9	94.5
3 RUBY	120.7	112.2	111.4	114.3
OVERALL MEAN	4.10	4.50	4.23	4.34

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

YEAR(S): 87-91
 MGMT : NORMAL
 AREA : 1

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	3	3.58	76.6	45	97	1.7	88	152	3.8	5.0	5.4	3.0	4.3	.	2.2
2 KARAT	2	3.83	75.8	41	92	1.8	103	153	1.7	2.0	5.1	3.0	2.5	.	2.8
3 RUBY	1	4.90	77.1	43	100	1.6	91	150	3.2	1.0	3.5	3.0	3.0	.	1.5
LOCATIONS		10	5	1	2	3	10	10	6	2	2	1	3	0	2

YIELD AVERAGES WERE BASED ON DATA FROM:

1987: WOODSLEE, CHATHAM, RIDGETOWN.

1988: WOODSLEE, RIDGETOWN.

1989: HARROW, RIDGETOWN.

1990: RIDGETOWN.

1991: WOODSLEE, RIDGETOWN.

YEAR(S): 87-91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	2	4.26	76.4	38	92	1.4	87	156	4.3	3.3	5.0	3.3	2.7	.	3.3
2 KARAT	3	4.24	76.1	37	90	0.4	101	158	1.7	3.4	4.6	2.9	1.6	.	2.0
3 RUBY	1	5.01	75.9	36	93	0.7	86	155	3.7	2.9	4.3	2.4	2.2	.	1.5
LOCATIONS		21	20	16	16	4	20	21	13	8	13	8	2	0	2

YIELD AVERAGES WERE BASED ON DATA FROM:

1987: NAIRN, WOODSTOCK.

1988: NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL.

1989: NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL.

1990: NAIRN, WOODSTOCK, ELORA, HARRISTON.

1991: NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR : 91
 AREA : 1

KEY NAME	WE91N	RN91N	MEAN
1 ABSOLVENT	2.64	2.77	2.70
2 KARAT	3.20	3.02	3.11
3 RUBY	4.20	4.00	4.10
LOCATION MEAN	3.35	3.26	3.30

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	WE91N	RN91N	MEAN
1 ABSOLVENT	79	85	82
2 KARAT	96	93	94
3 RUBY	125	123	124
LOCATION MEAN	3.35	3.26	3.30

TRAIT : YIELD
 YEAR : 91
 AREA : 2

KEY NAME	NN91N	WK91N	EA91N	HN91N	LL91N	MEAN
1 ABSOLVENT	4.04	5.13	4.89	4.90	4.02	4.60
2 KARAT	3.88	4.29	4.57	4.70	4.30	4.35
3 RUBY	4.62	5.72	6.36	5.89	5.01	5.52
LOCATION MEAN	4.18	5.04	5.27	5.16	4.44	4.82

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	NN91N	WK91N	EA91N	HN91N	LL91N	MEAN
1 ABSOLVENT	97	102	93	95	90	95
2 KARAT	93	85	87	91	97	90
3 RUBY	111	113	121	114	113	114
LOCATION MEAN	4.18	5.05	5.27	5.16	4.44	4.82

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR : 91
 AREA : 3

KEY NAME	BG91N	KE91N	MEAN
1 ABSOLVENT	5.52	2.83	4.18
2 KARAT	5.74	2.73	4.23
3 RUBY	5.80	3.53	4.66
LOCATION MEAN	5.69	3.03	4.36

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	BG91N	KE91N	MEAN
1 ABSOLVENT	97	93	95
2 KARAT	101	90	96
3 RUBY	102	117	109
LOCATION MEAN	5.69	3.03	4.36

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

YEAR(S): 87-91
 MGMT : NORMAL
 AREA : 3

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	3	3.86	83.7	45	77	3.3	87	161	.	.	8.0	.	.	.	.
2 KARAT	2	4.23	84.1	44	75	1.8	98	162	.	.	5.0	.	.	.	.
3 RUBY	1	4.71	81.2	39	84	2.9	85	160	.	.	6.5	.	.	.	.
LOCATIONS		8	8	6	9	4	8	7	0	0	1	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM:
 1987: OTTAWA-1, OTTAWA-2, KEMPTVILLE.
 1988: OTTAWA-1, KEMPTVILLE.
 1989: RENFREW.
 1990: NO LOCATIONS.
 1991: BEACHBURG, KEMPTVILLE.

YEAR(S): 87-91
 MGMT : NORMAL
 AREA(S): 1- 3

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	3	4.00	78.2	40	87	2.2	87	156	4.2	3.7	5.2	3.2	3.7	.	2.7
2 KARAT	2	4.13	78.0	39	85	1.3	101	157	1.7	3.1	4.7	2.9	2.2	.	2.4
3 RUBY	1	4.93	77.2	37	90	1.7	87	154	3.6	2.5	4.4	2.4	2.7	.	1.5
LOCATIONS		39	33	23	27	11	38	38	19	10	16	9	5	0	4

YIELD AVERAGES WERE BASED ON DATA FROM:
 1987: WOODSLEE, CHATHAM, RIDGETOWN, NAIRN, WOODSTOCK, OTTAWA-1, OTTAWA-2, KEMPTVILLE.
 1988: WOODSLEE, RIDGETOWN, NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL, OTTAWA-1, KEMPTVILLE.
 1989: HARROW, RIDGETOWN, NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL, RENFREW.
 1990: RIDGETOWN, NAIRN, WOODSTOCK, ELORA, HARRISTON.
 1991: WOODSLEE, RIDGETOWN, NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL, BEACHBURG, KEMPTVILLE.

* DAYS FROM JAN.1
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

YEAR : 91
 MGMT : NORMAL
 AREA : 1

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	3	2.70	78.6	.	.	2.0	82	147	5.0	5.0	.	.	2.0	.	2.2
2 KARAT	2	3.11	78.0	.	.	1.5	96	148	2.0	2.0	.	.	1.0	.	2.8
3 RUBY	1	4.10	79.4	.	.	0.8	80	146	3.0	1.0	.	.	3.0	.	1.5
LOCATIONS		2	1	0	0	1	2	2	1	2	0	0	1	0	2

YIELD AVERAGES WERE BASED ON DATA FROM: WOODSLEE, RIDGETOWN.

YEAR : 91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	2	4.60	76.4	39	97	1.1	89	151	.	2.7	4.8	3.1	.	.	2.5
2 KARAT	3	4.35	76.9	39	92	0.6	102	153	.	2.8	4.8	2.7	.	.	1.0
3 RUBY	1	5.52	76.6	37	93	0.9	86	150	.	0.3	4.6	1.8	.	.	1.0
LOCATIONS		5	5	5	2	2	5	5	0	2	3	4	0	0	1

YIELD AVERAGES WERE BASED ON DATA FROM: NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL.

YEAR : 91
 MGMT : NORMAL
 AREA : 3

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	3	4.18	83.0	38	94	.	99	157	.	.	.	.	.	.	.
2 KARAT	2	4.23	82.9	38	93	.	108	160	.	.	.	.	.	.	.
3 RUBY	1	4.66	80.7	33	94	.	96	157	.	.	.	.	.	.	.
LOCATIONS		2	2	2	2	0	1	1	0	0	0	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM: BEACHBURG, KEMPTVILLE.

YEAR : 91
 MGMT : NORMAL
 AREA(S): 1- 3

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	2	4.08	78.3	39	96	1.4	88	151	5.0	3.8	4.8	3.1	2.0	.	2.3
2 KARAT	3	4.05	78.6	39	92	0.9	101	153	2.0	2.4	4.8	2.7	1.0	.	2.2
3 RUBY	1	5.01	78.0	36	94	0.8	86	150	3.0	0.7	4.6	1.8	3.0	.	1.3
LOCATIONS		9	8	7	4	3	8	8	1	4	3	4	1	0	3

YIELD AVERAGES WERE BASED ON DATA FROM: WOODSLEE, RIDGETOWN, NAIRN, WOODSTOCK, ELORA, HARRISTON, LISTOWEL, BEACHBURG, KEMPTVILLE.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

LOCATION - WOODSLEE
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	3	2.64	.	.	.	.	71	147	.	9.0	.	.	2.0	.	2.3
2 KARAT	2	3.20	.	.	.	.	85	147	.	2.0	.	.	1.0	.	3.5
3 RUBY	1	4.20	.	.	.	.	69	146	.	2.0	.	.	3.0	.	1.0
MEANS		3.35	.	.	.	.	75	147	.	4.3	.	.	2.0	.	2.3

LOCATION - RIDGETOWN
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	3	2.77	78.6	.	.	2.0	92	147	5.0	1.0	.	.	.	.	2.0
2 KARAT	2	3.02	78.0	.	.	1.5	106	148	2.0	2.0	.	.	.	.	2.0
3 RUBY	1	4.00	79.4	.	.	0.8	91	146	3.0	0.0	.	.	.	.	2.0
MEANS		3.26	78.7	.	.	1.4	96	147	3.3	1.0	.	.	.	.	2.0

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	2	4.04	76.8	39	100	.	87	147	.	5.0	6.5	5.0	.	.	2.5
2 KARAT	3	3.88	78.1	41	94	.	102	149	.	5.0	7.0	4.0	.	.	1.0
3 RUBY	1	4.62	78.0	40	96	.	84	146	.	0.0	6.5	2.5	.	.	1.0
MEANS		4.18	77.6	40	97	.	91	147	.	3.3	6.7	3.8	.	.	1.5

LOCATION - WOODSTOCK
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	SUR %	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SSM 0-9	BYD 0-9
	RK	T/HA													
1 ABSOLVENT	2	5.13	74.8	31	.	.	90	149	.	0.3	.	3.3	.	.	.
2 KARAT	3	4.29	74.2	32	.	.	110	152	.	0.7	.	2.7	.	.	.
3 RUBY	1	5.72	76.7	34	.	.	90	148	.	0.7	.	1.0	.	.	.
MEANS		5.04	75.2	32	.	.	97	150	.	0.6	.	2.3	.	.	.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	2	4.89	76.1	40	.	2.3	93	153	.	.	.	.	.	.	.
2 KARAT	3	4.57	77.3	41	.	1.3	109	157	.	.	.	.	.	.	.
3 RUBY	1	6.36	74.8	36	.	1.7	96	153	.	.	.	.	.	.	.
MEANS		5.27	76.1	39	.	1.8	99	154	.	.	.	.	.	.	.

LOCATION - HARRISTON
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	2	4.90	78.6	44	94	.	95	153	.	.	4.5	2.3	.	.	.
2 KARAT	3	4.70	77.6	42	90	.	103	156	.	.	3.5	2.5	.	.	.
3 RUBY	1	5.89	77.0	40	90	.	90	153	.	.	3.8	1.3	.	.	.
MEANS		5.16	77.7	42	91	.	96	154	.	.	3.9	2.0	.	.	.

LOCATION - LISTOWEL
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	3	4.02	75.9	40	.	.	78	151	.	.	3.5	1.8	.	.	.
2 KARAT	2	4.30	77.5	41	.	.	85	152	.	.	3.8	1.5	.	.	.
3 RUBY	1	5.01	76.4	36	.	.	68	150	.	.	3.5	2.5	.	.	.
MEANS		4.44	76.6	39	.	.	77	151	.	.	3.6	1.9	.	.	.

LOCATION - BEACHBURG
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	3	5.52	82.0	44	88	.	.	.	.	.	.	.	.	.	.
2 KARAT	2	5.74	82.8	44	87	.	.	.	.	.	.	.	.	.	.
3 RUBY	1	5.80	81.0	38	88	.	.	.	.	.	.	.	.	.	.
MEANS		5.69	81.9	42	88	.	.	.	.	.	.	.	.	.	.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1991

LOCATION - KEMPTVILLE
 MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	SUR	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SSM	BYD
	RK	T/HA	K/HL	MG	%	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 ABSOLVENT	2	2.83	84.0	32	100	.	99	157	.	.	.	.	.	.	.
2 KARAT	3	2.73	83.0	31	98	.	108	160	.	.	.	.	.	.	.
3 RUBY	1	3.53	80.4	28	100	.	96	157	.	.	.	.	.	.	.
MEANS		3.03	82.5	30	99	.	101	158	.	.	.	.	.	.	.

* DAYS FROM JAN.1

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

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LEGEND

 YLD - YIELD (T/HA; 1 T/HA = 14.87 BU/AC)
 TSTW - TEST WEIGHT (KG/HL)
 KW - KERNEL WEIGHT (MG)
 LOG - LODGING
 HGT - HEIGHT (CM)
 HDT - HEADING DATE (DAYS FROM PLANTING)
 MIL - MILDEW
 LRS - LEAF RUST
 SEP - SEPTORIA
 GLB - GLUME BLOTCH
 HBL - HEAD BLIGHT
 SSM - SPINDLE STREAK MOSAIC VIRUS
 BYD - BARLEY YELLOW DWARF VIRUS

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

LOCATIONS ABBREVIATIONS

EA	ELORA
HW	HARROW
HN	HARRISTON
LL	LISTOWEL
NL	NEW LISKEARD
NN	NAIRN
O1	OTTAWA-1
RN	RIDGETOWN
RR	RAINY RIVER

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

DESCRIPTION OF REGISTERED VARIETIES

COLUMBUS:

NEEPAWA*6/RL4137. DEVELOPED AT AGRICULTURE CANADA, WINNIPEG AND MARKETED BY W.G.THOMPSON & SONS LTD. A TALL, LATE HEADING VARIETY WITH HIGH PROTEIN AND GOOD LEAF RUST RESISTANCE. POOR MILDEW AND BARLEY YELLOW DWARF VIRUS RESISTANCE. LOW YIELDING CULTIVAR WITH HIGH GRAIN AND FLOUR PROTEIN.

KATEPWA:

NEP*6/RL2938/3/NEP*6//C.I. 8554/2*FCR. DEVELOPED AT AGRICULTURE CANADA, WINNIPEG AND MARKETED BY W.G.THOMPSON & SONS LTD. GOOD RUST RESISTANCE; SUSCEPTIBLE TO POWDERY MILDEW. A TALL, LOW YIELDING VARIETY WITH HIGH GRAIN AND FLOUR PROTEIN.

CELTIC, (NAHS81-55):

ANGUS/LEN. DEVELOPED BY AGRIPRO COLORADO, AND MARKETED BY W.G. THOMPSON & SONS LTD. A HIGH YIELDING VARIETY WITH GOOD TEST WEIGHT AND HIGH THOUSAND KERNEL WEIGHT. RESISTANT TO LEAF RUST WITH MODERATE SEPTORIA RESISTANCE. SUSCEPTIBLE TO POWDERY MILDEW. A SHORT, STRONG STRAWED CULTIVAR WITH GOOD FLOUR YIELD AND ASH CONTENT. FLOUR PROTEIN IS 3/4% LESS THAN KATEPWA. HAS A THREE YEAR INTERIM REGISTRATION.

NORSEMAN, (HS78-1139):

PEDIGREE UNKNOWN. DEVELOPED BY AGRIPRO COLORADO, AND MARKETED BY W.G. THOMPSON & SONS LTD. A HIGH YIELDING, SEMI-DWARF VARIETY WITH VERY STRONG STRAW. GOOD LEAF RUST RESISTANCE AND MODERATE RESISTANCE TO POWDERY MILDEW. GOOD FLOUR ASH AND LOAF VOLUME, FLOUR PROTEIN IS 1/2% LOWER THAN KATEPWA. HAS A THREE YEAR INTERIM REGISTRATION, PROCEDURES WILL BE INITIATED IN JANUARY, 1992 TO FULLY REGISTER AS A FEED WHEAT.

ROBLIN:

RL4302/RL4356//RL4359/RL4353. DEVELOPED AT AGRICULTURE CANADA, WINNIPEG. A VERY EARLY, HIGH YIELDING CULTIVAR WITH GOOD RUST RESISTANCE. HIGH FLOUR YIELD AND FLOUR PROTEIN.

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

TRAIT : YIELD
 YEAR(S): 88-91
 AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY NAME	NN88N	EA88N	LL88N	HN88N	NN89N	EA89N	LL89N	HN89N	NN90N	EA90N
1 COLUMBUS	2.29	2.06	3.05	2.04	1.32	2.73	2.24	3.02	1.87	1.98
2 KATEPWA	2.32	2.16	3.49	2.13	1.36	2.67	2.88	3.09	2.21	2.57
3 CELTIC	2.44	2.38	3.63	2.45	2.28	3.84	3.93	3.73	2.66	3.21
4 NORSEMAN	2.51	2.09	3.76	2.39	2.73	3.78	4.06	4.60	2.75	3.72
5 ROBLIN	2.05	1.73	3.65	1.83	2.15	3.34	3.52	4.13	2.64	3.81
LOCATION MEAN	2.32	2.08	3.52	2.17	1.97	3.27	3.33	3.71	2.43	3.06

KEY NAME	HN90N	NN91N	EA91N	HN91N	MEAN
1 COLUMBUS	2.44	1.14	3.32	2.03	2.25
2 KATEPWA	3.24	1.45	3.63	2.25	2.53
3 CELTIC	3.78	1.96	4.53	3.12	3.14
4 NORSEMAN	4.32	2.10	4.69	3.30	3.34
5 ROBLIN	4.29	1.70	3.68	3.91	3.03
LOCATION MEAN	3.61	1.67	3.97	2.92	2.86

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	NN88N	EA88N	LL88N	HN88N	NN89N	EA89N	LL89N	HN89N	NN90N	EA90N
1 COLUMBUS	99	99	87	94	67	83	67	81	77	65
2 KATEPWA	100	104	99	98	69	82	87	83	91	84
3 CELTIC	105	114	103	113	116	117	118	100	110	105
4 NORSEMAN	108	100	107	110	139	116	122	124	113	122
5 ROBLIN	88	83	104	84	109	102	106	111	109	125
LOCATION MEAN	2.32	2.08	3.52	2.17	1.97	3.27	3.33	3.71	2.43	3.06

KEY NAME	HN90N	NN91N	EA91N	HN91N	MEAN
1 COLUMBUS	68	68	84	69	79
2 KATEPWA	90	87	91	77	89
3 CELTIC	105	117	114	107	110
4 NORSEMAN	120	126	118	113	117
5 ROBLIN	119	102	93	134	105
LOCATION MEAN	3.61	1.67	3.97	2.92	2.86

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

TRAIT : YIELD
 YEAR(S): 88-91
 AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY NAME	O188N	O189N	O190N	O191N	MEAN
1 COLUMBUS	2.27	2.90	3.69	1.19	2.51
2 KATEPWA	1.90	2.97	3.72	1.52	2.53
3 CELTIC	2.31	3.43	4.30	1.61	2.91
4 NORSEMAN	2.02	3.42	4.25	1.36	2.76
5 ROBLIN	1.84	3.31	3.86	1.70	2.68
LOCATION MEAN	2.07	3.21	3.96	1.48	2.68

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	O188N	O189N	O190N	O191N	MEAN
1 COLUMBUS	110	90	93	81	93
2 KATEPWA	92	93	94	103	95
3 CELTIC	112	107	108	109	109
4 NORSEMAN	98	107	107	92	101
5 ROBLIN	89	103	97	115	101
LOCATION MEAN	2.07	3.21	3.96	1.48	2.68

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

TRAIT : YIELD
 YEAR(S) : 88-91
 MGMT : NORMAL

KEY NAME	AREA 2 (14)	AREA 3 (4)	PROVINCE (24)**
1 COLUMBUS	2.25	2.51	2.38
2 KATEPWA	2.53	2.53	2.51
3 CELTIC	3.14	2.91	3.06
4 NORSEMAN	3.34	2.76	3.21
5 ROBLIN	3.03	2.68	2.96
OVERALL MEAN	2.86	2.68	2.83

MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

KEY NAME	AREA 2	AREA 3	PROVINCE
1 COLUMBUS	79.2	93.5	83.8
2 KATEPWA	88.7	95.3	88.3
3 CELTIC	110.3	109.1	108.9
4 NORSEMAN	116.9	100.9	113.8
5 ROBLIN	104.9	101.2	105.2
OVERALL MEAN	2.86	2.68	2.83

- * # OF LOCATIONS
 ** WEIGHTED AVERAGE FROM AREAS 1 TO 5, AREA 1 DATA FOR 1988 AND 1989 ONLY,
 AREA 5 DATA FOR 1990 AND 1991 ONLY.

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

YEAR(S): 88-91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
	RK	T/HA												
1 COLUMBUS	5	2.25	72.0	30	2.4	94	60	4.4	2.3	3.5	3.8	.	.	6.0
2 KATEPWA	4	2.53	71.6	29	2.3	91	57	4.8	2.9	3.5	4.9	.	.	5.6
3 CELTIC	2	3.14	72.8	33	0.5	79	56	4.3	1.5	2.8	4.7	.	.	4.3
4 NORSEMAN	1	3.34	71.0	32	0.0	71	58	3.0	1.1	2.7	4.7	.	.	4.9
5 ROBLIN	3	3.03	72.2	34	0.8	84	52	3.7	1.6	2.9	3.7	.	.	5.7
LOCATIONS		14	14	14	2	13	15	10	10	5	3	0	0	2

YIELD AVERAGES WERE BASED ON DATA FROM:
 1988: NAIRN, ELORA, HARRISTON, LISTOWEL.
 1989: NAIRN, ELORA, HARRISTON, LISTOWEL.
 1990: NAIRN, ELORA, HARRISTON.
 1991: NAIRN, ELORA, HARRISTON.

YEAR(S): 88-91
 MGMT : NORMAL
 AREA : 3

KEY NAME	YIELD		TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
	RK	T/HA												
1 COLUMBUS	5	2.51	74.3	31	0.0	87	54	.	.	.	.	.	.	.
2 KATEPWA	4	2.53	72.9	28	0.5	82	52	.	.	.	.	.	.	.
3 CELTIC	1	2.91	75.1	34	0.0	72	51	.	.	.	.	.	.	.
4 NORSEMAN	2	2.76	71.7	30	0.0	59	53	.	.	.	.	.	.	.
5 ROBLIN	3	2.68	73.3	31	0.5	71	48	.	.	.	.	.	.	.
LOCATIONS		4	4	3	1	4	2	0	0	0	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM:
 1988: OTTAWA-1.
 1989: OTTAWA-1.
 1990: OTTAWA-1.
 1991: OTTAWA-1.

* DAYS FROM PLANTING
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

YEAR(S): 88-91
 MGMT : NORMAL
 AREA(S): 1- 5

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	5	2.38	71.6	30	1.6	93	60	4.2	2.3	3.5	3.8	.	.	6.0
2 KATEPWA	4	2.51	71.4	28	1.8	90	57	4.6	2.9	3.5	4.9	.	.	5.6
3 CELTIC	2	3.06	73.0	32	0.7	78	56	4.1	1.5	2.8	4.7	.	.	4.3
4 NORSEMAN	1	3.21	70.6	31	0.5	68	58	2.8	1.1	2.7	4.7	.	.	4.9
5 ROBLIN	3	2.96	72.4	33	1.0	83	52	3.6	1.6	2.9	3.7	.	.	5.7
LOCATIONS		24	24	23	6	24	23	11	10	5	3	0	0	2

YIELD AVERAGES WERE BASED ON DATA FROM:

1988: HARROW, RIDGETOWN, NAIRN, ELORA, HARRISTON, LISTOWEL, OTTAWA-1.

1989: RIDGETOWN, NAIRN, ELORA, HARRISTON, LISTOWEL, OTTAWA-1

1990: NAIRN, ELORA, HARRISTON, OTTAWA-1, NEW LISKEARD, RAINY RIVER.

1991: NAIRN, ELORA, HARRISTON, OTTAWA-1, NEW LISKEARD.

* DAYS FROM PLANTING

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR(S): 90-91
 AREA : 5

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	NL90N	RR90N	NL91N	MEAN
1 COLUMBUS	97	83	104	95
2 KATEPWA	77	92	95	88
3 CELTIC	88	116	102	102
4 NORSEMAN	116	111	110	112
5 ROBLIN	121	98	88	103
LOCATION MEAN	2.98	3.16	4.76	3.64

YEAR(S): 90-91
 MGMT : NORMAL
 AREA : 5

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	4	3.49	67.5	33	1.0	101	56	.	.	.	.	.	.	.
2 KATEPWA	5	3.26	69.3	26	1.0	96	54	.	.	.	.	.	.	.
3 CELTIC	2	3.73	71.2	31	1.0	82	54	.	.	.	.	.	.	.
4 NORSEMAN	1	4.07	68.3	32	1.0	72	55	.	.	.	.	.	.	.
5 ROBLIN	3	3.64	70.5	33	1.0	92	50	.	.	.	.	.	.	.
LOCATIONS			3	4	4	1	4	3	0	0	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM:
 1990: NEW LISKEARD, RAINY RIVER.
 1991: NEW LISKEARD.

* DAYS FROM PLANTING
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR : 91
 AREA : 2

KEY NAME	NN91N	EA91N	HN91N	MEAN
1 COLUMBUS	1.14	3.32	2.03	2.16
2 KATEPWA	1.45	3.63	2.25	2.44
3 CELTIC	1.96	4.53	3.12	3.20
4 NORSEMAN	2.10	4.69	3.30	3.36
5 ROBLIN	1.70	3.68	3.91	3.10
LOCATION MEAN	1.67	3.97	2.92	2.85

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	EA91N	NN91N	HN91N	MEAN
1 COLUMBUS	84	68	69	74
2 KATEPWA	91	87	77	85
3 CELTIC	114	117	107	113
4 NORSEMAN	118	126	113	119
5 ROBLIN	93	102	134	109
LOCATION MEAN	3.97	1.67	2.92	2.85

TRAIT : YIELD
 YEAR : 91
 AREA : 3

KEY NAME	O191N	MEAN
1 COLUMBUS	1.19	1.19
2 KATEPWA	1.52	1.52
3 CELTIC	1.61	1.61
4 NORSEMAN	1.36	1.36
5 ROBLIN	1.70	1.70
LOCATION MEAN	1.48	1.48

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	O191N	MEAN
1 COLUMBUS	81	81
2 KATEPWA	103	103
3 CELTIC	109	109
4 NORSEMAN	92	92
5 ROBLIN	115	115
LOCATION MEAN	1.48	1.48

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

TRAIT : YIELD
 YEAR : 91
 AREA : 5

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY NAME	NL91N	MEAN
1 COLUMBUS	4.95	4.95
2 KATEPWA	4.54	4.54
3 CELTIC	4.87	4.87
4 NORSEMAN	5.24	5.24
5 ROBLIN	4.21	4.21
LOCATION MEAN	4.76	4.76

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	NL91N	MEAN
1 COLUMBUS	104	104
2 KATEPWA	95	95
3 CELTIC	102	102
4 NORSEMAN	110	110
5 ROBLIN	88	88
LOCATION MEAN	4.76	4.76

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

YEAR : 91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	5	2.16	71.5	28	1.8	95	54	4.8	1.4	3.0	1.3	.	.	.
2 KATEPWA	4	2.44	70.8	27	2.5	94	50	5.3	2.6	2.5	1.5	.	.	.
3 CELTIC	2	3.20	73.8	32	0.0	76	49	4.3	1.4	2.0	2.0	.	.	.
4 NORSEMAN	1	3.36	71.0	31	0.0	70	51	5.0	0.4	2.0	2.3	.	.	.
5 ROBLIN	3	3.10	73.4	34	0.0	82	44	4.8	2.3	2.0	1.5	.	.	.
LOCATIONS		3	3	3	1	3	3	1	2	1	1	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM: NAIRN, ELORA, HARRISTON.

YEAR : 91
 MGMT : NORMAL
 AREA : 3

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	5	1.19	70.5	26	.	68	50	.	.	.	.	.	.	.
2 KATEPWA	3	1.52	68.5	24	.	68	49	.	.	.	.	.	.	.
3 CELTIC	2	1.61	71.5	28	.	63	47	.	.	.	.	.	.	.
4 NORSEMAN	4	1.36	67.5	24	.	48	49	.	.	.	.	.	.	.
5 ROBLIN	1	1.70	70.5	27	.	68	45	.	.	.	.	.	.	.
LOCATIONS		1	1	1	0	1	1	0	0	0	0	0	0	0

YIELD AVERAGES WERE BASED ON DATA FROM: OTTAWA-1.

* DAYS FROM PLANTING
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS.

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

YEAR : 91
 MGMT : NORMAL
 AREA(S): 2- 5

KEY NAME	YIELD RK T/HA	TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
1 COLUMBUS	5 2.53	69.5	32	1.8	94	53	4.8	1.4	3.0	1.3	.	.	.
2 KATEPWA	4 2.68	69.9	27	2.5	91	50	5.3	2.6	2.5	1.5	.	.	.
3 CELTIC	2 3.22	73.2	34	0.0	76	49	4.3	1.4	2.0	2.0	.	.	.
4 NORSEMAN	1 3.34	70.3	33	0.0	67	51	5.0	0.4	2.0	2.3	.	.	.
5 ROBLIN	3 3.04	71.9	35	0.0	82	45	4.8	2.3	2.0	1.5	.	.	.
LOCATIONS													

YIELD AVERAGES WERE BASED ON DATA FROM: NAIRN, ELORA, HARRISTON, OTTAWA-1,
 NEW LISKEARD.

* DAYS FROM PLANTING
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	5	1.14	70.7	26	.	82	53	.	.	.	.	.	.	.
2 KATEPWA	4	1.45	69.4	25	.	87	49	.	.	.	.	.	.	.
3 CELTIC	2	1.96	74.3	31	.	68	49	.	.	.	.	.	.	.
4 NORSEMAN	1	2.10	72.1	31	.	66	49	.	.	.	.	.	.	.
5 ROBLIN	3	1.70	73.2	32	.	66	43	.	.	.	.	.	.	.
MEANS		1.67	71.9	29	.	74	48	.	.	.	.	.	.	.

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	5	3.32	72.3	32	.	93	53	.	2.3	.	.	.	.	.
2 KATEPWA	4	3.63	72.3	30	.	85	50	.	4.3	.	.	.	.	.
3 CELTIC	2	4.53	76.7	38	.	70	48	.	2.0	.	.	.	.	.
4 NORSEMAN	1	4.69	74.8	35	.	63	51	.	0.0	.	.	.	.	.
5 ROBLIN	3	3.68	74.8	37	.	78	43	.	3.3	.	.	.	.	.
MEANS		3.97	74.2	34	.	78	49	.	2.4	.	.	.	.	.

LOCATION - HARRISTON
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 COLUMBUS	5	2.03	71.6	27	1.8	110	55	4.8	0.5	3.0	1.3	.	.	.
2 KATEPWA	4	2.25	70.7	26	2.5	110	52	5.3	0.8	2.5	1.5	.	.	.
3 CELTIC	3	3.12	70.3	28	0.0	90	50	4.3	0.8	2.0	2.0	.	.	.
4 NORSEMAN	2	3.30	66.2	26	0.0	80	52	5.0	0.8	2.0	2.3	.	.	.
5 ROBLIN	1	3.91	72.1	34	0.0	103	46	4.8	1.3	2.0	1.5	.	.	.
MEANS		2.92	70.2	28	0.9	99	51	4.8	0.8	2.3	1.7	.	.	.

* DAYS FROM PLANTING

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1991

LOCATION - OTTAWA-1
MANAGEMENT - NORMAL

KEY NAME	YIELD RK T/HA	TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
1 COLUMBUS	5 1.19	70.5	26	.	68	50	.	.	.	.	.	.	.
2 KATEPWA	3 1.52	68.5	24	.	68	49	.	.	.	.	.	.	.
3 CELTIC	2 1.61	71.5	28	.	63	47	.	.	.	.	.	.	.
4 NORSEMAN	4 1.36	67.5	24	.	48	49	.	.	.	.	.	.	.
5 ROBLIN	1 1.70	70.5	27	.	68	45	.	.	.	.	.	.	.
MEANS	1.48	69.7	26	.	63	48	.	.	.	.	.	.	.

LOCATION - NEW LISKEARD
MANAGEMENT - NORMAL

KEY NAME	YIELD RK T/HA	TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
1 COLUMBUS	2 4.95	64.8	52	.	104	.	.	.	.	.	.	.	.
2 KATEPWA	4 4.54	73.6	33	.	93	.	.	.	.	.	.	.	.
3 CELTIC	3 4.87	76.1	49	.	84	.	.	.	.	.	.	.	.
4 NORSEMAN	1 5.24	71.1	49	.	70	.	.	.	.	.	.	.	.
5 ROBLIN	5 4.21	74.8	49	.	86	.	.	.	.	.	.	.	.
MEANS	4.76	72.1	46	.	87	.	.	.	.	.	.	.	.

LOCATION - EMO
MANAGEMENT - NORMAL

KEY NAME	YIELD RK T/HA	TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
1 COLUMBUS	.	67.0	29	.	105	55	.	.	.	.	.	.	.
2 KATEPWA	.	65.0	26	.	102	52	.	.	.	.	.	.	.
3 CELTIC	.	70.0	31	.	81	52	.	.	.	.	.	.	.
4 NORSEMAN	.	70.0	31	.	75	54	.	.	.	.	.	.	.
5 ROBLIN	.	66.0	30	.	90	47	.	.	.	.	.	.	.
MEANS	.	67.6	29	.	91	52	.	.	.	.	.	.	.

* DAYS FROM PLANTING

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1991

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 1 YEAR OVERALL SUMMARY
 INDIVIDUAL TRIAL SUMMARIES

LEGEND

 YLD - YIELD (T/HA; 1 T/HA = 14.87 BU/AC)
 TSTW - TEST WEIGHT (KG/HL)
 KW - KERNEL WEIGHT (MG)
 LOG - LODGING
 HGT - HEIGHT (CM)
 HDT - HEADING DATE
 MIL - MILDEW
 LRS - LEAF RUST
 SEP - SEPTORIA
 GLB - GLUME BLOTCH
 HBL - HEAD BLIGHT
 SSM - SPINDLE STREAK MOSAIC VIRUS
 BYD - BARLEY YELLOW DWARF VIRUS

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

LOCATIONS ABBREVIATIONS

EA	ELORA
HN	HARRISTON
NN	NAIRN

DESCRIPTION OF REGISTERED VARIETIES

MEDORA:

WARD/MACOUN. DEVELOPED AT THE AGRICULTURE CANADA RESEARCH STATION,
 WINNIPEG. RESISTANT TO LEAF RUST. SLIGHTLY HIGHER PROTEIN THAN EDMORE.

EDMORE:

D6530/D65114. DEVELOPED AT NORTH DAKOTA STATE UNIVERSITY AND
 MARKETED BY W.G.THOMPSON & SONS LTD. A HIGH YIELDING VARIETY
 WITH HIGH TEST WEIGHT AND THOUSAND KERNEL WEIGHT. HAS A THREE YEAR
 INTERIM REGISTRATION FOR ONTARIO.

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR(S): 87-91
 AREA : 2

KEY NAME	EA87N	NN88N	EA88N	HN88N	NN89N	EA89N	HN89N	NN90N	EA90N	HN90N	EA91N	HN91N	MEAN
1 MEDORA	2.84	3.04	2.33	2.26	3.01	4.13	2.24	2.97	4.12	3.45	4.16	3.18	3.14
2 EDMORE	3.26	2.63	2.14	2.28	2.72	4.92	2.71	2.95	3.99	4.38	3.56	3.26	3.23
LOC.MEAN	3.05	2.84	2.24	2.27	2.87	4.53	2.47	2.96	4.05	3.91	3.86	3.22	3.19

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	EA87N	NN88N	EA88N	HN88N	NN89N	EA89N	HN89N	NN90N	EA90N	HN90N	EA91N	HN91N	MEAN*
1 MEDORA	93	107	104	100	105	91	91	100	102	88	108	99	99
2 EDMORE	107	93	96	100	95	109	109	100	98	112	92	101	101
LOC.MEAN	3.05	2.84	2.24	2.27	2.87	4.53	2.47	2.96	4.05	3.91	3.86	3.22	3.19

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

TRAIT : YIELD
 YEAR(S): 87-91

KEY NAME	AREA 2 (12)**	AREAS 1-2++(15)
1 MEDORA	3.14	2.88
2 EDMORE	3.23	3.02
OVERALL MEAN	3.19	2.95

** # OF LOCATIONS

++ WEIGHTED AVERAGE - AREA 1 DATA FOR 1989 AND 1990 ONLY.

MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

KEY NAME	AREA 2	AREAS 1-2
1 MEDORA	99.0	97.3
2 EDMORE	101.0	102.7
OVERALL MEAN	3.19	2.95

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1991

YEAR(S): 87-91
 MGMT : NORMAL
 AREA : 2

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 MEDORA	2	3.14	73.4	39	3.5	95	58	3.8	1.0	3.3	.	1.7	.	6.6
2 EDMORE	1	3.23	72.0	44	3.8	96	58	4.0	2.1	2.9	.	1.0	.	4.0
LOCATIONS	12	11	10	3	12	13	10	5	5	0	1	0	2	

YIELD AVERAGES WERE BASED ON DATA FROM:
 1987: ELORA.
 1988: NAIRN, ELORA, HARRISTON.
 1989: NAIRN, ELORA, HARRISTON.
 1990: NAIRN, ELORA, HARRISTON.
 1991: ELORA, HARRISTON.

YEAR(S): 87-91
 MGMT : NORMAL
 AREA(S): 1- 2

KEY NAME	YIELD		TSTW	KW	LOG	HGT	HDT	MIL	LRS	SEP	GLB	HBL	SRS	BYD
	RK	T/HA	K/HL	MG	0-9	CM	*	0-9	0-9	0-9	0-9	0-9	0-9	0-9
1 MEDORA	2	2.88	71.9	37	3.1	95	59	3.7	1.0	3.3	.	1.7	.	6.6
2 EDMORE	1	3.02	71.6	42	3.1	95	59	4.0	2.1	2.9	.	1.0	.	4.0
LOCATIONS	15	14	12	4	14	15	11	5	5	0	1	0	2	

YIELD AVERAGES WERE BASED ON DATA FROM:
 1987: ELORA.
 1988: NAIRN, ELORA, HARRISTON.
 1989: DELHI, NAIRN, ELORA, HARRISTON.
 1990: DELHI, RIDGETOWN, NAIRN, ELORA, HARRISTON.
 1991: ELORA, HARRISTON.

* DAYS FROM PLANTING
 A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1991

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD
 YEAR : 91
 AREA : 2

KEY NAME	EA91N	HN91N	MEAN
1 MEDORA	4.16	3.18	3.67
2 EDMORE	3.56	3.26	3.41
LOCATION MEAN	3.86	3.22	3.54

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	EA91N	HN91N	MEAN
1 MEDORA	108	99	103
2 EDMORE	92	101	97
LOCATION MEAN	3.86	3.22	3.54

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1991

YEAR : 91
MGMT : NORMAL

AREA : 2

KEY NAME	YIELD		TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
	RK	T/HA												
1 MEDORA	1	3.67	74.3	43	.	97	51	2.0	1.3	2.3	.	.	.	.
2 EDMORE	2	3.41	72.9	45	.	101	54	3.7	2.7	3.0	.	.	.	.
LOCATIONS		2	2	2	0	3	3	1	1	1	0	0	0	0

YIELD AVERAGE BASED ON DATA FROM ELORA AND HARRISTON.

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
	RK	T/HA												
1 MEDORA	1	4.16	74.8	46	.	95	51	.	1.3	.	.	.	.	.
2 EDMORE	2	3.56	71.7	48	.	102	55	.	2.7	.	.	.	.	.
MEANS		3.86	73.3	47	.	98	53	.	2.0	.	.	.	.	.

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
	RK	T/HA												
1 MEDORA	90	49	.	.	.	.	.	.	.
2 EDMORE	92	50	.	.	.	.	.	.	.
MEANS		91	49	.	.	.	.	.	.	.

LOCATION - HARRISTON
MANAGEMENT - NORMAL

KEY NAME	YIELD		TSTW K/HL	KW MG	LOG 0-9	HGT CM	HDT *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL 0-9	SRS 0-9	BYD 0-9
	RK	T/HA												
1 MEDORA	2	3.18	73.8	40	.	105	53	2.0	.	2.3	.	.	.	.
2 EDMORE	1	3.26	74.2	41	.	108	56	3.7	.	3.0	.	.	.	.
MEANS		3.22	74.0	40	.	107	55	2.8	.	2.7	.	.	.	.

* DAYS FROM PLANTING

A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

CO-OPERATORS AND LOCATIONS OF REGIONAL TESTS, 1991

Testing area	Country or District	Co-operators	Crops					
			Barley	Oats	Winter Barley	Winter Wheat	Spring Wheat	Spring Wheat
I	Kent I	RN = Ridgetown C.A.T., Ridgetown, Ont.	X*	X	X	R+W		
	Kent II	MH = W.G. Thompson and Sons Ltd., Morpeth, Ont.			X	W		
	Lambton	ID = Ridgetown C.A.T., Ridgetown, Ont. (Inwood)	X**	X				
	Essex	HW = Harrow Research Station, Agriculture Canada				W		
	Essex	WE = Woodslee Soil Substation, Agriculture Canada				R+W		
II	Oxford	WK = Crop Science Department, OAC, Woodstock, Ont.	X	X	X*	R+W		
	Huron	W.G. Thompson and Sons Ltd., Winthrop, Ontario	X	X				
	Wellington I	EA = Crop Science Department, OAC, Elora, Ont.			X	R+W	S+D	
	Wellington	HN = C & M Seed Sales Inc., Pamerston, Ontario				R	S+D	
	Middlesex I	NN = W.G. Thompson & Sons Ltd., Nairn, Ont.	X**	X	X	R+W	S+D	
	Middlesex	LN = W. Laidlaw, R.R. #7, London, Ont. (R.C.A.T.)				W*		
	Perth	LL = King Agro, Listowel, Ontario				R		
	Lennox Addington	BH = L. Seaman, Agriculture Canada, Bath, Ontario				W		
	III	Stormont, Dundas & Glengarry	Kemptville C.A.T., Winchester, Ont.	X*	X			
		Grenville	KE = Kemptville C.A.T., Kemptville, Ont.	X	X	R+W		
Carleton I		01 = Agriculture Canada, P.R.C., Ottawa, Ont.	X	X	R*+W**	S		
Carleton		02 = Agriculture Canada, P.R.C., Ottawa, Ont.			R*+W*			
Renfrew I		K. Dick, R.R. #1, Douglas, Ont.	X	X				
Renfrew		RW = L. Seaman, Agriculture Canada, Renfrew, Ont.			W*			
Renfrew		BG = L. Seaman, Agriculture Canada, Beachburg, Ont.			R			
Lanark		J. Stewart, Pakenham, Ont.	X*	X				
Prescott & Russell		Alfred College of Agriculture and Food Tech., Alfred, Ont.	X	X				

CO-OPERATORS AND LOCATIONS OF REGIONAL TESTS, 1991 (Continued)

Testing area	Country or District	Co-operators	Crops				
			Barley	Oats	Winter Barley	Winter Wheat	Spring Wheat
IV	Wellington I	Crop Science Dept., OAC, Elora, Ont.	X	X			
V	Temiskaming I	NL = New Liskeard C.A.T., New Liskeard, Ont.	X	X			S
	Temiskaming II	New Liskeard C.A.T., New Liskeard, Ont.	X	X			
	Thunder Bay	O.M.A.F., Thunder Bay Experimental Farm, Thunder Bay, Ont.	X	X			
	Nipissing-Sudbury	New Liskeard C.A.T., New Liskeard, Ont.	X	X			
	Rainy River District	EO = O.M.A.F., Emo Research Station, Emo, Ont.	X*	X*			S
VI	Cochrane	Agriculture Canada, Exp. Farm, Kapuskasing, Ont.	X	X			

- * Data not used or plots not harvested
- ** Plots did not pass inspection conducted by area coordinators with respect to yield
- R = Hard Red Winter Wheat grown at this location
- W = Soft White Winter Wheat grown at this location
- S = Spring Red Wheat grown at this location
- D = Spring Durum Wheat grown at this location

