Department of Crop Science

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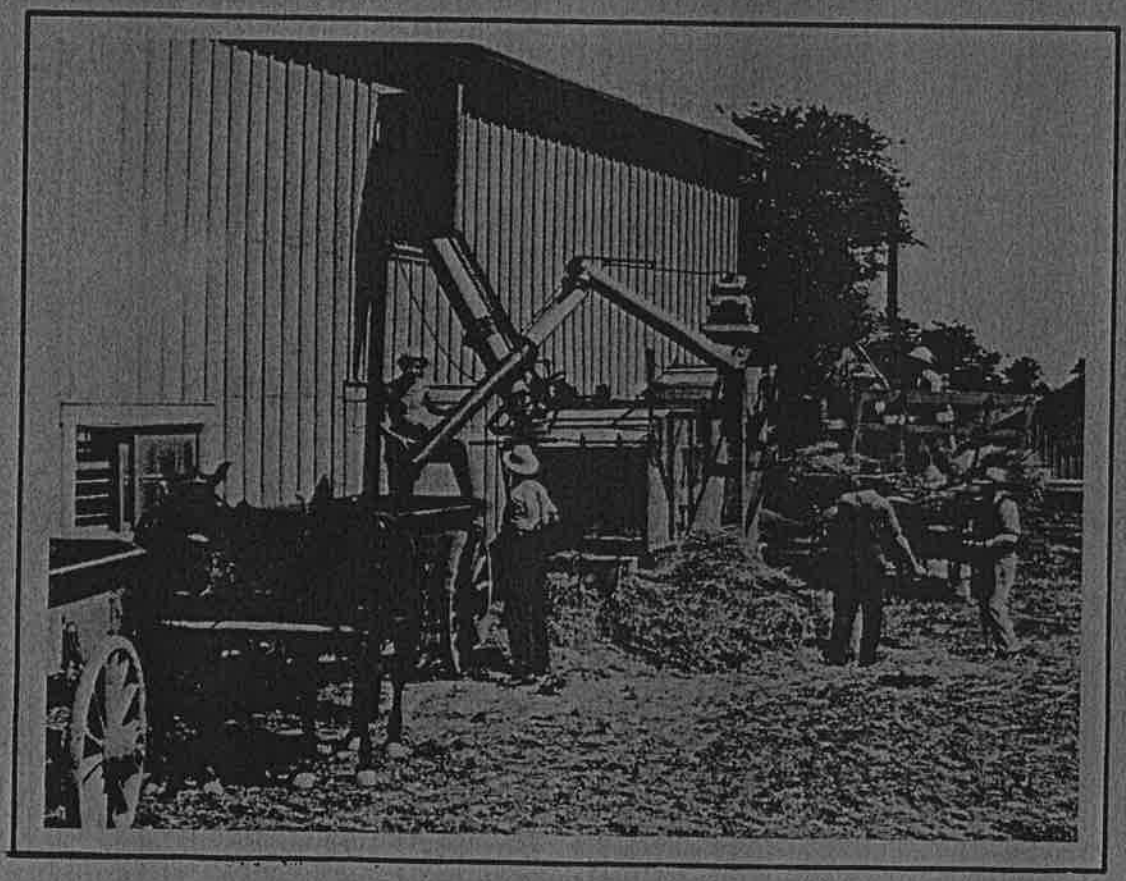
1990 PROGRESS REPORT

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



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

AGRICULTURE CANADA

Delhi Research Station
Harrow Research Station
Kapuskasing Experimental Farm
Plant Research Centre, Ottawa

ONTARIO MINISTRY OF AGRICULTURE AND FOOD

Agricultural Representatives Branch
Alfred College of Agriculture and Food Technology
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Ontario Agricultural College

SEED TRADE

C & M Seed Sales Inc.
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Additional Copies of this Report available from

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Ontario Agricultural College
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TABLE OF CONTENTS

INTRODUCTION

In 1990, 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 14 machine planted and harvested locations for spring barley, and oats across the province in 1990. 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 1990 were down from the 1989 yields with barley averaging 3.6 t/ha and oats averging 3.3 t/ha across the test locations. Area IV had the highest average yields for barley and for oats. Area VI had the lowest barley yields while Areas I and III had the lowest yields for oats.

Spring Barley

The seed supplied for the cultivar Maskot was highly contaminated with two-rowed barley and so the data should be disregarded throughout this report. Across the province, Chapais at 4.07 t/ha was the highest yielding six-rowed barley. In two-rowed barley, Symko at 3.73 t/ha was higher yielding than the other entries. Overall, Chapais was the highest yielding six-rowed barley in the areas II at 4.50 t/ha, V at 5.43 t/ha and VI at 2.81 t/ha; Joly in area I at 3.15 t/ha, Leger in area III at 3.08 t/ha and Etienne in area IV at 6.22 t/ha. Cultivar Morrison was the highest yielding two-rowed cultivar in Areas I, and VI while Lester was the highest in areas II and IV, and Symko was highest in Areas III and V. The six-rowed barley generally out-yielded the two-rowed barleys across the province in 1990 except in Area I. There was reasonable lodging and disease data from several sites in 1990.

Oats

The highest yielding oat cultivar in 1990 across the province was Ogle at 4.24 t/ha. Ogle was the highest yielding cultivar in Area I, Area II and Area V, TO 85025 in Area III, and OA 775-4 in Area IV, with no data reported from Area VI. Lodging and disease were obtained from several locations in 1990. The milling quality of the crop was good. Exports of oats to the U.S. will probably be somewhat down from the past with a good crop in the Midwest this year.

WINTER CEREALS

Winter Barley

Test data were obtained from four sites for winter barley in 1990. Winter kill at Elora was too severe to be included in the report. The crop averaged about 3.93 t/ha, Area I being virtually the same yield as Area II. The highest yielding cultivar across the 1990 test sites was OAC Elmira. There were appreciable differences in winter kill among the cultivars with OAC Acton and OAC Elmira having lower survival than Huron and OAC Halton. OAC Acton had the lowest yield hectolitre weight, and poorest lodging resistance, possibly stemming from its high susceptibility to mildew. Severe leaf rust was noted at several

locations in 1990. Lodging was a major problem in the 1990.

Soft, White Winter Wheat

Yield data on soft, white winter wheat were obtained from 7 locations in 1990. Area II had the highest yields while Area III had the lowest yields. Over all, the crop averaged about 4.7 t/ha. Rebecca was the highest yielding cultivar across the province. Annette had the highest kernel weight and also very good resistance to mildew, but a lower leaf rust score than other cultivars. Harus and Rebecca had better lodging resistance than other cultivars. The winter was severe and only one out of four Area III locations reported yield data.

Red Winter Wheat

Yield data were obtained from 5 locations in 1990 for fall, sown red winter wheat. Overall average yield was about 5.4 t/ha, with Orbita being the highest yielding cultivar at 5.8 t/ha. Karat had the highest hectolitre weight. Absolvent had the poorest mildew and Septoria resistance. The severe winter made it unable to use area III data this year.

Spring Red Wheat:

Yield data were obtained from 6 locations for 1990. Area 1 has been dropped and 2 locations were added in Area 5. The overall average was 3.1 t/ha; Norseman having the highest average yield at 3.7 t/ha and Roblin close by at 3.6 t/ha. Norseman also has good mildew and leaf rust resistance. Max maintains a good yield in Area 3 but not elsewhere.

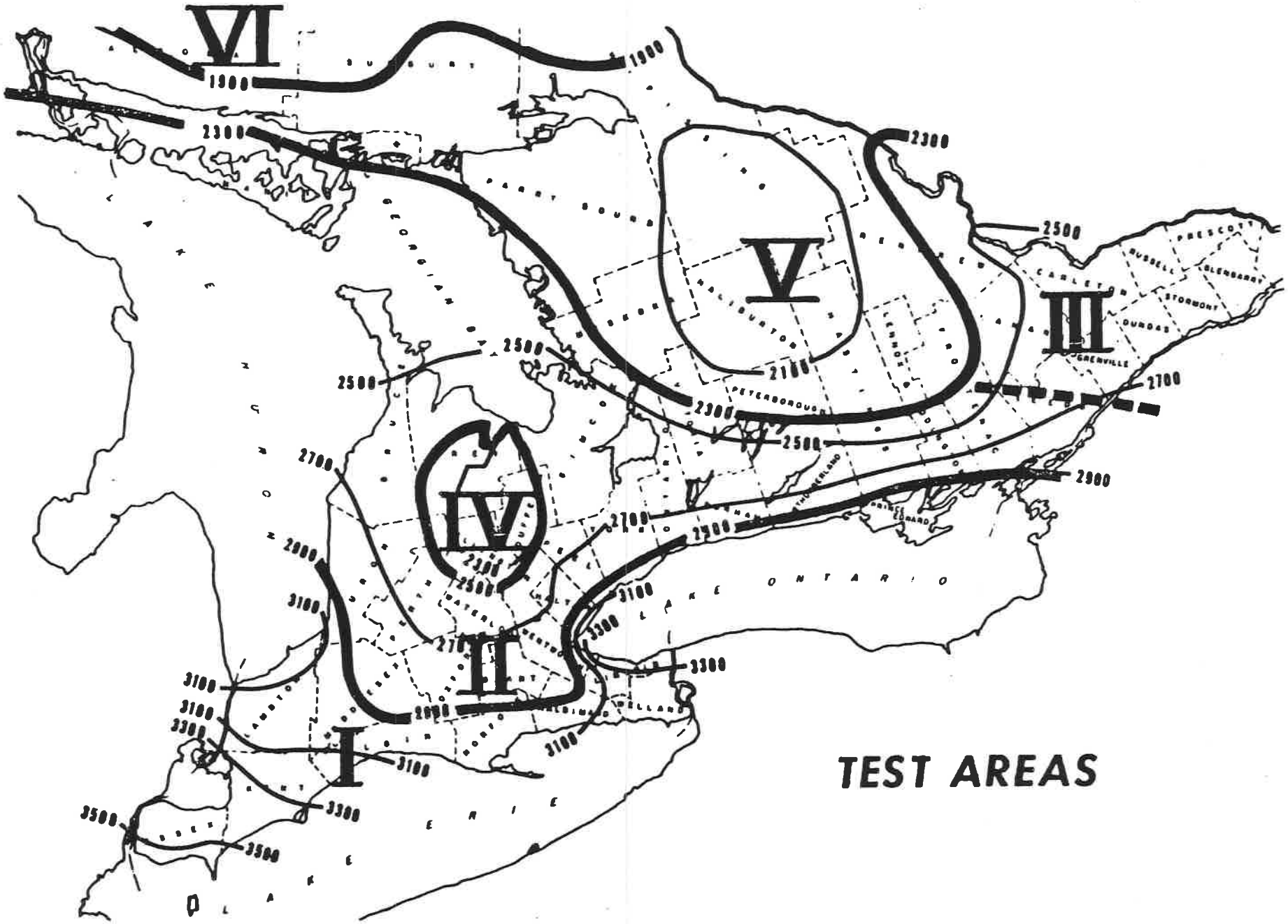
Spring Durun Wheat:

Yield data were obtained from 5 locations for 1990. Average yield was 2.9 t/ha; Edmore yielding a slightly higher yield than Medora. Medora appears more susceptible to BYDV than Edmore.

GROWING CONDITIONS

The autumn of 1989 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 average for most spring cereals. After a fairly cool spring, rains came in late June and essentially stayed on for the rest of the summer. There was some lodging due to severe thunderstorms throughout the summer. Yields tend to be average, overall quality was generally quite good. Harvest dates were average in most of the province however rains delayed some harvest and did cause some weathering damage.


VI
V
III
IV
II
I
1900
2300
2500
2100
2700
2900
3100
3300
3500
PRESCOTT
RUSSELL
GLENGARRY
STORMONT
DUNDAS
GRENVILLE
PETERBOROUGH
PRINCE EDWARD
L A K E O N T A R I O
E R I E

TEST AREAS

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 1990 tests and the average performance of cultivars over the past two to eight 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 - "1991 Field Crop Recommendations for Ontario".

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1990

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.

Birka - two-rowed, rough-awned, barley developed in Sweden from the cross W82-68/W17-68. Introduced in Canada by W.G. Thompson and Sons Ltd. High yield, large kernels, short and lodging resistant. Resistant to mildew and leaf rust. Tolerant to scald. Registered in 1982.

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 UPBS/BPBS66//Micmac. Registered in 1990.

Micmac - two-rowed, rough-awned, barley Charlottetown P.E.I. selection from the cross 1B6-3/Volla/2/Mazurka. High yield, 3-4 days earlier than Birka, but inferior lodging resistance to Birka. Thousand kernel weight comparable to Birka. May have some tolerance to net blotch and mildew. Registered in 1983.

Morrison (OB751-12) - two-rowed, roughawned, 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 UPB560 x UBP576 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 (OB751-27) - two-rowed, rough awned, barley developed by Agriculture Canada, Ottawa from the cross Rodeo/Gitane. Registered in 1989.

Winthrop (TBE611-29) - two-rowed, rough awned, barley developed by W.G. Thompson from the cross Micmac/B7735-5. Registered in 1989.

K8-10 - two-rowed, rough awned barley developed by King Agro, Pedigree not provided. Not registered.

TBR 635-25 - a two-rowed, rough awned barley developed by W.G. Thompson and Sons from a cross of CGB 83-46/Rodeo. Not registered.

Chapais (QB198.27) - 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.

Mingo - six-rowed, smooth-awned, barley developed by Ciba-Geigy Seeds Ltd. from the cross Vanier/Laurier using the doubled haploid method. Susceptible to mildew. Owned and distributed by W.G. Thompson and Sons Ltd. Registered in 1979.

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.

OB 907-33 - a six-rowed, smooth awned barley developed by Agriculture Canada, Ottawa, from a cross of Leger/Bruce//2* Leger. Not registered.

OB 942-1 - a six-rowed, smooth awned barley developed by Agriculture Canada, Ottawa, from a cross of Rodeo/2* Leger. Not registered.

BARLEY
MEAN YIELDS IN DIFFERENT AREAS*, 1990

CULTIVAR	I(1)** t/ha	RANK	II(3) t/ha	RANK	III(4) t/ha	RANK	IV(1) t/ha	RANK	V(4) t/ha	RANK	VI(1) t/ha	RANK	PROVINCE***(14) t/ha	lbs/a	bu/a
ALBANY	3.53	3	3.78	8	2.80	8	5.14	12	4.41	10	1.74	13	3.61	3223	67.1
BIRKA	3.16	6	3.57	19	2.70	14	5.00	15	4.17	15	1.27	19	3.40	3036	63.3
CRAIG	2.95	14	3.60	16	2.48	18	4.97	17	4.10	17	1.69	16	3.34	2982	62.1
HELENA	3.09	10	3.72	12	2.72	12	5.27	10	4.22	14	1.59	18	3.49	3116	64.9
IONA	3.09	10	3.61	14	2.79	9	5.45	9	3.94	19	1.71	14	3.43	3063	63.8
LESTER	3.49	4	3.91	4	2.72	12	5.60	6	4.39	11	1.97	10	3.66	3268	68.1
MICMAC	3.17	5	3.61	14	2.63	15	4.64	18	4.27	13	1.93	12	3.44	3071	64.0
MORRISON	3.92	1	3.86	6	2.62	16	5.07	13	4.56	8	2.11	7	3.67	3277	68.3
RODEO	3.10	9	3.65	13	2.61	17	5.04	14	4.11	16	1.70	15	3.41	3045	63.4
SYMKO	3.55	2	3.77	9	2.95	4	4.99	16	4.66	7	1.99	9	3.73	3330	69.4
WINTHROP	3.16	6	3.56	18	2.73	10	5.17	11	4.31	12	1.63	17	3.49	3117	64.9
CHAPAIS	3.07	12	4.50	1	2.45	19	6.06	3	5.43	1	2.81	1	4.07	3634	75.7
ETIENNE	2.95	14	4.20	2	3.02	2	6.22	1	4.97	3	1.97	10	3.98	3554	74.0
JOLY	3.15	8	3.76	10	3.02	2	5.99	4	4.75	5	2.28	3	3.84	3429	71.4
LEGER	2.86	16	3.94	3	3.08	1	5.49	8	4.98	2	2.27	5	3.91	3491	72.7
MASKOT	2.54	18	3.59	17	2.73	10	5.60	6	4.05	18	2.09	8	3.44	3071	64.0
MINGO	2.99	13	3.80	7	2.94	5	4.41	19	4.97	3	2.55	2	3.78	3375	70.3
OAC KIPPEN	2.69	17	3.90	5	2.92	7	5.61	5	4.72	6	2.28	3	3.78	3375	70.3
SABINA	2.35	19	3.74	11	2.94	5	6.19	2	4.51	9	2.27	5	3.70	3304	68.8
MEAN	3.10	--	3.79	--	2.78	--	5.36	--	4.50	--	1.99	--	3.64	3250	67.7

*see attached map
**no. of locations
***weighted average

BARLEY
RELATIVE YIELDS, 1990

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
ALBANY	114	100	101	96	98	87	99
BIRKA	102	94	97	93	93	64	91
CRAIG	95	95	89	93	91	85	91
HELENA	100	98	98	98	94	80	95
IONA	100	95	100	102	88	86	95
LESTER	113	103	98	105	98	99	102
MICMAC	102	95	95	87	95	97	95
MORRISON	127	102	94	95	101	106	104
RODEO	100	96	94	94	91	85	94
SYMKO	115	100	106	93	104	100	103
WINTHROP	102	94	98	97	96	82	95
CHAPAIS	99	119	88	113	121	141	114
ETIENNE	95	111	109	116	110	99	107
JOLY	102	99	109	112	106	115	107
LEGER	93	104	111	102	111	114	106
MASKOT	82	95	98	105	90	105	96
MINGO	97	100	106	82	110	128	104
OAC KIPPEN	87	103	105	105	105	115	103
SABINA	76	99	106	116	100	114	102
MEAN YIELD t/ha	3.10	3.79	2.78	5.36	4.50	1.99	3.64

BARLEY
MEAN YIELDS IN DIFFERENT AREAS*, 1990

CULTIVAR	I(1)** t/ha	RANK	II(3) t/ha	RANK	III(4) t/ha	RANK	IV(1) t/ha	RANK	V(4) t/ha	RANK	VI(1) t/ha	RANK	PROVINCE***(14) t/ha	lbs/a	bu/a
ALBANY	3.53	3	3.78	10	2.80	10	5.14	16	4.41	13	1.74	17	3.61	3223	67.1
BIRKA	3.16	10	3.57	22	2.70	17	5.00	19	4.17	19	1.27	23	3.40	3036	63.3
CRAIG	2.95	17	3.60	19	2.48	21	4.97	21	4.10	21	1.69	20	3.34	2982	62.1
HELENA	3.09	13	3.72	15	2.72	15	5.27	14	4.22	18	1.59	22	3.49	3116	64.9
IONA	3.09	13	3.61	17	2.79	11	5.45	12	3.94	23	1.71	18	3.43	3063	63.8
LESTER	3.49	4	3.91	4	2.72	15	5.60	8	4.39	14	1.97	14	3.66	3268	68.1
MICMAC	3.17	8	3.61	17	2.63	18	4.64	22	4.27	17	1.93	16	3.44	3071	64.0
MORRISON	3.92	1	3.86	7	2.62	19	5.07	17	4.56	9	2.11	9	3.67	3277	68.3
RODEO	3.10	12	3.65	16	2.61	20	5.04	18	4.11	20	1.70	19	3.41	3045	63.4
SYMKO	3.55	2	3.77	11	2.95	5	4.99	20	4.66	8	1.99	13	3.73	3330	69.4
WINTHROP	3.16	9	3.56	23	2.73	13	5.17	15	4.31	15	1.63	21	3.49	3117	64.9
K8-10	3.27	5	3.74	13	2.82	9	5.48	11	4.54	10	2.16	7	3.68	3286	68.5
TBR 635-25	3.23	6	3.88	6	2.74	12	5.36	13	4.29	16	2.02	11	3.60	3214	67.0
CHAPAIS	3.07	15	4.50	1	2.45	23	6.06	3	5.43	1	2.81	1	4.07	3634	75.7
ETIENNE	2.95	18	4.20	2	3.02	3	6.22	1	4.97	4	1.97	14	3.98	3554	74.0
JOLY	3.15	11	3.76	12	3.02	3	5.99	4	4.75	6	2.28	3	3.84	3429	71.4
LEGER	2.86	19	3.94	3	3.08	1	5.49	10	4.98	3	2.27	5	3.91	3491	72.7
MASKOT	2.54	22	3.59	21	2.73	13	5.60	8	4.05	22	2.09	10	3.44	3071	64.0
MINGO	2.99	16	3.80	9	2.94	6	4.41	23	4.97	4	2.55	2	3.78	3375	70.3
OAC KIPPEN	2.69	21	3.90	5	2.92	8	5.61	7	4.72	7	2.28	3	3.78	3375	70.3
SABINA	2.35	23	3.74	13	2.94	6	6.19	2	4.51	11	2.27	5	3.70	3304	68.8
OB 907-33	3.22	7	3.81	8	2.48	21	5.70	5	5.22	2	2.01	12	3.80	3373	70.7
OB 942-1	2.75	20	3.60	19	3.05	2	5.64	6	4.44	12	2.14	8	3.66	3268	68.1
MEAN	3.10	--	3.79	--	2.78	--	5.40	--	4.52	--	1.98	--	3.65	3259	67.9

*see attached map
**no. of locations
***weighted average

BARLEY
MEAN YIELDS, 1989-90

CULTIVAR	I(2)*		II(6)		III(6)		IV(2)		V(7)		VI(2)		PROVINCE (25)		
	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	3.96	8	3.41	7	5.14	3	4.52	14	3.74	14	4.06	3625	75.5
BIRKA	3.48	13	3.82	15	3.23	15	5.05	6	4.39	18	2.88	19	3.83	3420	71.3
CRAIG	3.27	18	3.81	16	3.09	19	4.91	12	4.54	12	3.75	12	3.88	3464	72.2
HELENA	3.78	8	3.89	13	3.36	9	5.08	5	4.27	19	3.54	17	3.92	3500	72.9
IONA	3.49	12	3.90	11	3.29	10	5.05	6	4.43	17	3.54	17	3.94	3518	73.3
LESTER	4.03	2	4.16	2	3.24	14	5.19	2	4.67	10	3.77	11	4.13	3688	76.8
MICMAC	3.54	11	3.93	9	3.29	10	4.92	11	4.53	13	3.85	10	3.99	3563	74.2
MORRISON	4.40	1	4.08	4	3.45	5	5.02	9	4.84	7	4.12	5	4.23	3777	78.7
RODEO	3.77	9	3.90	11	3.16	18	4.91	12	4.45	15	3.72	15	3.94	3518	73.3
SYMKO	3.85	5	3.93	9	3.48	4	4.97	10	4.80	9	3.87	9	4.14	3696	77.0
WINTHROP	3.79	6	3.76	17	3.26	12	4.86	14	4.64	11	3.69	16	3.98	3554	74.0
CHAPAIS	3.79	6	4.32	1	3.17	17	5.37	1	5.36	1	4.41	1	4.36	3893	81.1
ETIENNE	3.60	10	4.11	3	3.19	16	4.82	15	5.01	5	4.05	7	4.16	3714	77.4
JOLY	3.90	4	3.84	14	3.62	2	4.81	16	5.18	2	4.37	2	4.27	3813	79.4
LEGER	3.48	13	4.02	5	3.85	1	4.81	16	5.02	4	4.34	3	4.29	3830	79.8
MASKOT	3.30	17	3.76	17	3.37	8	4.70	18	4.44	16	4.00	8	3.91	3491	72.7
MINGO	3.48	13	3.76	17	3.45	5	4.02	19	4.92	6	4.06	6	4.02	3589	74.8
OAC KIPPEN	3.24	19	4.02	5	3.25	13	5.04	8	4.81	8	3.75	12	4.06	3625	75.5
SABINA	3.32	16	3.97	7	3.60	3	5.13	4	5.17	3	4.14	4	4.26	3803	79.2
MEAN	3.65	--	3.94	--	3.36	--	4.94	--	4.74	--	3.87	--	4.07	3634	75.7

*no. of locations

BARLEY
RELATIVE YIELDS, 1989-1990

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
ALBANY	107	101	102	104	95	97	101
BIRKA	95	97	96	102	93	74	93
CRAIG	90	97	92	99	96	97	95
HELENA	104	99	100	103	90	92	98
IONA	96	99	98	102	94	92	97
LESTER	110	106	96	105	99	97	102
MICMAC	97	100	98	100	96	100	98
MORRISON	121	104	103	102	102	107	106
RODEO	103	99	94	99	94	96	98
SYMKO	106	100	104	101	101	100	102
WINTHROP	104	96	97	98	98	96	98
CHAPAIS	104	110	94	109	113	114	107
ETIENNE	99	104	95	98	106	105	101
JOLY	107	98	108	97	109	113	105
LEGER	95	102	115	97	106	112	105
MASKOT	90	96	100	95	94	103	96
MINGO	95	96	103	81	104	105	97
OAC KIPPEN	89	102	97	102	102	97	98
SABINA	91	101	107	104	110	107	103
MEAN YIELD t/ha	3.65	3.94	3.36	4.94	4.74	3.87	4.07

BARLEY
MEAN YIELDS, 1988-90

CULTIVAR	I(4)*		II(10)		III(12)		IV(7)		V(11)		VI(3)		PROVINCE (47)		
	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	3.80	2	3.81	5	3.69	4	4.56	3	4.20	14	3.95	13	3.96	3536	73.7
BIRKA	3.45	13	3.68	11	3.45	14	4.51	6	4.12	16	3.20	17	3.75	3348	69.8
CRAIG	3.25	14	3.72	8	3.44	15	4.41	10	4.30	12	3.91	14	3.83	3420	71.3
HELENA	3.59	7	3.67	12	3.62	8	4.44	8	4.07	17	3.68	16	3.81	3402	70.9
MICMAC	3.49	9	3.66	13	3.52	12	4.36	12	4.32	11	4.01	11	3.86	3446	71.8
MORRISON	4.28	1	3.85	4	3.67	6	4.56	3	4.52	7	4.37	5	4.11	3670	76.5
RODEO	3.68	5	3.70	9	3.48	13	4.45	7	4.18	15	4.00	12	3.86	3446	71.8
SYMKO	3.74	4	3.70	9	3.68	5	4.41	11	4.45	9	4.12	19	4.00	3571	74.4
WINTHROP	3.80	2	3.63	15	3.61	9	4.32	14	4.45	9	4.05	10	3.92	3500	72.9
CHAPAIS	3.56	8	4.05	1	3.41	16	4.75	1	4.74	2	4.47	3	4.12	3679	76.6
ETIENNE	3.46	10	3.89	2	3.38	17	4.42	9	4.59	4	4.23	8	3.99	3563	74.2
JOLY	3.61	6	3.53	17	3.77	3	4.24	16	4.58	5	4.57	2	4.01	3580	74.6
LEGER	3.46	10	3.86	3	3.97	1	4.36	12	4.60	3	4.62	1	4.13	3688	76.8
MASKOT	3.22	16	3.62	16	3.58	11	4.28	15	4.22	13	4.40	4	3.83	3420	71.3
MINGO	3.46	10	3.64	14	3.65	7	3.74	17	4.52	7	4.36	7	3.90	3482	72.5
OAC KIPPEN	3.20	17	3.81	5	3.61	9	4.52	5	4.56	6	3.91	14	3.97	3545	73.9
SABINA	3.25	14	3.74	7	3.78	2	4.60	2	4.82	1	4.37	5	4.09	3652	76.1
MEAN	3.55	--	3.74	--	3.61	--	4.41	--	4.43	--	4.13	--	3.95	3527	73.5

*no. of locations

BARLEY
RELATIVE YIELDS, 1988-90

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
* ALBANY	107	102	103	103	95	96	101
BIRKA	97	98	96	102	93	77	94
CRAIG	92	99	95	100	97	95	96
HELENA	101	98	100	101	92	89	97
* MICMAC	98	98	98	99	98	97	98
MORRISON	121	103	102	103	102	106	106
RODEO	104	99	96	101	94	97	99
SYMKO	105	99	102	100	100	100	101
WINTHROP	107	97	100	98	100	98	100
* CHAPAIS	100	108	94	108	107	108	104
ETIENNE	97	104	94	100	104	102	100
JOLY	102	94	104	96	103	111	102
LEGER	97	103	110	99	104	112	104
MASKOT	91	97	99	97	95	107	98
MINGO	97	97	101	85	102	106	98
* OAC KIPPEN	90	102	100	102	103	95	99
SABINA	92	100	105	104	109	106	103
MEAN YIELD t/ha	3.55	3.74	3.61	4.41	4.43	4.13	3.95

TESTING AREA I
BARLEY
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (1)*	hl/wt kg (1)	HEIGHT cm (1)	MATURITY[a] DAYS (1)
ALBANY	3.53	63.9	77	91
BIRKA	3.16	68.1	78	93
CRAIG	2.95	64.3	73	92
HELENA	3.09	65.9	69	91
IONA	3.09	63.2	78	91
LESTER	3.49	68.0	75	91
MICMAC	3.17	64.5	78	92
MORRISON	3.92	68.6	74	93
RODEO	3.10	64.5	78	92
SYMKO	3.55	68.8	79	92
WINTHROP	3.16	65.0	74	93
K8-10	3.27	62.8	66	92
TBR 635-25	3.23	63.8	73	91
CHAPAIS	3.07	58.5	73	92
ETIENNE	2.95	61.6	82	93
JOLY	3.15	58.9	87	92
LEGER	2.86	61.5	82	92
MASKOT	2.54	64.0	77	92
MINGO	2.99	66.8	89	93
OAC KIPPEN	2.69	65.2	83	92
SABINA	2.35	64.6	83	93
OB 907-33	3.22	61.1	89	92
OB 942-1	2.75	66.0	89	93

[a]no. of days from seeding to maturity
*no. of locations

TESTING AREA I
BARLEY
AGRONOMIC DATA, 1989-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000*	HEIGHT cm	LODGING 0-9*	MATURITY[a] DAYS
ALBANY	3.91	65.8	43.4	84	2	93
BIRKA	3.48	67.6	41.9	84	1	96
CRAIG	3.27	65.7	41.0	82	3	94
HELENA	3.78	67.7	41.7	79	0	93
IONA	3.49	62.8	37.1	89	2	92
LESTER	4.03	68.3	44.6	83	0	93
MICMAC	3.54	63.8	35.9	86	5	94
MORRISON	4.40	67.5	41.0	84	2	95
RODEO	3.77	65.5	41.4	86	2	94
SYMKO	3.85	67.6	38.0	89	5	95
WINTHROP	3.79	65.1	39.4	84	2	94
CHAPAIS	3.79	59.7	45.3	83	0	96
ETIENNE	3.60	61.8	40.9	92	0	97
JOLY	3.90	59.1	40.4	97	2	95
LEGER	3.48	60.7	37.6	99	2	95
MASKOT	3.30	64.0	39.6	93	1	96
MINGO	3.48	65.3	39.1	101	4	96
OAC KIPPEN	3.24	65.8	39.7	93	2	95
SABINA	3.32	64.9	42.0	94	2	96

[a]no. of days from seeding to maturity
*1989 data only

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000*	HEIGHT cm	LODGING 0-9*	MATURITY[a] DAYS
ALBANY	3.80	65.8	43.5	79	1.0	96
BIRKA	3.45	67.2	41.9	79	0.5	98
CRAIG	3.25	66.0	40.0	77	1.5	96
HELENA	3.59	67.6	41.9	73	0.0	95
MICMAC	3.49	64.4	38.2	81	3.0	96
MORRISON	4.28	67.1	43.0	79	1.5	97
RODEO	3.68	65.4	41.5	81	1.0	96
SYMKO	3.74	66.9	40.5	84	3.0	97
WINTHROP	3.80	64.6	40.0	81	1.0	96
CHAPAIS	3.56	59.6	44.1	77	0.0	97
ETIENNE	3.46	61.9	39.8	85	0.0	98
JOLY	3.61	58.9	38.3	90	1.5	96
LEGER	3.46	60.4	38.8	92	1.5	97
MASKOT	3.22	63.7	38.2	86	0.5	97
MINGO	3.46	64.6	39.6	93	2.0	98
OAC KIPPEN	3.20	65.1	38.6	89	1.0	97
SABINA	3.25	64.4	40.9	88	1.0	98

[a]no. of days from seeding to maturity
*1988, 1989 data only

TESTING AREA I
BARLEY
YIELD in kg per ha, 1990

CULTIVAR	KENT I	AVERAGE t/ha	lbs/a	bu/a	RANK
ALBANY	3532	3.53	3152	65.7	3
BIRKA	3156	3.16	2821	58.8	10
CRAIG	2953	2.95	2634	54.9	17
HELENA	3090	3.09	2759	57.5	14
IONA	3091	3.09	2759	57.5	13
LESTER	3493	3.49	3116	64.9	4
MICMAC	3166	3.17	2830	59.0	8
MORRISON	3923	3.92	3500	72.9	1
RODEO	3100	3.10	2768	57.7	12
SYMKO	3548	3.55	3170	66.0	2
WINTHROP	3161	3.16	2821	58.8	9
K8-10	3267	3.27	2920	60.8	5
TBR 635-25	3225	3.23	2884	60.1	6
CHAPAIS	3070	3.07	2741	57.1	15
ETIENNE	2949	2.95	2634	54.9	18
JOLY	3152	3.15	2813	58.6	11
LEGER	2858	2.86	2554	53.2	19
MASKOT	2535	2.54	2268	47.3	22
MINGO	2989	2.99	2670	55.6	16
OAC KIPPEN	2686	2.69	2402	50.0	21
SABINA	2352	2.35	2098	43.7	23
OB 907-33	3223	3.22	2875	59.9	7
OB 942-1	2753	2.75	2455	51.1	20
MEAN	3099	3.10	2768	57.7	--
C.V. %	11.6	--	--	--	--
L.S.D. (0.05)	433	--	--	--	--

TESTING AREA II
BARLEY
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (3)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	HEIGHT cm (3)	LODGING 0-9 (2)	MATURITY[a] DAYS (1)	Leaf Rust 0-9 (1)	Mildew 0-9 (2)	B.Y.D.V. 0-9 (2)
ALBANY	3.78	62.1	40.5	84	4.9	97	5.5	0.0	3.8
BIRKA	3.57	62.5	37.5	81	4.3	100	0.0	0.0	3.0
CRAIG	3.60	63.4	37.3	81	3.5	97	6.5	0.0	3.5
HELENA	3.72	64.9	39.0	77	3.2	98	8.0	0.0	3.8
IONA	3.61	61.8	38.3	86	4.7	99	8.5	0.0	3.8
LESTER	3.91	63.6	41.9	81	3.5	96	6.0	0.0	4.0
MICMAC	3.61	63.3	38.6	84	4.7	96	7.0	0.0	3.3
MORRISON	3.86	63.6	40.9	84	4.5	95	6.0	0.0	3.3
RODEO	3.65	62.5	38.9	84	4.0	97	7.0	0.0	3.8
SYMKO	3.77	65.8	39.9	89	5.2	99	7.5	0.0	3.5
WINTHROP	3.56	61.3	37.0	87	3.7	99	6.5	0.0	4.0
K8-10	3.74	60.2	37.9	76	4.4	96	6.0	0.0	3.5
TBR 635-25	3.88	63.3	40.3	80	3.5	96	7.0	0.0	4.0
CHAPAIS	4.50	61.3	45.0	80	4.5	93	7.0	1.8	3.5
ETIENNE	4.20	60.5	35.8	88	3.7	96	9.0	2.5	3.8
JOLY	3.76	56.9	34.4	94	5.0	95	9.0	2.3	4.0
LEGER	3.94	58.3	34.2	98	5.2	96	9.0	4.8	3.3
MASKOT	3.59	62.5	36.3	86	3.4	98	8.0	0.5	3.5
MINGO	3.80	61.5	36.9	99	5.9	97	9.0	4.8	3.0
OAC KIPPEN	3.90	61.2	35.1	94	4.9	97	8.5	0.0	3.8
SABINA	3.74	59.5	37.2	94	2.8	98	9.0	0.3	2.5
OB 907-33	3.81	59.6	34.7	92	4.3	96	9.0	1.5	4.3
OB 942-1	3.60	56.7	35.6	94	3.8	97	8.5	0.0	3.5

[a]no. of days from seeding to maturity
*no. of locations

TESTING AREA II
BARLEY
AGRONOMIC DATA, 1989-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS	LEAF RUST 0-9	MILDEW 0-9
ALBANY	3.96	64.0	42.1	85	3.3	94	6.5	0.0
BIRKA	3.82	65.2	40.2	81	2.2	97	0.0	0.0
CRAIG	3.81	65.5	39.4	83	2.2	94	7.0	0.0
HELENA	3.89	66.5	41.3	81	1.8	95	8.0	0.0
IONA	3.90	63.8	39.6	88	3.0	95	7.5	0.0
LESTER	4.16	65.7	44.1	81	2.4	94	6.0	0.1
MICMAC	3.93	64.4	39.8	88	3.1	93	7.0	0.0
MORRISON	4.08	65.3	42.6	84	3.2	93	7.0	0.0
RODEO	3.90	64.3	40.4	86	3.0	94	7.0	0.0
SYMKO	3.93	66.0	41.3	90	3.9	95	7.5	0.0
WINTHROP	3.76	63.3	38.7	87	3.0	95	7.0	0.0
CHAPAIS	4.32	62.8	45.0	84	2.4	91	7.3	2.1
ETIENNE	4.11	62.4	37.2	91	1.9	94	8.5	3.5
JOLY	3.84	59.0	35.8	98	4.3	93	8.5	1.8
LEGER	4.02	61.0	36.2	101	3.3	94	9.0	4.7
MASKOT	3.76	63.8	36.9	93	1.9	95	8.3	0.5
MINGO	3.76	63.8	37.1	100	3.7	94	8.5	5.3
OAC KIPPEN	4.02	63.4	36.9	99	3.3	93	8.0	0.0
SABINA	3.97	62.3	38.0	95	1.9	94	9.0	0.2

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS	MILDEW 0-9
ALBANY	3.81	64.2	41.4	78	2.2	90	0.0
BIRKA	3.68	65.2	40.1	76	1.6	93	0.0
CRAIG	3.72	65.0	38.9	77	1.6	90	0.0
HELENA	3.67	66.0	40.9	75	1.3	91	0.0
MICMAC	3.66	64.0	39.0	81	2.8	89	0.0
MORRISON	3.85	65.4	42.4	78	2.5	90	0.0
RODEO	3.70	64.1	40.7	79	2.0	90	0.0
SYMKO	3.70	65.5	40.7	82	3.0	91	0.0
WINTHROP	3.63	65.0	38.3	81	2.0	91	0.0
CHAPAIS	4.05	61.3	43.1	78	1.9	87	1.4
ETIENNE	3.89	62.0	36.8	84	1.4	90	3.8
JOLY	3.53	58.4	34.8	88	3.0	89	1.2
LEGER	3.86	60.8	35.7	91	2.3	89	3.8
MASKOT	3.62	63.2	37.0	85	1.3	91	0.2
MINGO	3.64	63.4	37.5	92	3.0	90	5.9
OAC KIPPEN	3.81	63.4	36.3	89	2.6	89	0.0
SABINA	3.74	61.9	37.9	85	1.3	90	0.1

[a]no. of days from seeding to maturity

TESTING AREA II
BARLEY
YIELD in kg per ha, 1990

CULTIVAR	OXFORD	MIDDLESEX I	HURON	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
ALBANY	3187	3894	4256	3.78	3375	70.3	10
BIRKA	2865	3647	4202	3.57	3188	66.4	22
CRAIG	3001	3586	4220	3.60	3214	67.0	19
HELENA	3350	3676	4129	3.72	3321	69.2	15
IONA	3044	3749	4021	3.61	3223	67.1	17
LESTER	3154	3894	4673	3.91	3491	72.7	4
MICMAC	2989	3876	3948	3.61	3223	67.1	17
MORRISON	3046	4129	4401	3.86	3446	71.8	7
RODEO	2825	3749	4383	3.65	3259	67.9	16
SYMKO	3169	3785	4347	3.77	3366	70.1	11
WINTHROP	2738	3713	4220	3.56	3179	66.2	23
K8-10	3327	3695	4184	3.74	3339	69.6	13
TBR 635-25	3110	4158	4383	3.88	3464	72.1	6
CHAPAIS	3526	4673	5307	4.50	4018	83.7	1
ETIENNE	3356	3821	5415	4.20	3750	78.1	2
JOLY	3178	3332	4781	3.76	3357	69.9	12
LEGER	3424	3785	4618	3.94	3518	73.3	3
MASKOT	3009	3622	4129	3.59	3205	66.8	21
MINGO	3296	3604	4510	3.80	3393	70.7	9
OAC KIPPEN	3468	3785	4437	3.90	3482	72.5	5
SABINA	3038	3459	4709	3.74	3339	69.6	13
OB 907-33	3407	3604	4419	3.81	3402	70.9	8
OB 942-1	3132	3821	3858	3.60	3214	67.0	19
MEAN	3158	3786	4416	3.79	3384	70.5	--
C.V. %	6.7	6.9	8.6	--	--	--	--
L.S.D. (0.05)	300	369	538	--	--	--	--

TESTING AREA III
BARLEY
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (4)*	hl/wt kg (5)	KERNEL WEIGHT g/1000 (5)	HEIGHT cm (4)	LODGING 0-9 (2)	MATURITY[a] DAYS (3)
ALBANY	2.80	61.0	42.8	76	3.3	93
BIRKA	2.70	62.6	41.1	77	3.0	94
CRAIG	2.48	63.2	41.2	77	2.5	93
HELENA	2.72	62.7	41.1	72	3.5	93
IONA	2.79	61.5	41.6	80	1.8	93
LESTER	2.72	62.7	43.5	74	5.0	92
MICMAC	2.63	62.9	41.9	81	4.8	93
MORRISON	2.62	62.4	45.2	76	4.5	93
RODEO	2.61	64.4	43.9	79	3.5	93
SYMKO	2.95	63.0	44.7	82	4.8	93
WINTHROP	2.73	59.8	43.1	82	1.8	93
K8-10	2.82	59.8	41.6	74	2.8	93
TBR 635-25	2.74	60.2	43.0	73	2.8	92
CHAPAIS	2.45	57.5	45.3	72	0.0	92
ETIENNE	3.02	59.2	37.8	80	0.3	93
JOLY	3.02	56.1	39.3	84	1.3	93
LEGER	3.08	59.0	37.9	87	1.0	93
MASKOT	2.73	61.3	41.8	89	1.0	93
MINGO	2.94	59.7	38.7	91	6.5	93
OAC KIPPEN	2.92	60.5	39.1	88	3.8	93
SABINA	2.94	60.8	40.8	87	1.8	94
OB 907-33	2.48	59.7	37.5	86	0.0	92
OB 942-1	3.05	57.2	39.0	88	0.3	93

[a]no. of days from seeding to maturity
*no. of locations

TESTING AREA III
BARLEY
AGRONOMIC DATA, 1989-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
ALBANY	3.41	62.8	44.8	73	1.8	89
BIRKA	3.23	63.9	42.7	73	1.5	90
CRAIG	3.09	63.9	40.9	73	1.4	89
HELENA	3.36	64.3	44.0	70	2.0	89
IONA	3.29	62.3	42.3	74	1.0	89
LESTER	3.24	63.7	45.0	71	2.7	88
MICMAC	3.29	63.2	42.0	78	2.8	88
MORRISON	3.45	63.2	44.7	73	2.4	90
RODEO	3.16	64.4	43.5	75	1.9	89
SYMKO	3.48	64.2	45.2	79	2.9	90
WINTHROP	3.26	61.3	42.9	79	0.9	90
CHAPAIS	3.17	58.2	45.5	70	0.3	89
ETIENNE	3.19	59.5	37.9	78	0.3	89
JOLY	3.62	57.6	39.1	81	0.6	89
LEGER	3.85	59.2	37.7	87	1.3	89
MASKOT	3.37	61.7	40.8	85	0.5	89
MINGO	3.45	60.7	39.1	87	4.3	89
OAC KIPPEN	3.25	60.7	39.0	85	2.7	89
SABINA	3.60	61.0	39.5	83	1.1	90

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
ALBANY	3.69	63.6	43.4	69	1.6	88
BIRKA	3.45	65.1	42.1	70	1.1	89
CRAIG	3.44	64.7	40.1	70	1.1	88
HELENA	3.62	65.3	43.0	67	1.7	88
MICMAC	3.52	64.2	41.1	74	2.2	87
MORRISON	3.67	64.0	42.4	69	1.9	88
RODEO	3.48	65.0	42.3	72	1.8	88
SYMKO	3.68	63.7	42.6	74	1.3	88
WINTHROP	3.61	62.9	41.7	75	1.0	88
CHAPAIS	3.41	59.2	44.7	67	0.5	88
ETIENNE	3.38	60.3	37.6	75	0.4	88
JOLY	3.77	58.8	38.2	78	0.8	88
LEGER	3.97	60.3	37.4	83	1.0	88
MASKOT	3.58	62.2	40.5	81	0.5	88
MINGO	3.65	62.0	39.4	84	3.2	88
OAC KIPPEN	3.61	61.6	37.9	83	1.9	88
SABINA	3.78	62.5	39.6	80	0.9	89

[a]no. of days from seeding to maturity

TESTING AREA III
BARLEY
YIELD in kg per ha, 1990

CULTIVAR	CARLETON	RENFREW I	LANARK	PRESCOTT & RUSSELL	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
ALBANY	2902	1568	3376	3338	2.80	2500	52.1	10
BIRKA	3207	1559	2297	3750	2.70	2411	50.2	17
CRAIG	3015	1372	1879	3640	2.48	2214	46.1	21
HELENA	3090	1404	2819	3547	2.72	2429	50.6	15
IONA	2840	1483	3155	3673	2.79	2491	51.9	11
LESTER	3126	1624	2564	3562	2.72	2429	50.6	15
MICMAC	3312	1678	1540	3991	2.63	2348	48.9	18
MORRISON	3343	1452	1818	3874	2.62	2339	48.7	19
RODEO	3510	1535	1592	3806	2.61	2331	48.6	20
SYMKO	3526	1737	2166	4350	2.95	2634	54.9	5
WINTHROP	3842	1576	1830	3660	2.73	2438	50.8	13
K8-10	2816	1507	3158	3802	2.82	2518	52.5	9
TBR 635-25	2938	1448	2993	3595	2.74	2446	51.0	12
CHAPAIS	2701	1267	2412	3412	2.45	2188	45.6	23
ETIENNE	3126	1372	4376	3215	3.02	2696	56.2	3
JOLY	3420	1404	4347	2913	3.02	2696	56.2	3
LEGER	3387	1683	4092	3143	3.08	2750	57.3	1
MASKOT	2738	1302	3352	3534	2.73	2438	50.8	13
MINGO	3411	1552	3373	3417	2.94	2625	54.7	6
OAC KIPPEN	3219	1581	2874	4015	2.92	2607	54.3	8
SABINA	2630	1659	3843	3641	2.94	2625	54.7	6
OB 907-33	2984	1211	2433	3283	2.48	2214	46.1	21
OB 942-1	3001	1328	4367	3489	3.05	2723	56.7	2
MEAN	3134	1491	2898	3593	2.78	2482	51.7	--
C.V. %	11.6	11.9	14.1	9.4	--	--	--	--
L.S.D. (0.05)	513	251	673	477	--	--	--	--

TESTING AREA IV
BARLEY
AGRONOMIC DATA, 1990

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)	Mildew 0-9 (1)
ALBANY	5.14	66.7	43.4	78	1.0	96	0.0
BIRKA	5.00	70.5	45.0	86	0.0	98	0.0
CRAIG	4.97	68.0	40.8	79	0.0	96	0.0
HELENA	5.27	69.9	44.4	74	0.0	97	0.0
IONA	5.45	65.5	41.8	87	1.0	98	0.0
LESTER	5.60	69.9	47.6	75	1.5	95	0.0
MICMAC	4.64	68.0	44.4	81	0.0	95	0.0
MORRISON	5.07	71.1	47.2	76	1.5	95	0.0
RODEO	5.04	66.7	44.6	84	0.5	97	0.0
SYMKO	4.99	70.5	46.2	83	2.5	98	0.0
WINTHROP	5.17	70.5	44.8	85	2.5	98	0.0
K8-10	5.48	64.2	39.8	70	1.5	94	0.0
TBR 635-25	5.36	64.9	42.0	74	1.5	94	0.0
CHAPAIS	6.06	62.4	47.2	86	2.5	93	4.0
ETIENNE	6.22	63.0	41.2	90	1.0	95	7.0
JOLY	5.99	62.4	42.8	89	0.0	94	1.0
LEGER	5.49	64.9	42.0	97	0.0	95	4.0
MASKOT	5.60	67.4	42.2	96	1.0	97	0.0
MINGO	4.40	65.5	39.4	88	0.5	96	7.0
OAC KIPPEN	5.61	68.0	41.6	91	1.5	96	0.0
SABINA	6.19	66.1	44.6	103	0.0	97	0.0
OB 907-33	5.70	64.9	39.4	93	0.0	95	1.0
OB 942-1	5.64	62.4	42.0	90	1.5	96	0.0

[a]no. of days from seeding to maturity
*no. of locations

TESTING AREA IV
BARLEY
AGRONOMIC DATA, 1989-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS	Mildew 0-9
ALBANY	5.14	65.4	43.3	71	0.5	91	0.0
BIRKA	5.05	69.2	44.2	81	0.2	93	0.0
CRAIG	4.91	66.6	40.5	73	0.0	91	0.0
HELENA	5.08	68.0	44.6	77	0.0	90	0.0
IONA	5.05	63.5	40.7	86	0.5	91	0.0
LESTER	5.19	68.0	48.0	79	1.0	91	0.3
MICMAC	4.92	66.7	43.3	83	0.3	90	0.0
MORRISON	5.02	68.2	45.8	77	0.9	91	0.0
RODEO	4.91	65.8	44.3	83	0.3	92	0.0
SYMKO	4.97	67.8	44.8	84	1.3	91	0.0
WINTHROP	4.86	66.5	42.3	82	1.3	91	0.0
CHAPAIS	5.37	60.8	45.9	86	1.3	88	4.0
ETIENNE	4.82	61.0	38.7	93	0.6	89	6.8
JOLY	4.81	60.0	38.4	93	0.3	89	2.0
LEGER	4.81	62.1	37.9	95	0.3	89	4.2
MASKOT	4.70	64.3	39.1	96	0.6	90	0.9
MINGO	4.02	63.3	38.0	93	1.6	89	6.3
OAC KIPPEN	5.04	66.3	40.8	94	0.8	88	0.0
SABINA	5.13	63.5	41.0	101	0.1	91	0.2

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY[a] DAYS
ALBANY	4.56	64.6	42.5	65	0.5	89
BIRKA	4.51	67.2	42.7	72	0.2	91
CRAIG	4.41	65.6	39.6	66	0.0	89
HELENA	4.44	66.6	42.7	68	0.0	88
MICMAC	4.36	65.3	41.7	75	0.4	89
MORRISON	4.56	66.8	44.5	69	0.9	89
RODEO	4.45	64.9	43.1	74	0.3	90
SYMKO	4.41	66.8	43.5	75	1.3	89
WINTHROP	4.32	65.0	41.4	74	1.3	89
CHAPAIS	4.75	59.6	43.5	75	1.3	86
ETIENNE	4.42	60.4	37.8	83	0.6	87
JOLY	4.24	58.7	37.2	82	0.4	87
LEGER	4.36	60.8	36.4	84	0.3	87
MASKOT	4.28	63.4	38.6	85	0.7	88
MINGO	3.74	61.6	37.7	83	1.7	87
OAC KIPPEN	4.52	64.1	38.7	84	0.8	87
SABINA	4.60	62.5	39.7	84	0.1	88

[a]no. of days from seeding to maturity
*1989, 1990 data only

TESTING AREA IV
BARLEY
YIELD in kg per ha, 1990

CULTIVAR	Wellington	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
ALBANY	5137	5.14	4589	95.6	16
BIRKA	5003	5.00	4464	93.0	19
CRAIG	4967	4.97	4438	92.5	21
HELENA	5268	5.27	4705	98.0	14
IONA	5447	5.45	4866	101.4	12
LESTER	5603	5.60	5000	104.2	8
MICMAC	4637	4.64	4143	86.3	22
MORRISON	5069	5.07	4527	94.3	17
RODEO	5043	5.04	4500	93.8	18
SYMKO	4988	4.99	4455	92.8	20
WINTHROP	5169	5.17	4616	96.2	15
K8-10	5483	5.48	4893	101.9	11
TBR 635-25	5355	5.36	4786	99.7	13
CHAPAIS	6061	6.06	5411	112.7	3
ETIENNE	6216	6.22	5554	115.7	1
JOLY	5991	5.99	5348	114.4	4
LEGER	5493	5.49	4902	102.1	10
MASKOT	5599	5.60	5000	104.2	8
MINGO	4413	4.41	3938	82.0	23
OAC KIPPEN	5612	5.61	5009	104.4	7
SABINA	6191	6.19	5527	115.1	2
OB 907-33	5703	5.70	5089	106.0	5
OB 942-1	5644	5.64	5036	104.9	6
MEAN	5395	5.40	4821	100.4	--
C.V. %	6.6	--	--	--	--
L.S.D. (0.05)	506	--	--	--	--

TESTING AREA V
BARLEY
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (4)*	hl/wt kg (4)	KERNEL WEIGHT g/1000 (1)	HEIGHT cm (1)	LODGING 0-9 (1)	MATURITY[a] DAYS (1)	Scald 0-9 (1)
ALBANY	4.41	60.5	34.6	78	1	91	6.8
BIRKA	4.17	61.1	31.0	82	2	93	3.0
CRAIG	4.10	60.7	26.7	79	1	91	5.0
HELENA	4.22	62.8	32.1	78	2	90	6.8
IONA	3.94	60.3	33.2	84	2	89	6.0
LESTER	4.39	62.1	35.2	82	2	90	7.3
MICMAC	4.27	61.6	32.5	84	2	92	5.8
MORRISON	4.56	63.4	34.0	81	1	89	6.5
RODEO	4.11	62.8	33.8	83	1	92	6.5
SYMKO	4.66	63.9	34.2	85	2	90	5.5
WINTHROP	4.31	60.5	30.7	84	2	92	6.5
K8-10	4.54	58.5	29.9	75	1	91	7.0
TBR 635-25	4.29	60.4	34.6	77	1	88	5.0
CHAPAIS	5.43	58.8	39.3	78	1	90	0.0
ETIENNE	4.97	59.0	35.2	83	2	92	2.5
JOLY	4.75	55.9	31.8	86	1	91	0.0
LEGER	4.98	59.4	33.0	95	2	93	1.3
MASKOT	4.05	60.6	30.8	85	2	92	3.0
MINGO	4.97	62.1	35.4	94	4	93	1.3
OAC KIPPEN	4.72	61.1	29.7	88	5	90	1.3
SABINA	4.51	59.4	32.0	93	2	94	2.0
OB 907-33	5.22	59.1	31.4	89	2	92	0.0
OB 942-1	4.44	57.0	32.2	93	1	91	4.3

[a]no. of days from seeding to maturity
*no. of locations

TESTING AREA V
BARLEY
AGRONOMIC DATA, 1989-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
ALBANY	4.52	60.5	41.1	78	1.5	92
BIRKA	4.39	61.1	40.2	80	1.4	94
CRAIG	4.54	60.4	36.1	79	1.4	93
HELENA	4.27	62.0	39.6	77	1.5	92
IONA	4.43	61.1	40.5	83	2.0	91
LESTER	4.67	61.2	42.0	80	2.4	92
MICMAC	4.53	61.1	40.3	84	2.0	93
MORRISON	4.84	62.3	41.0	80	1.3	91
RODEO	4.45	62.0	41.1	82	1.4	93
SYMKO	4.80	62.8	41.7	83	1.9	92
WINTHROP	4.64	60.9	39.2	84	1.8	94
CHAPAIS	5.36	59.4	43.8	80	1.1	92
ETIENNE	5.01	58.1	40.1	86	1.4	93
JOLY	5.18	56.8	36.9	87	2.0	92
LEGER	5.02	58.7	38.0	96	2.3	93
MASKOT	4.44	59.9	38.2	89	1.6	93
MINGO	4.92	61.5	40.8	94	3.3	93
OAC KIPPEN	4.81	59.9	36.6	89	3.5	91
SABINA	5.17	60.5	40.1	93	1.5	94

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
ALBANY	4.20	60.5	39.9	73	1.7	93
BIRKA	4.12	61.8	39.4	74	1.6	95
CRAIG	4.30	61.0	35.9	74	1.5	93
HELENA	4.07	62.7	39.4	71	1.5	93
MICMAC	4.32	61.1	39.6	79	2.2	94
MORRISON	4.52	61.5	40.2	74	1.5	92
RODEO	4.18	61.7	39.7	77	1.6	94
SYMKO	4.45	61.5	40.7	78	1.7	93
WINTHROP	4.45	61.0	38.5	79	1.6	94
CHAPAIS	4.74	58.1	42.3	72	0.9	93
ETIENNE	4.59	58.0	38.7	80	1.3	94
JOLY	4.58	56.4	35.5	81	2.2	93
LEGER	4.60	58.3	37.3	90	2.1	94
MASKOT	4.22	60.1	36.9	84	1.3	94
MINGO	4.52	60.9	39.8	88	2.9	94
OAC KIPPEN	4.56	60.2	36.3	85	2.7	92
SABINA	4.82	60.3	38.7	86	1.3	95

[a]no. of days from seeding to maturity

TESTING AREA V
BARLEY
YIELD in kg per ha, 1990

CULTIVAR	Temiskaming	Nipissing-Sudbury	Rainy River District	Thunder Bay District	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
ALBANY	4245	4426	5147	3830	4.41	3938	82.0	13
BIRKA	3345	4601	5254	3482	4.17	3723	77.6	19
CRAIG	3437	4960	5390	2603	4.10	3661	76.3	21
HELENA	3415	4602	5904	2976	4.22	3768	78.5	18
IONA	3843	4626	4775	2515	3.94	3518	73.3	23
LESTER	3925	4887	5380	3372	4.39	3920	81.7	14
MICMAC	4006	5137	4719	3224	4.27	3813	79.4	17
MORRISON	4011	4871	5440	3897	4.56	4071	84.8	9
RODEO	3459	4833	5116	3046	4.11	3670	76.5	20
SYMKO	4398	4806	4860	4581	4.66	4161	86.7	8
WINTHROP	3403	4602	5736	3508	4.31	3848	80.2	15
K8-10	4020	4763	6371	2985	4.54	4054	84.5	10
TBR 635-25	4197	4950	5390	2611	4.29	3830	79.8	16
CHAPAIS	5100	5064	5892	5642	5.43	4848	101.0	1
ETIENNE	5021	4990	5645	4212	4.97	4438	92.5	4
JOLY	4918	4358	5484	4235	4.75	4241	88.4	6
LEGER	4864	5528	5554	3991	4.98	4446	92.6	3
MASKOT	4345	4460	5165	2231	4.05	3616	75.3	22
MINGO	5225	4828	4945	4870	4.97	4438	92.5	4
OAC KIPPEN	4442	4591	5792	4067	4.72	4214	87.8	7
SABINA	4541	4871	5688	2931	4.51	4027	83.9	11
OB 907-33	4633	5334	6820	4087	5.22	4661	97.1	2
OB 942-1	3981	4521	5583	3672	4.44	3964	82.6	12
MEAN	4208	4809	5480	3590	4.52	4036	84.1	--
C.V. %	9.3	7.3	10.7	15.7	--	--	--	--
L.S.D. (0.05)	245	218	825	927	--	--	--	--

TESTING AREA VI
BARLEY
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (1)*	hl/wt kg (1)	KERNEL WEIGHT g/1000 (1)	HEIGHT cm (1)	MATURITY[a] DAYS (1)
ALBANY	1.74	58.1	31.2	62	106
BIRKA	1.27	60.1	25.3	51	107
CRAIG	1.69	59.1	28.1	57	106
HELENA	1.59	60.5	30.4	56	107
IONA	1.71	55.7	30.5	66	106
LESTER	1.97	59.8	34.0	63	107
MICMAC	1.93	58.0	27.6	60	108
MORRISON	2.11	61.0	32.0	67	107
RODEO	1.70	60.9	31.2	61	107
SYMKO	1.99	63.6	34.6	67	107
WINTHROP	1.63	56.8	26.1	64	107
K8-10	2.16	58.3	32.5	58	106
TBR 635-25	2.02	61.1	31.0	56	105
CHAPAIS	2.81	58.3	34.3	60	107
ETIENNE	1.97	57.6	25.5	64	108
JOLY	2.28	55.8	25.2	67	107
LEGER	2.27	58.3	25.7	80	109
MASKOT	2.09	60.2	28.7	59	107
MINGO	2.55	60.6	27.2	76	107
OAC KIPPEN	2.28	58.2	28.6	68	107
SABINA	2.27	57.4	24.2	72	107
OB 907-33	2.01	57.0	26.9	70	109
OB 942-1	2.14	52.4	24.5	71	107

[a]no. of days from seeding to maturity
*no. of locations

TESTING AREA VI
BARLEY
AGRONOMIC DATA, 1989-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY[a] DAYS
ALBANY	3.74	64.6	38.3	72	1.0	102
BIRKA	2.88	66.2	34.0	70	6.3	104
CRAIG	3.75	66.1	35.2	69	2.3	102
HELENA	3.54	66.6	37.1	72	3.8	103
IONA	3.54	63.1	36.7	75	4.5	102
LESTER	3.77	65.7	40.4	75	3.0	102
MICMAC	3.85	64.5	34.4	73	4.0	103
MORRISON	4.12	66.6	39.8	75	3.3	103
RODEO	3.72	66.2	37.9	75	2.5	103
SYMKO	3.87	68.2	40.9	77	2.5	103
WINTHROP	3.69	63.8	35.2	74	3.5	102
CHAPAIS	4.41	62.7	40.9	74	1.8	102
ETIENNE	4.05	62.6	33.3	76	3.5	103
JOLY	4.37	62.4	33.9	80	3.3	102
LEGER	4.34	62.9	32.5	90	4.0	104
MASKOT	4.00	65.0	34.5	79	3.3	102
MINGO	4.06	65.6	34.4	87	4.0	102
OAC KIPPEN	3.75	61.9	34.0	80	4.8	102
SABINA	4.14	64.1	31.8	83	3.8	102

[a]no. of days from seeding to maturity
*1989 data only

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY[a] DAYS
ALBANY	3.95	64.3	39.5	67	1.0	101
BIRKA	3.20	65.3	37.8	66	4.1	103
CRAIG	3.91	65.2	36.5	66	1.4	101
HELENA	3.68	65.4	38.5	66	2.0	101
MICMAC	4.01	64.5	37.1	70	2.5	101
MORRISON	4.37	66.1	40.9	70	2.0	101
RODEO	4.00	65.3	39.1	71	1.5	101
SYMKO	4.12	66.9	41.3	73	1.6	101
WINTHROP	4.05	64.0	38.0	70	2.0	100
CHAPAIS	4.47	62.1	41.6	68	1.5	101
ETIENNE	4.23	62.1	35.7	71	2.0	101
JOLY	4.57	61.9	35.2	76	2.2	99
LEGER	4.62	62.5	34.2	84	2.8	102
MASKOT	4.40	64.3	36.1	74	1.9	101
MINGO	4.36	64.4	36.1	81	3.4	100
OAC KIPPEN	3.91	61.6	34.5	76	3.7	101
SABINA	4.37	63.4	34.5	78	2.3	101

[a]no. of days from seeding to maturity
*1988, 1989 data only

TESTING AREA VI
BARLEY
YIELD in kg per ha, 1990

CULTIVAR	COCHRANE	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
ALBANY	1744	1.74	1554	32.4	17
BIRKA	1273	1.27	1134	23.6	23
CRAIG	1688	1.69	1509	31.4	20
HELENA	1587	1.59	1420	29.6	22
IONA	1707	1.71	1527	31.8	18
LESTER	1974	1.97	1759	36.6	14
MICMAC	1928	1.93	1723	35.9	16
MORRISON	2113	2.11	1884	39.3	9
RODEO	1698	1.70	1518	31.6	19
SYMKO	1993	1.99	1777	37.0	13
WINTHROP	1633	1.63	1455	30.3	21
K8-10	2159	2.16	1929	40.2	7
TBR 635-25	2021	2.02	1804	37.6	11
CHAPAIS	2805	2.81	2509	52.3	1
ETIENNE	1974	1.97	1759	36.6	14
JOLY	2279	2.28	2036	42.4	3
LEGER	2270	2.27	2027	42.2	5
MASKOT	2085	2.09	1866	38.9	10
MINGO	2546	2.55	2277	47.4	2
OAC KIPPEN	2279	2.28	2036	42.4	3
SABINA	2270	2.27	2027	42.2	5
OB 907-33	2011	2.01	1795	37.4	12
OB 942-1	2140	2.14	1911	39.8	8
MEAN	1982	1.98	1768	36.8	--
C.V. %	11.1	--	--	--	--
L.S.D. (0.05)	311	--	--	--	--

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1990

OATS

Baldwin - a Quebec (MacDonald College) selection from the cross Laurent/Q051.42. An early maturing oat with high yield, and good hectolitre weight. Similar to Marion in most respects. Registered in 1986.

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.

Marion - a Quebec (Ste. Foy) high yielding, early selection from the cross Q0130.4/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. Taller than OAC Woodstock with average lodging resistance. Acceptable for milling. Registered in 1985.

Newman (OA 774-1) - daylength insensitive white oat developed by Agriculture Canada, Ottawa from rust resistant backcross to Donald (Donald *4/OT219). Nearly identical to Donald in all respects with the addition of at least 2 genes for crown rust resistance. Acceptable for milling. Registered in 1988.

OAC Woodstock - a Guelph selection from interspecific composite Stormont x (Clintland x Garry x Garry). High yield, resistant to leaf rust and smut, susceptible to BYD. Large kernels, low % hull, and low % double oats. Rust resistance is no longer effective in Eastern Ontario. Acceptable for milling. Registered in 1982.

Ogle - an Illinois selection (ILL73-2664, CI9401) from the cross BRAVE2 x TYLER x 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.

Oxford - a Guelph selection from the cross Stormont x (GA85 x Clintland 60 x OA48-54). It is a yellow oat with high yield and very good lodging resistance. It has a lower percentage of double oats than Elgin. Good tolerance to Septoria and BYD. Registered in 1976.

Tibor - a hulless (naked) Ottawa selection with a complex parentage. Compared to Terra, it has higher groat yield, thousand kernel weight, hectolitre weight and seed protein content. It has good lodging resistance coupled with tall plant height and early maturity. Resistant to smut and Victoria blight and a "slow ruster" to prevalent races in E. Canada. Registered in 1985.

ULTIMA
(QO 224.5) - a new oat cultivar developed by Agriculture Canada (Ste. Foy) from the cross Manic//R12892/Kent. Registered in 1989.

OA 775-4 - an oat developed by the University of Guelph from the cross OAC Woodstock/Manic. Not registered.

TO 85025 - an oat developed by W.G. Thompson and Sons from the cross Ogle/QO183.3. Not registered.

OATS
MEAN YIELDS IN DIFFERENT AREAS*, 1990

CULTIVAR	I(1)** t/ha	RANK	II(3) t/ha	RANK	III(5) t/ha	RANK	IV(1) t/ha	RANK	V(4) t/ha	RANK	VII(0) t/ha	RANK	PROVINCE***(14) t/ha	lbs/a
BALDWIN	1.70	7	2.73	7	2.95	6	4.13	7	2.50	8	--	--	2.77	2473
DONALD	3.91	2	3.51	4	3.04	5	5.05	4	4.44	2	--	--	3.74	3339
MARION	3.53	4	3.72	2	3.31	1	5.18	3	4.05	4	--	--	3.76	3357
NEWMAN	3.88	3	3.62	3	3.05	4	4.98	5	4.14	3	--	--	3.68	3286
OAC WOODSTOCK	1.56	8	2.40	8	2.95	6	3.37	9	2.61	7	--	--	2.67	2384
OGLE	4.97	1	4.26	1	3.17	2	5.51	1	5.07	1	--	--	4.24	3786
OXFORD	2.42	6	2.91	6	2.71	8	4.21	6	3.44	6	--	--	3.05	2723
TIBOR[1]	.94	9	1.90	9	1.82	9	3.75	8	1.99	9	--	--	1.96	1750
ULTIMA	3.32	5	3.47	5	3.14	3	5.38	2	3.69	5	--	--	3.54	3161
MEAN	2.91	--	3.17	--	2.90	--	4.62	--	3.55	--	--	--	3.27	2920

*see attached map
**no. of locations
***weighted average
[1]hulless oats

RELATIVE OAT YIELDS, 1990

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
BALDWIN	58	86	102	89	70	--	81
DONALD	134	111	105	109	125	--	117
MARION	121	117	114	112	114	--	116
NEWMAN	133	114	105	108	117	--	115
OAC WOODSTOCK	54	75	102	73	74	--	76
OGLE	171	134	109	119	143	--	135
OXFORD	83	92	94	91	97	--	91
TIBOR[1]	32	60	63	81	56	--	58
ULTIMA	114	110	108	117	104	--	110
MEAN YIELD t/ha	2.91	3.17	2.90	4.62	3.55	--	3.27

[1]hulless oats

OATS
MEAN YIELDS IN DIFFERENT AREAS*, 1990

CULTIVAR	I(1)** t/ha	RANK	II(3) t/ha	RANK	III(5) t/ha	RANK	IV(1) t/ha	RANK	V(4) t/ha	RANK	VI(-) t/ha	RANK	PROVINCE***(14) t/ha	lbs/a
BALDWIN	1.70	9	2.73	9	2.95	7	4.13	9	2.50	10	--	--	2.77	2473
DONALD	3.91	3	3.51	5	3.04	6	5.05	6	4.44	3	--	--	3.74	3339
MARION	3.53	5	3.72	3	3.31	2	5.18	5	4.05	5	--	--	2.76	3357
NEWMAN	3.88	4	3.62	4	3.05	5	4.98	7	4.14	4	--	--	3.68	3286
OAC WOODSTOCK	1.56	10	2.40	10	2.95	7	3.37	11	2.61	9	--	--	2.67	2384
OGLE	4.97	1	4.26	1	3.17	3	5.51	2	5.07	1	--	--	4.24	3786
OXFORD	2.42	8	2.91	8	2.71	10	4.21	8	3.44	7	--	--	3.05	2723
TIBOR[1]	.94	11	1.90	11	1.82	11	3.75	10	1.99	11	--	--	1.96	1750
ULTIMA	3.32	6	3.47	6	3.14	4	5.38	4	3.69	6	--	--	3.54	3161
OA 775-4	2.76	7	3.24	7	2.91	9	5.68	1	2.91	8	--	--	3.17	2830
TO 85025	4.77	2	4.03	2	3.47	1	5.44	3	4.63	2	--	--	4.15	3705
MEAN	3.13	--	3.25	--	2.96	--	4.79	--	3.59	--	--	--	3.34	2982

*see attached map
**no. of locations
***weighted average
[1]hulless oats

OATS
MEAN YIELDS, 1988-90

CULTIVAR	I(4)* t/ha	RANK	II(10) t/ha	RANK	III(14) t/ha	RANK	IV(7) t/ha	RANK	V(10) t/ha	RANK	VI(2)** t/ha	RANK	PROVINCE(47) t/ha	lbs/a
BALDWIN	2.20	7	3.18	7	3.55	5	3.93	6	3.94	7	4.80	2	3.47	3098
DONALD	3.69	4	3.43	5	3.42	6	4.10	5	4.14	6	4.10	8	3.49	3116
MARION	3.83	2	3.61	4	3.78	3	4.61	4	5.14	1	4.49	4	3.94	3518
NEWMAN	3.82	3	3.75	3	3.69	4	4.89	1	4.58	4	4.54	3	3.75	3348
OAC WOODSTOCK	1.86	8	2.83	8	3.39	7	3.73	8	3.79	8	4.30	5	3.22	2875
OGLE	4.67	1	4.19	1	3.79	2	4.65	2	5.02	3	4.12	7	3.94	3518
OXFORD	2.85	6	3.20	6	3.20	8	3.78	7	4.16	5	4.24	6	3.39	3027
TIBOR[1]	1.09	9	2.20	9	2.22	9	3.39	9	2.48	9	2.76	9	2.33	2081
ULTIMA	3.69	4	3.82	2	3.98	1	4.63	3	5.07	2	5.59	1	4.07	3634
MEAN	3.08	--	3.36	--	3.45	--	4.19	--	4.26	--	4.33	--	3.51	3134

*no. of locations
**1988-89 data only
[1]hulless oats

RELATIVE OAT YIELDS, 1988-90

CULTIVAR	I	II	III	IV	V	VI*	PROVINCE
BALDWIN	71	95	103	94	93	112	91
DONALD	120	102	95	98	97	95	103
MARION	124	107	110	110	121	104	114
NEWMAN	124	112	107	117	108	106	113
OAC WOODSTOCK	60	84	98	89	89	100	84
OGLE	152	125	110	111	118	96	123
OXFORD	93	95	93	90	98	99	94
TIBOR[1]	35	66	64	81	58	64	61
ULTIMA	120	114	115	111	119	130	116
MEAN YIELD t/ha	3.08	3.36	3.45	4.19	4.26	4.33	3.51

*1988-89 data only
[1]hulless oats

OATS
MEAN YIELDS, 1987-90

CULTIVAR	I(6)** t/ha	RANK	II(22) t/ha	RANK	III(17) t/ha	RANK	IV(13) t/ha	RANK	V(13) t/ha	RANK	VI(5)** t/ha	RANK	PROVINCE(76) t/ha	lbs/a
BALDWIN	2.83	5	3.05	4	3.64	2	3.85	3	3.75	4	4.17	1	3.44	3071
DONALD	3.72	3	3.09	3	3.37	4	3.72	4	3.75	4	3.48	6	3.40	3036
MARION	3.96	2	3.31	2	3.74	1	4.18	1	4.52	1	3.96	2	3.81	3402
OAC WOODSTOCK	2.95	6	3.05	4	3.33	5	3.69	5	3.59	6	3.71	4	3.22	2875
OGLE	4.17	1	3.60	1	3.58	3	4.08	2	4.28	2	3.56	5	3.80	3393
OXFORD	3.13	4	2.92	6	3.29	6	3.68	6	3.82	3	3.78	3	3.33	2973
TIBOR[1]	1.30	7	2.08	7	2.35	7	2.96	7	2.42	7	2.51	7	2.31	2063
MEAN	3.10	--	3.01	--	3.33	--	3.74	--	3.73	--	3.59	--	3.33	2973

*no. of locations
**1987-89 data only
[1]hulless oats

RELATIVE OAT YIELDS, 1987-90

CULTIVAR	I	II	III	IV	V	VI*	PROVINCE
BALDWIN	91	101	109	103	101	116	101
DONALD	120	103	101	100	101	97	105
MARION	128	110	112	112	121	110	117
OAC WOODSTOCK	83	101	100	99	96	103	96
OGLE	135	120	108	109	115	99	117
OXFORD	101	97	99	98	102	105	100
TIBOR[1]	42	69	71	79	65	70	65
MEAN YIELD t/ha	3.10	3.01	3.33	3.74	3.73	3.59	3.33

*1987-89 data only
[1]hulless oats

TESTING AREA I
OATS
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (1)*	hl/wt kg (1)	HEIGHT cm (1)	LODGING 0-9 (1)	MATURITY[a] DAYS (1)	B.Y.D.V. 0-9 (1)
BALDWIN	1.70	40.8	112	1	107	2
DONALD	3.91	43.5	115	2	104	1
MARION	3.53	39.1	118	2	107	1
NEWMAN	3.88	43.7	110	3	103	1
OAC WOODSTOCK	1.56	38.3	106	0	107	2
OGLE	4.97	45.6	100	2	101	0
OXFORD	2.42	39.7	108	1	107	1
TIBOR	.94	46.4	104	1	105	2
ULTIMA	3.32	40.2	104	2	107	2
OA 775-4	2.76	42.4	110	1	107	2
TO 85025	4.77	44.0	115	3	108	0

[a]no. of days from seeding to maturity
*no. of locations

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000*	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	2.20	42.6	29.2	120	3.5	104
DONALD	3.69	43.1	32.9	117	4.0	103
MARION	3.83	41.7	34.9	121	4.0	105
NEWMAN	3.82	43.1	34.6	113	3.5	102
OAC WOODSTOCK	1.86	38.8	28.3	114	3.5	106
OGLE	4.67	44.4	30.1	108	1.0	101
OXFORD	2.85	41.2	30.0	112	0.5	106
TIBOR	1.09	50.5	28.8	117	2.5	104
ULTIMA	3.69	40.1	31.6	113	2.5	105

[a]no. of days from seeding to maturity
*1989 data only

AGRONOMIC DATA, 1987-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000*	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	2.83	44.7	33.0	108	2.7	106
DONALD	3.72	46.4	37.9	104	2.5	106
MARION	3.96	43.2	37.0	109	2.0	108
OAC WOODSTOCK	2.57	41.5	31.8	103	2.2	108
OGLE	4.17	44.4	31.3	94	0.6	105
OXFORD	3.13	41.9	31.7	98	0.5	109
TIBOR	1.30	53.1	27.3	107	1.8	107

[a]no. of days from seeding to maturity
*1987-89 data only

TESTING AREA I
OATS
YIELD in kg per ha, 1990

CULTIVAR	KENT I	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
BALDWIN	1699	1.70	1518	44.6	9
DONALD	3908	3.91	3491	102.7	3
MARION	3529	3.53	3152	92.7	5
NEWMAN	3878	3.88	3464	101.9	4
OAC WOODSTOCK	1559	1.56	1393	41.0	10
OGLE	4974	4.97	4438	130.5	1
OXFORD	2415	2.42	2161	63.6	8
TIBOR	938	.94	839	--	11
ULTIMA	3323	3.32	2964	87.2	6
OA 775-4	2755	2.76	2464	72.5	7
TO 85025	4766	4.77	4259	125.3	2
MEAN	3130	3.13	2795	86.2	--
C.V. %	10.0	--	--	--	--
L.S.D. (0.05)	503	--	--	--	--

TESTING AREA II
OATS
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (3)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	HEIGHT cm (3)	LODGING 0-9 (2)	MATURITY[a] DAYS (1)	Leaf Rust 0-9 (2)	Septoria 0-9 (2)	B.Y.D.V. 0-9 (2)
BALDWIN	2.73	42.2	30.3	112	4.7	101	5.8	6.5	6.5
DONALD	3.50	46.7	36.3	113	4.3	100	5.8	6.3	4.7
MARION	3.72	46.6	36.6	115	3.5	102	6.0	5.5	4.9
NEWMAN	3.62	46.4	35.9	105	4.2	101	0.0	6.3	3.9
OAC WOODSTOCK	2.40	40.4	32.2	104	4.0	103	2.0	5.0	7.1
OGLE	4.26	50.2	33.9	92	0.4	100	4.8	5.8	1.9
OXFORD	2.91	42.5	27.9	104	2.9	104	5.5	5.3	4.5
TIBOR	1.90	57.4	29.0	114	3.0	100	4.0	6.0	6.4
ULTIMA	3.47	44.3	31.4	100	1.4	103	4.5	6.0	3.9
OA 775-4	3.24	46.6	34.8	105	2.2	102	2.3	5.3	4.1
TO 85025	4.03	48.9	36.7	105	3.1	101	5.5	5.0	1.9

[a]no. of days from seeding to maturity
*no. of locations

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS	Leaf Rust 0-9	Septoria 0-9
BALDWIN	3.18	43.8	30.2	114	4.7	97	6.2	6.4
DONALD	3.43	46.3	33.7	109	3.9	95	6.0	6.6
MARION	3.61	47.6	37.0	112	4.6	96	5.4	6.2
NEWMAN	3.75	48.0	36.8	102	3.8	95	0.0	7.2
OAC WOODSTOCK	2.83	43.2	31.3	105	3.6	96	1.9	5.0
OGLE	4.19	49.3	32.4	93	2.8	93	4.5	5.2
OXFORD	3.20	43.1	29.5	106	2.3	97	5.1	5.7
TIBOR	2.20	56.9	28.4	117	1.9	97	4.2	6.1
ULTIMA	3.82	45.9	31.7	98	2.2	95	3.8	5.8

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1987-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS	Septoria 0-9
BALDWIN	3.05	46.0	31.7	104	3.9	94	4.6
DONALD	3.09	48.1	37.2	95	3.2	93	5.6
MARION	3.31	47.3	38.0	101	3.4	93	4.5
OAC WOODSTOCK	3.05	45.4	33.4	96	2.9	96	3.7
OGLE	3.60	48.3	33.2	83	1.1	91	3.9
OXFORD	2.92	43.8	30.6	93	1.9	97	3.7
TIBOR	2.08	56.8	28.7	104	2.8	93	4.5

[a]no. of days from seeding to maturity

TESTING AREA II
OATS
YIELD in kg per ha, 1990

CULTIVAR	OXFORD	MIDDLESEX I	HURON	MANITOULIN ISLAND*	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	AVERAGE RANK
BALDWIN	2896	2300	2988	474	2.73	2438	71.7	9
DONALD	3176	3187	4147	1998	3.51	3134	92.2	5
MARION	3873	3405	3894	1698	3.72	3321	97.7	3
NEWMAN	3499	3555	3803	2237	3.62	3232	95.1	4
OAC WOODSTOCK	2315	2264	2608	727	2.40	2143	63.0	10
OGLE	3643	4274	4872	4036	4.26	3804	111.9	1
OXFORD	2611	2861	3242	1423	2.91	2598	76.4	8
TIBOR	1774	1720	2209	299	1.90	1696	--	11
ULTIMA	3147	3423	3839	1604	3.47	3098	91.1	6
OA 775-4	3094	2952	3676	--	3.24	2893	85.1	7
TO 85025	3609	4310	4184	--	4.03	3598	105.8	2
MEAN	3058	3114	3588	1611	3.25	2902	89.0	--
C.V. %	10.1	10.9	9.0	13.8	--	--	--	--
L.S.D. (0.05)	437	492	466	323	--	--	--	--

*data not included in mean

TESTING AREA III
OATS
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (5)*	hl/wt kg (6)	KERNEL WEIGHT g/1000 (6)	HEIGHT cm (6)	LODGING 0-9 (3)	MATURITY[a] DAYS (3)
BALDWIN	2.95	48.6	32.8	115	5.3	99
DONALD	3.04	48.8	38.5	112	4.0	98
MARION	3.31	48.3	39.7	114	3.7	99
NEWMAN	3.05	49.6	38.7	104	5.0	98
OAC WOODSTOCK	2.95	48.3	34.9	110	4.3	99
OGLE	3.17	47.7	32.5	94	3.5	97
OXFORD	2.71	44.2	31.1	108	3.7	100
TIBOR	1.82	52.4	32.4	115	2.3	98
ULTIMA	3.14	44.8	33.4	99	3.5	100
OA 775-4	2.91	48.6	35.0	110	3.8	99
TO 85025	3.47	47.8	39.1	105	6.0	100

[a]no. of days from seeding to maturity
*no. of locations

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	3.55	47.0	31.8	105	4.7	97
DONALD	3.42	46.4	36.8	100	3.9	95
MARION	3.78	47.2	37.9	105	4.6	96
NEWMAN	3.69	47.0	37.4	96	3.8	95
OAC WOODSTOCK	3.39	45.7	33.1	103	3.6	96
OGLE	3.79	46.4	31.4	86	2.8	93
OXFORD	3.20	42.3	30.0	100	2.3	97
TIBOR	2.22	50.7	29.5	105	1.9	97
ULTIMA	3.98	44.9	33.5	91	2.2	95

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1987-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	3.64	48.3	33.3	84	4.3	95
DONALD	3.37	48.1	35.5	77	3.7	94
MARION	3.74	47.3	36.6	81	4.1	95
OAC WOODSTOCK	3.33	45.8	32.1	79	3.5	95
OGLE	3.58	46.9	30.6	66	2.4	92
OXFORD	3.29	43.8	29.8	77	2.3	96
TIBOR	2.35	52.7	30.3	84	2.2	95

[a]no. of days from seeding to maturity

TESTING AREA III
OATS
YIELD in kg per ha, 1990

CULTIVAR	CARLETON	RENFREW I	LANARK*	GRENVILLE	STORMONT, DUNDAS & GLENGARRY	PRESCOTT & RUSSELL	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
BALDWIN	1210	1938	859	4206	3330	4080	2.95	2634	77.5	7
DONALD	1327	1840	1966	4848	3414	3753	3.04	2714	79.8	6
MARION	1549	1995	2123	5220	3879	3892	3.31	2955	86.9	2
NEWMAN	1218	1764	1921	4194	4429	3659	3.05	2723	80.1	5
OAC WOODSTOCK	1001	1499	722	4090	4245	3922	2.95	2634	77.5	7
OGLE	1238	1747	2386	4361	4510	3993	3.17	2830	83.2	3
OXFORD	1201	1727	1379	2847	3923	3844	2.71	2420	71.2	10
TIBOR	759	1068	540	2223	2739	2304	1.82	1625	--	11
ULTIMA	1288	1797	973	4357	4221	4023	3.14	2804	82.5	4
OA 775-4	1366	1797	916	3805	3381	4208	2.91	2598	76.4	9
TO 85025	1899	2279	2110	4259	4454	4438	3.47	3098	91.1	1
MEAN	1278	1768	1445	4037	3866	3829	2.96	2643	86.6	--
C.V. %	13.2	7.3	27.8	15.2	14.7	7.2	--	--	--	--
L.S.D. (0.05)	237	183	580	N.A.	N.A.	399	--	--	--	--

*data not included in mean

TESTING AREA IV
OATS
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (1)*	hl/wt kg (1)	KERNEL WEIGHT g/1000 (1)	HEIGHT cm (1)	MATURITY[a] DAYS (1)	Leaf Rust 0-9 (1)	Septoria 0-9 (1)
BALDWIN	4.13	52.4	34.8	112	99	5.0	5.0
DONALD	5.05	50.5	37.4	106	99	7.0	7.0
MARION	5.18	51.1	40.0	109	100	3.5	5.0
NEWMAN	4.98	52.4	39.8	100	100	0.0	7.0
OAC WOODSTOCK	3.37	47.4	35.6	102	101	0.0	3.0
OGLE	5.51	49.3	33.0	96	99	2.5	4.5
OXFORD	4.21	44.9	30.2	100	103	3.0	3.0
TIBOR	3.75	61.1	30.0	108	99	4.0	4.5
ULTIMA	5.38	47.4	34.0	92	102	3.0	5.0
OA 775-4	5.68	49.9	37.4	102	102	0.0	3.0
TO 85025	5.44	49.9	38.2	100	101	6.0	5.0

[a]no. of days from seeding to maturity
*no. of locations

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	MATURITY[a] DAYS	Leaf Rust 0-9	Septoria 0-9
BALDWIN	3.93	46.5	31.9	114	93	6.0	4.3
DONALD	4.10	44.3	32.2	106	93	6.8	4.3
MARION	4.61	48.0	36.4	110	93	4.8	4.0
NEWMAN	4.89	49.3	36.9	104	94	0.0	3.8
OAC WOODSTOCK	3.73	45.6	34.2	103	95	0.0	1.5
OGLE	4.65	45.9	32.5	94	92	3.0	3.3
OXFORD	3.78	40.6	28.2	99	97	3.5	2.8
TIBOR	3.39	55.2	26.7	108	94	4.0	2.8
ULTIMA	4.63	42.8	30.4	96	95	1.5	5.3

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1987-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY[a] DAYS	Septoria 0-9
BALDWIN	3.85	47.8	33.5	106	2.8	91	4.0
DONALD	3.72	46.6	34.9	96	2.0	89	4.2
MARION	4.18	47.3	35.9	101	1.8	90	3.8
OAC WOODSTOCK	3.69	45.5	33.8	98	3.8	93	2.0
OGLE	4.08	45.1	33.0	85	0.0	89	1.1
OXFORD	3.68	42.1	30.1	93	1.1	94	2.6
TIBOR	2.96	55.2	28.3	101	0.6	91	3.1

[a]no. of days from seeding to maturity
*1987 data only

TESTING AREA IV
OATS
YIELD in kg per ha, 1990

CULTIVAR	Wellington	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	RANK
BALDWIN	4128	4.13	3688	108.5	9
DONALD	5048	5.05	4509	132.6	6
MARION	5179	5.18	4625	136.0	5
NEWMAN	4982	4.98	4446	130.8	7
OAC WOODSTOCK	3370	3.37	3009	88.5	11
OGLE	5505	5.51	4920	144.7	2
OXFORD	4211	4.21	3759	110.6	8
TIBOR	3746	3.75	3348	--	10
ULTIMA	5377	5.38	4804	141.3	4
OA 775-4	5675	5.68	5071	149.1	1
TO 85025	5435	5.44	4857	142.9	3
MEAN	4787	4.79	4277	128.5	--
C.V. %	7.0	--	--	--	--
L.S.D. (0.05)	485	--	--	--	--

TESTING AREA V
OATS
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (4)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (1)	HEIGHT cm (3)	LODGING 0-9 (1)	MATURITY[a] DAYS (2)
BALDWIN	2.50	40.0	22.1	102	1	98
DONALD	4.44	44.6	40.0	111	2	96
MARION	4.05	44.6	40.0	107	1	97
NEWMAN	4.14	43.6	40.4	110	2	96
OAC WOODSTOCK	2.61	39.0	31.8	102	1	99
OGLE	5.07	43.9	33.7	91	2	97
OXFORD	3.44	39.9	25.0	100	1	100
TIBOR	1.99	52.0	28.3	109	1	97
ULTIMA	3.69	38.6	35.1	102	0	99
OA 775-4	2.91	43.0	37.0	103	1	99
TO 85025	4.63	43.6	32.9	103	2	99

[a]no. of days from seeding to maturity
*no. of locations

AGRONOMIC DATA, 1988-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	3.94	45.8	27.5	106	2.3	97
DONALD	4.14	46.8	37.7	105	3.0	97
MARION	5.14	48.9	39.6	106	1.8	97
NEWMAN	4.58	47.4	38.8	105	2.5	97
OAC WOODSTOCK	3.79	45.1	32.9	104	2.5	99
OGLE	5.02	47.1	33.5	88	1.0	98
OXFORD	4.16	44.3	28.0	101	0.8	100
TIBOR	2.48	57.2	30.4	108	1.3	97
ULTIMA	5.07	43.9	33.4	99	1.0	99

[a]no. of days from seeding to maturity

AGRONOMIC DATA, 1987-90

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	3.75	46.2	29.2	71	2.3	99
DONALD	3.75	46.6	35.3	69	2.7	98
MARION	4.52	48.1	36.4	71	2.9	99
OAC WOODSTOCK	3.59	44.6	31.2	68	2.2	100
OGLE	4.28	46.5	31.0	62	0.7	98
OXFORD	3.82	43.8	28.5	67	1.5	101
TIBOR	2.42	55.6	29.6	75	1.2	99

[a]no. of days from seeding to maturity

TESTING AREA V
OATS
YIELD in kg per ha, 1990

CULTIVAR	TEMISKAMING	NIPISSING-SUDBURY	RAINY RIVER DISTRICT	THUNDER BAY DISTRICT	AVERAGE t/ha	AVERAGE lbs/a	AVERAGE bu/a	AVERAGE RANK
BALDWIN	1199	3729	2729	2355	2.50	2232	65.6	10
DONALD	3472	4559	4160	5578	4.44	3964	116.6	3
MARION	2715	4365	3609	5527	4.05	3616	106.4	5
NEWMAN	3164	4430	3902	5046	4.14	3696	108.7	4
OAC WOODSTOCK	1182	3989	2616	2661	2.61	2330	68.5	9
OGLE	4781	5042	3751	6722	5.07	4527	133.1	1
OXFORD	2550	3984	3498	3732	3.44	3071	90.3	7
TIBOR	812	2863	2091	2193	1.99	1777	--	11
ULTIMA	3030	4862	3124	3754	3.69	3295	96.9	6
OA 775-4	1828	4430	2546	2826	2.91	2598	76.4	8
TO 85025	5521	4098	2651	6238	4.63	4134	121.6	2
MEAN	2751	4214	3152	4239	3.59	3206	98.4	--
C.V. %	11.3	14.2	16.0	13.5	--	--	--	--
L.S.D. (0.05)	309	595	728	826	--	--	--	--

TESTING AREA VI
OATS
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha (-)*	hl/wt kg (-)	KERNEL WEIGHT g/1000 (-)	HEIGHT 0-9 (-)	LODGING 0-9 (-)	MATURITY[a] DAYS (-)
BALDWIN						
DONALD						
MARION						
NEWMAN		N O	D A T A			
OAC WOODSTOCK						
OGLE						
OXFORD						
TIBOR						
ULTIMA						
OA 775-4						
TO 85025						

[a]no. of days from seeding to maturity
*no. of locations

AGRONOMIC DATA, 1988-90*

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT 0-9	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	4.80	54.7	33.3	107	4.4	103
DONALD	4.10	53.1	33.5	94	4.3	102
MARION	4.49	51.9	32.9	99	3.3	101
NEWMAN	4.54	51.2	36.5	92	3.7	103
OAC WOODSTOCK	4.30	50.4	30.8	99	2.0	103
OGLE	4.12	49.3	28.4	78	0.8	100
OXFORD	4.24	49.1	31.4	94	1.5	103
TIBOR	2.76	60.9	30.7	102	1.3	102
ULTIMA	5.59	50.0	31.7	88	2.7	103

[a]no. of days from seeding to maturity
*1988-89 data only

AGRONOMIC DATA, 1987-90*

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT 0-9	LODGING 0-9	MATURITY[a] DAYS
BALDWIN	4.17	54.1	32.1	104	3.9	108
DONALD	3.48	52.9	32.0	89	3.6	108
MARION	3.96	52.2	33.2	98	3.2	107
OAC WOODSTOCK	3.71	50.5	29.6	96	2.3	108
OGLE	3.56	49.7	28.3	76	1.4	106
OXFORD	3.78	49.7	29.6	92	1.7	108
TIBOR	2.51	60.4	30.2	100	1.8	107

[a]no. of days from seeding to maturity
*1987-89 data only

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1990

WINTER BARLEY

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.

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.

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.

WINTER BARLEY
TESTING AREA I & II
AGRONOMIC DATA, 1990

CULTIVAR	YIELD t/ha			hl/wt	HEIGHT	LODGING	WINTER	DATE	
	AREA I (2)*	AREA II (2)	MEAN (4)	kg (5)	cm (5)	0-9 (3)	SURVIVAL 0-9 (2)	HEAD (3)	RIPE (5)
HURON	4.08	4.04	4.06	63.3	90	1.4	6.3	May 26	July 7
OAC HALTON	3.79	4.01	3.90	63.9	95	3.2	6.0	28	8
OAC ACTON	3.66	3.41	3.54	61.7	104	4.4	3.9	30	9
OAC ELMIRA	4.15	4.28	4.34	62.5	101	3.3	4.0	28	10
MEAN	3.92	3.94	3.93	62.9	98	3.1	5.1	May 28	July 9

*no. of locations

AGRONOMIC DATA, 1985-90

CULTIVAR	YIELD t/ha			hl/wt	HEIGHT	LODGING	WINTER
	AREA I (12)*	AREA II (18)	MEAN (30)	kg	cm	0-9	SURVIVAL 0-9
HURON	4.47	3.88	4.18	63.1	88	2.6	7.3
OAC HALTON	4.92	4.15	4.54	63.8	92	3.3	7.4
OAC ACTON	4.78	4.01	4.40	60.3	101	3.3	6.9
OAC ELMIRA	5.04	4.42	4.73	63.4	99	2.8	7.0
MEAN	4.80	4.12	4.46	62.7	95	3.0	7.2

*no. of locations

AGRONOMIC DATA, 1983-90

CULTIVAR	YIELD t/ha			hl/wt	HEIGHT	LODGING	WINTER
	AREA I (17)*	AREA II (27)	MEAN (44)	kg	cm	0-9	SURVIVAL 0-9
HURON	4.34	4.01	4.18	63.0	89	2.2	7.1
OAC HALTON	4.79	4.28	4.54	63.4	92	3.4	7.3
OAC ACTON	4.72	4.23	4.48	60.6	101	3.2	7.1
MEAN	4.62	4.17	4.40	62.3	94	2.9	7.2

*no. of locations

WINTER BARLEY, 1990
TESTING AREA I, SUMAMRY

CULTIVAR	YIELD t/ha (2)*	hl/wt kg (2)	KERNEL WEIGHT g/1000 (2)	HEIGHT cm (2)	LODGING 0-9 (2)	DATE HEAD MAY (1)	DATE RIPE JULY (2)	MILDEW 0-9 (1)	SCALD 0-9 (1)	SPOT BLOTCH 0-9 (1)
HURON	4.08	63.8	37.7	99	1.5	20	2	0	0	2
OAC HALTON	3.79	66.8	35.6	109	3.0	23	4	0	1	1
OAC ACTON	3.66	64.4	38.7	119	5.0	26	3	3	1	2
OAC ELMIRA	4.15	64.1	30.9	110	2.5	24	6	0	0	5

*no. of locations

WINTER BARLEY, 1990
TESTING AREA II, SUMAMRY

CULTIVAR	YIELD t/ha (2)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	WINTER SURVIVAL 0-9 (2)	HEIGHT cm (3)	LODGING 0-9 (1)	DATE HEAD (2)	DATE RIPE (3)	LEAF RUST 0-9 (2)	B.Y.D.V. 0-9 (2)	SPOT BLOTCH 0-9 (1)
HURON	4.04	62.7	32.7	6.3	80	1.3	May 31	July 12	3.7	1.7	4
OAC HALTON	4.01	61.0	34.0	6.0	81	3.3	June 1	12	4.5	1.8	7
OAC ACTON	3.41	59.0	36.6	3.9	88	3.8	3	15	5.9	2.9	7
OAC ELMIRA	4.28	60.8	32.9	4.0	91	4.0	1	14	2.0	3.5	8

*no. of locations

TESTING AREA I & II SUMMARY t/ha, 1990

CULTIVAR	AREA I KENT I	AREA I KENT II	AREA II OXFORD	AREA II MIDDLESEX I	MEAN AREA I & II
HURON	3.24	4.91	2.23	5.84	4.06
OAC HALTON	2.64	4.93	2.39	5.62	3.90
OAC ACTON	3.48	3.84	1.80	5.02	3.54
OAC ELMIRA	3.80	5.00	2.80	5.75	4.34
MEAN	3.16	4.67	2.31	5.56	3.93
C.V.%	15.5	14.1	17.4	5.3	--
L.S.D.(0.05)	.60	1.05	.55	.47	--

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

INDEX

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

AC	AILSA CRAIG
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;FALL WHITE WHEAT 1990

DESCRIPTION OF REGISTERED VARIETIES

FREDRICK:

REDCOAT (C.D.6707)/5/GENESEE/4/(WASHINGTON-1)/RIO/REX//BREVOR /3/NORIN-10/BREVOR. FROM 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. SHORT HEIGHT WITH GOOD LODGING RESISTANCE, WINTER HARDINESS AND DISEASE RESISTANCE, BUT A TENDENCY FOR LOW TEST WEIGHT.

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. HIGH YIELDING, SOFT WHITE VARIETY WITH GOOD MILLING AND BAKING QUALITY. MEDIUM HEIGHT. BETTER STRAW STRENGTH THAN FREDRICK.

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; MARKETED IN CANADA BY KING AGRO LTD. MEDIUM HEIGHT, BEARDLESS, AND BROWN CHAFFED. ONE DAY LATER THAN FREDRICK. SELECTED FOR HESSIAN FLY AND LEAF RUST RESISTANCE. RELATIVELY LOW PROTEIN CONTENT BUT HIGH TEST WEIGHT.

HARUS:

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

DESCRIPTION OF VARIETIES TESTED

ENA:

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

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 1 AND 2, OF MEDIUM HEIGHT AND REASONABLE LODGING RESISTANCE. SUPERIOR TO OTHER RECOMMENDED VARIETIES IN MILDEW RESISTANCE HOWEVER IT IS 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 EXCELLENT RESISTANCE TO SEPTORIA, GLUME BLOTCH, AND HEAD BLIGHT. MORE SUSCEPTIBLE TO LEAF RUST THAN THE OTHER CULTIVARS.

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	HW87N	ID87N	MH87N	RN87N	HW88N	WE88N	RN88N	ID88N	HW89N	RN89N
1 FREDRICK	3.07	4.50	4.35	5.48	4.04	4.51	5.45	4.61	3.08	3.86
2 HOUSER	3.11	3.92	3.29	5.67	5.43	5.20	6.93	5.24	3.75	3.07
3 AUGUSTA	3.58	4.79	4.83	6.02	4.99	5.05	6.35	4.93	3.49	2.43
4 FRANKENMUTH	3.33	4.31	4.44	5.57	5.53	4.81	6.06	4.89	3.78	2.82
5 HARUS	3.46	4.69	5.01	5.62	4.31	4.87	5.76	4.85	4.48	3.98
6 ENA	3.79	4.10	4.17	5.74	4.79	4.93	5.92	5.21	3.62	3.63
7 ANNETTE	3.45	4.61	5.13	5.75	4.82	4.91	6.25	5.01	4.31	3.01
8 HARMIL	3.49	4.48	4.77	5.74	4.60	4.57	6.15	4.69	4.42	4.06
9 REBECCA	3.68	4.41	4.98	5.81	5.72	5.09	7.10	5.07	4.80	3.50
LOCATION MEAN	3.44	4.42	4.55	5.71	4.91	4.88	6.22	4.94	3.97	3.37

CULTIVAR NAME	ID89N	MH89N	RN90N	MEAN
1 FREDRICK	4.15	3.98	3.67	4.21
2 HOUSER	3.84	3.41	4.91	4.44
3 AUGUSTA	4.12	4.20	4.19	4.54
4 FRANKENMUTH	4.43	4.01	4.20	4.48
5 HARUS	4.64	4.89	4.44	4.69
6 ENA	4.31	3.30	4.57	4.47
7 ANNETTE	4.32	4.65	4.59	4.68
8 HARMIL	4.38	4.98	4.25	4.66
9 REBECCA	4.62	4.83	5.08	4.98
LOCATION MEAN	4.31	4.25	4.43	4.57

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990
DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 87-90
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	HW87N	ID87N	MH87N	RN87N	HW88N	WE88N	RN88N	ID88N	HW89N	RN89N
1	FREDRICK	89	102	96	96	82	92	88	93	78	114
2	HOUSER	90	89	72	99	110	107	111	106	94	91
3	AUGUSTA	104	108	106	105	102	103	102	100	88	72
4	FRANKENMUTH	97	97	98	98	113	99	97	99	95	84
5	HARUS	101	106	110	98	88	100	93	98	113	118
6	ENA	110	93	92	101	97	101	95	105	91	108
7	ANNETTE	100	104	113	101	98	101	101	101	109	89
8	HARMIL	101	101	105	101	94	94	99	95	111	120
9	REBECCA	107	100	109	102	116	104	114	103	121	104
	LOCATION MEAN	3.44	4.42	4.55	5.71	4.91	4.88	6.22	4.94	3.97	3.37

KEY	NAME	ID89N	MH89N	RN90N	MEAN*
1	FREDRICK	96	94	83	93
2	HOUSER	89	80	111	96
3	AUGUSTA	96	99	95	98
4	FRANKENMUTH	103	94	95	97
5	HARUS	108	115	100	104
6	ENA	100	78	103	98
7	ANNETTE	100	109	104	102
8	HARMIL	102	117	96	103
9	REBECCA	107	114	115	109
	LOCATION MEAN	4.31	4.25	4.43	4.57

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	AC87N	LN87N	WK87N	BH87N	NN88N	LN88N	WK88N	EA88N	BH88N
1 FREDRICK	2.10	2.90	4.79	3.66	4.22	3.49	4.85	4.16	5.29
2 HOUSER	2.10	3.26	3.79	3.46	5.26	3.90	6.57	5.60	4.74
3 AUGUSTA	2.35	3.41	5.06	3.71	4.75	3.76	6.03	5.30	4.84
4 FRANKENMUTH	1.96	3.11	4.61	3.58	4.71	3.83	5.87	5.22	4.47
5 HARUS	2.42	2.83	5.75	2.67	4.56	4.16	5.45	4.81	4.71
6 ENA	2.10	3.26	3.91	3.67	4.38	3.74	4.31	4.95	4.86
7 ANNETTE	2.10	2.96	4.64	3.44	4.40	4.15	5.32	5.35	5.04
8 HARMIL	2.72	3.16	4.06	3.32	4.49	3.44	4.76	5.06	5.08
9 REBECCA	2.32	3.38	5.14	3.34	5.25	3.83	5.87	4.70	4.37
LOCATION MEAN	2.24	3.14	4.64	3.43	4.67	3.81	5.45	5.02	4.82

CULTIVAR NAME	LN89N	NN89N	WK89N	EA89N	NN90N	LN90N	WK90N	EA90N	BH90N	MEAN
1 FREDRICK	4.41	3.51	5.53	5.44	5.02	3.60	3.79	5.78	4.65	4.29
2 HOUSER	4.38	3.44	4.94	5.61	5.44	4.76	4.16	6.09	4.78	4.57
3 AUGUSTA	4.08	3.49	4.53	6.03	5.47	3.95	4.29	6.75	4.84	4.59
4 FRANKENMUTH	4.52	3.15	5.50	6.06	5.15	3.62	3.63	6.28	4.67	4.44
5 HARUS	4.91	3.93	5.99	6.06	5.34	4.81	3.43	6.14	4.46	4.58
6 ENA	4.43	2.97	5.77	6.12	5.25	4.73	3.83	6.27	4.47	4.39
7 ANNETTE	4.59	3.39	6.18	6.07	5.27	4.52	3.69	6.39	4.77	4.57
8 HARMIL	5.18	3.60	6.33	6.67	5.25	4.30	3.84	5.99	5.26	4.58
9 REBECCA	5.19	3.44	5.62	6.89	5.44	4.71	4.40	6.89	5.08	4.77
LOCATION MEAN	4.63	3.44	5.60	6.11	5.29	4.33	3.90	6.29	4.78	4.53

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990
DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 87-90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	AC87N	LN87N	WK87N	BH87N	NN88N	LN88N	WK88N	EA88N	BH88N	EA89N
1	FREDRICK	94	92	103	107	90	92	89	83	110	89
2	HOUSER	94	104	82	101	113	102	121	112	98	92
3	AUGUSTA	105	109	109	108	102	99	111	106	100	99
4	FRANKENMUTH	87	99	99	104	101	100	108	104	93	99
5	HARUS	108	90	124	78	98	109	100	96	98	99
6	ENA	94	104	84	107	94	98	79	99	101	100
7	ANNETTE	94	94	100	100	94	109	98	107	105	99
8	HARMIL	121	101	88	97	96	90	87	101	105	109
9	REBECCA	104	108	111	97	112	100	108	94	91	113
	LOCATION MEAN	2.24	3.14	4.64	3.43	4.67	3.81	5.45	5.02	4.82	6.11

KEY	NAME	WK89N	NN89N	LN89N	NN90N	LN90N	WK90N	EA90N	BH90N	MEAN*
1	FREDRICK	99	102	95	95	83	97	92	97	95
2	HOUSER	88	100	95	103	110	107	97	100	101
3	AUGUSTA	81	102	88	103	91	110	107	101	102
4	FRANKENMUTH	98	92	98	97	84	93	100	98	97
5	HARUS	107	114	106	101	111	88	98	93	101
6	ENA	103	86	96	99	109	98	100	94	97
7	ANNETTE	110	99	99	100	104	95	102	100	100
8	HARMIL	113	105	112	99	99	99	95	110	102
9	REBECCA	100	100	112	103	109	113	110	106	105
	LOCATION MEAN	5.60	3.44	4.63	5.29	4.33	3.90	6.29	4.78	4.53

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	KE87N	O187N	O287N	RW87N	O188N	KE88N	RW88N	O289N	KE90N	MEAN
1 FREDRICK	4.96	5.13	5.92	4.74	3.92	3.12	3.26	3.43	3.67	4.24
2 HOUSER	5.90	4.62	5.44	4.46	5.23	4.07	4.83	3.27	3.45	4.59
3 AUGUSTA	5.38	5.40	5.88	5.49	5.05	3.39	3.99	3.35	3.97	4.66
4 FRANKENMUTH	4.44	5.07	5.27	4.95	4.99	3.63	3.74	3.69	3.13	4.32
5 HARUS	4.73	5.49	6.25	4.83	4.08	3.00	3.38	3.02	3.78	4.28
6 ENA	5.28	4.48	5.69	4.74	4.07	2.80	3.04	2.74	4.50	4.15
7 ANNETTE	4.99	5.02	5.30	5.05	4.73	3.32	3.46	4.25	4.30	4.49
8 HARMIL	4.83	4.76	6.30	5.06	4.19	2.99	3.89	3.54	2.64	4.24
9 REBECCA	5.04	5.17	6.30	4.54	4.87	3.51	3.73	2.43	4.60	4.47
LOCATION MEAN	5.06	5.02	5.82	4.87	4.57	3.31	3.70	3.30	3.78	4.38

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	KE87N	O187N	O287N	RW87N	O188N	KE88N	RW88N	O289N	KE90N	MEAN*
1 FREDRICK	98	102	102	97	86	94	88	104	97	96
2 HOUSER	117	92	94	92	114	123	130	99	91	106
3 AUGUSTA	106	108	101	113	111	102	108	101	105	106
4 FRANKENMUTH	88	101	91	102	109	110	101	112	83	99
5 HARUS	93	109	107	99	89	91	91	91	100	97
6 ENA	104	89	98	97	89	84	82	83	119	94
7 ANNETTE	99	100	91	104	104	100	93	129	114	104
8 HARMIL	95	95	108	104	92	90	105	107	70	96
9 REBECCA	100	103	108	93	107	106	101	74	122	101
LOCATION MEAN	5.06	5.02	5.82	4.87	4.57	3.31	3.70	3.30	3.78	4.38

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
MGMT : NORMAL

KEY	NAME	AREA 1 (13)*	AREA 2 (18)	AREA 3 (9)	PROVINCE (40)**
1	FREDRICK	4.21	4.29	4.24	4.25
2	HOUSER	4.44	4.57	4.59	4.53
3	AUGUSTA	4.54	4.59	4.66	4.59
4	FRANKENMUTH	4.48	4.44	4.32	4.43
5	HARUS	4.69	4.58	4.28	4.55
6	ENA	4.47	4.39	4.15	4.36
7	ANNETTE	4.68	4.57	4.49	4.59
8	HARMIL	4.66	4.58	4.24	4.53
9	REBECCA	4.98	4.77	4.47	4.77
	OVERALL MEAN	4.57	4.53	4.38	4.51

MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

KEY	NAME	AREA 1	AREA 2	AREA 3	PROVINCE
1	FREDRICK	92.5	95.0	96.5	94.5
2	HOUSER	96.2	100.9	105.7	100.5
3	AUGUSTA	98.4	101.7	106.1	101.6
4	FRANKENMUTH	97.5	97.5	99.5	97.9
5	HARUS	103.6	101.0	96.9	100.9
6	ENA	98.0	96.9	94.0	96.6
7	ANNETTE	102.3	100.4	103.7	101.8
8	HARMIL	102.7	101.5	96.3	100.7
9	REBECCA	108.9	105.0	101.4	105.4
	OVERALL MEAN	4.57	4.53	4.38	4.51

* # OF LOCATIONS
** WEIGHTED AVERAGE

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990

YEAR(S): 87-90
MGMT : NORMAL
AREA : 1

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	4.21	74.7	35	100	2.4	106	153	2.5	1.0	2.9	2.7	4.0	.	3.5
2	HOUSER	8	4.44	70.9	37	100	3.6	94	154	2.2	2.1	3.9	2.0	5.5	.	7.0
3	AUGUSTA	5	4.54	70.3	34	100	2.8	100	155	2.8	2.1	2.9	2.9	7.5	.	3.5
4	FRANKENMUTH	6	4.48	73.7	33	100	3.3	100	155	2.5	1.3	3.2	4.5	8.5	.	4.3
5	HARUS	2	4.69	74.2	35	100	2.5	97	152	2.2	1.8	2.5	2.7	3.5	.	3.5
6	ENA	7	4.47	74.4	33	100	2.0	99	154	2.7	2.0	3.5	2.0	2.5	.	5.0
7	ANNETTE	3	4.68	73.6	40	100	3.9	100	154	0.4	1.3	2.8	3.5	3.0	.	3.5
8	HARMIL;OT.90.4.1	4	4.66	72.8	31	100	2.6	104	154	3.0	1.0	2.2	3.3	4.5	.	5.0
9	REBECCA;TW839.3	1	4.98	73.1	35	100	2.1	94	154	2.3	2.5	2.0	1.8	1.5	.	5.0
LOCATIONS		13		11	7	1	9	14	13	10	4	5	3	2	0	1

YEAR(S): 87-90
MGMT : NORMAL
AREA : 2

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	4.29	74.2	36	93	1.5	101	159	3.2	4.6	4.0	3.8	4.1	.	3.3
2	HOUSER	5	4.57	71.4	37	89	1.9	89	160	2.6	5.7	4.2	2.8	4.3	.	1.5
3	AUGUSTA	2	4.59	71.7	35	94	2.5	97	160	3.9	5.8	3.6	2.8	4.3	.	1.8
4	FRANKENMUTH	7	4.44	74.0	34	92	2.6	96	161	2.8	5.9	3.9	4.5	3.3	.	1.3
5	HARUS	3	4.58	73.7	35	95	0.9	91	158	2.6	5.6	3.7	3.3	3.3	.	2.0
6	ENA	8	4.39	74.4	34	95	1.5	95	160	2.6	5.5	4.3	2.8	2.3	.	1.5
7	ANNETTE	5	4.57	73.7	39	93	2.5	96	160	1.0	6.1	3.9	3.3	4.4	.	1.5
8	HARMIL;OT.90.4.1	3	4.58	72.7	33	91	1.0	97	159	3.8	6.4	3.3	3.8	5.4	.	1.0
9	REBECCA;TW839.3	1	4.77	73.2	35	91	1.3	91	160	3.0	6.3	3.5	2.0	3.6	.	1.0
LOCATIONS		18		15	13	9	8	17	11	12	4	7	2	2	0	2

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

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990

YEAR(S): 87-90
MGMT : NORMAL
AREA : 3

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	7	4.24	80.9	41	67	1.6	99	161	7.0	4.0	4.5	.	4.0	.	.
2	HOUSER	2	4.59	77.2	42	70	1.8	88	160	7.5	8.0	4.0	.	7.0	.	.
3	AUGUSTA	1	4.66	78.0	40	69	1.6	96	160	7.3	8.0	4.5	.	9.0	.	.
4	FRANKENMUTH	5	4.32	79.7	39	69	1.8	93	161	7.0	8.0	2.5	.	7.0	.	.
5	HARUS	6	4.28	79.2	40	67	1.3	91	159	7.0	8.0	5.5	.	5.0	.	.
6	ENA	9	4.15	79.9	39	72	1.4	94	160	7.5	8.0	5.5	.	5.0	.	.
7	ANNETTE	3	4.49	79.8	46	68	1.8	95	161	5.0	8.0	5.0	.	8.0	.	.
8	HARMIL;OT.90.4.1	7	4.24	78.7	37	66	1.6	95	160	7.3	8.0	4.0	.	6.0	.	.
9	REBECCA;TW839.3	4	4.47	78.8	40	70	1.6	88	160	7.5	8.0	4.0	.	6.0	.	.
LOCATIONS		9	11	9	9	6	10	5	1	1	1	0	1	0	0	

YEAR(S): 87-90
MGMT : NORMAL
AREA(S): 1- 3

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	4.25	76.4	37	81	1.8	102	157	3.0	2.9	3.6	3.1	4.0	.	3.3
2	HOUSER	5	4.53	73.0	38	81	2.5	91	157	2.7	4.3	4.1	2.3	5.3	.	3.3
3	AUGUSTA	2	4.59	73.1	36	83	2.4	98	158	3.6	4.4	3.4	2.8	6.5	.	2.3
4	FRANKENMUTH	7	4.43	75.6	36	82	2.7	97	158	2.8	4.1	3.5	4.5	6.1	.	2.3
5	HARUS	4	4.55	75.5	37	82	1.7	93	156	2.6	4.2	3.4	2.9	3.7	.	2.5
6	ENA	8	4.36	76.0	35	84	1.7	96	157	2.8	4.2	4.1	2.3	2.9	.	2.7
7	ANNETTE	2	4.59	75.5	41	82	2.9	97	158	0.9	4.2	3.6	3.4	4.6	.	2.5
8	HARMIL;OT.90.4.1	5	4.53	74.5	34	80	1.8	99	157	3.6	4.2	2.9	3.5	5.1	.	3.0
9	REBECCA;TW839.3	1	4.77	74.8	37	81	1.7	91	157	2.9	4.8	3.0	1.9	3.2	.	3.0
LOCATIONS		40	37	29	19	23	41	29	23	9	13	5	5	0	3	

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	RN90N	MEAN
1 FREDRICK	3.67	3.67
2 HOUSER	4.91	4.91
3 AUGUSTA	4.19	4.19
4 FRANKENMUTH	4.20	4.20
5 HARUS	4.44	4.44
6 ENA	4.57	4.57
7 ANNETTE	4.59	4.59
8 HARMIL	4.25	4.25
9 REBECCA	5.08	5.08
LOCATION MEAN	4.43	4.43

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	RN90N	MEAN
1	FREDRICK	83	83
2	HOUSER	111	111
3	AUGUSTA	95	95
4	FRANKENMUTH	95	95
5	HARUS	100	100
6	ENA	103	103
7	ANNETTE	104	104
8	HARMIL	96	96
9	REBECCA	115	115
	LOCATION MEAN	4.43	4.43

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	NN90N	LN90N	WK90N	EA90N	BH90N	MEAN
1 FREDRICK	5.02	3.60	3.79	5.78	4.65	4.57
2 HOUSER	5.44	4.76	4.16	6.09	4.78	5.05
3 AUGUSTA	5.47	3.95	4.29	6.75	4.84	5.06
4 FRANKENMUTH	5.15	3.62	3.63	6.28	4.67	4.67
5 HARUS	5.34	4.81	3.43	6.14	4.46	4.84
6 ENA	5.25	4.73	3.83	6.27	4.47	4.91
7 ANNETTE	5.27	4.52	3.69	6.39	4.77	4.93
8 HARMIL	5.25	4.30	3.84	5.99	5.26	4.93
9 REBECCA	5.44	4.71	4.40	6.89	5.08	5.30
LOCATION MEAN	5.29	4.33	3.90	6.29	4.78	4.92

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	NN90N	LN90N	WK90N	EA90N	BH90N	MEAN*
1	FREDRICK	95	83	97	92	97	93
2	HOUSER	103	110	107	97	100	103
3	AUGUSTA	103	91	110	107	101	103
4	FRANKENMUTH	97	84	93	100	98	94
5	HARUS	101	111	88	98	93	98
6	ENA	99	109	98	100	94	100
7	ANNETTE	100	104	95	102	100	100
8	HARMIL	99	99	99	95	110	101
9	REBECCA	103	109	113	110	106	108
	LOCATION MEAN	5.29	4.33	3.90	6.29	4.78	4.92

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL;FALL WHITE WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	KE90N	MEAN
1 FREDRICK	3.67	3.67
2 HOUSER	3.45	3.45
3 AUGUSTA	3.97	3.97
4 FRANKENMUTH	3.13	3.13
5 HARUS	3.78	3.78
6 ENA	4.50	4.50
7 ANNETTE	4.30	4.30
8 HARMIL	2.64	2.64
9 REBECCA	4.60	4.60
LOCATION MEAN	3.78	3.78

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	KE90N	MEAN
1 FREDRICK	97	97
2 HOUSER	91	91
3 AUGUSTA	105	105
4 FRANKENMUTH	83	83
5 HARUS	100	100
6 ENA	119	119
7 ANNETTE	114	114
8 HARMIL	70	70
9 REBECCA	122	122
LOCATION MEAN	3.78	3.78

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990

YEAR : 90
MGMT : NORMAL
AREA : 1

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	3.67	74.9	37	.	0.0	113	154	2.2	0.9	3.0	.	.	.	.
2	HOUSER	2	4.91	73.2	37	.	0.0	103	155	2.8	1.4	4.0	.	.	.	.
3	AUGUSTA	8	4.19	71.8	34	.	0.0	105	156	2.7	2.4	4.0	.	.	.	.
4	FRANKENMUTH	7	4.20	74.6	34	.	0.0	108	155	2.7	1.6	3.0	.	.	.	.
5	HARUS	5	4.44	74.6	36	.	0.0	102	152	1.7	1.5	3.0	.	.	.	.
6	ENA	4	4.57	75.3	37	.	0.0	106	154	2.8	1.8	3.0	.	.	.	.
7	ANNETTE	3	4.59	74.6	39	.	3.0	108	155	0.3	1.9	2.0	.	.	.	.
8	HARMIL;OT.90.4.1	6	4.25	71.7	31	.	3.0	107	154	3.7	1.2	3.0	.	.	.	.
9	REBECCA;TW839.3	1	5.08	74.9	39	.	0.0	100	155	2.5	2.0	2.0	.	.	.	.
LOCATIONS			1	2	1	0	1	3	3	3	2	1	0	0	0	0

AREA : 2

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	4.57	74.0	38	95	2.5	99	160	3.0	4.0	3.5	.	.	.	3.5
2	HOUSER	3	5.05	71.4	40	96	2.5	91	160	3.3	8.0	4.8	.	.	.	1.0
3	AUGUSTA	2	5.06	71.8	37	96	2.3	97	161	4.1	6.0	3.3	.	.	.	1.5
4	FRANKENMUTH	8	4.67	73.2	36	97	4.5	95	161	3.3	7.0	4.5	.	.	.	0.5
5	HARUS	7	4.84	73.4	37	98	1.5	89	160	2.3	8.0	3.8	.	.	.	2.0
6	ENA	6	4.91	73.7	37	96	3.3	93	160	2.3	8.0	4.5	.	.	.	1.0
7	ANNETTE	4	4.93	73.1	41	97	4.8	95	161	0.4	9.0	4.5	.	.	.	1.5
8	HARMIL;OT.90.4.1	4	4.93	71.0	34	96	2.3	95	160	4.6	8.0	2.5	.	.	.	1.0
9	REBECCA;TW839.3	1	5.30	72.3	36	97	1.5	91	160	3.8	8.0	3.5	.	.	.	1.0
LOCATIONS			5	5	4	3	1	4	3	3	1	2	0	0	0	1

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

ONTARIO REGISTRATION TRIALS;FALL WHITE WHEAT 1990

YEAR : 90
MGMT : NORMAL
AREA : 3

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	6	3.67	78.8	41	30	.	104	.	.	.	.	.	.	.	.
2	HOUSER	7	3.45	74.7	41	25	.	95	.	.	.	.	.	.	.	.
3	AUGUSTA	4	3.97	76.7	39	28	.	100	.	.	.	.	.	.	.	.
4	FRANKENMUTH	8	3.13	78.8	39	23	.	96	.	.	.	.	.	.	.	.
5	HARUS	5	3.78	75.8	38	36	.	90	.	.	.	.	.	.	.	.
6	ENA	2	4.50	78.2	38	49	.	98	.	.	.	.	.	.	.	.
7	ANNETTE	3	4.30	78.8	47	34	.	100	.	.	.	.	.	.	.	.
8	HARMIL;OT.90.4.1	9	2.64	74.7	33	17	.	98	.	.	.	.	.	.	.	.
9	REBECCA;TW839.3	1	4.60	77.8	40	34	.	95	.	.	.	.	.	.	.	.
LOCATIONS		1	1	1	1	0		1	0	0	0	0	0	0	0	0

AREA(S): 1- 3

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	4.31	74.8	38	79	1.3	105	157	2.6	1.9	3.3	.	.	.	3.5
2	HOUSER	2	4.80	72.3	40	78	1.3	96	158	3.1	3.6	4.5	.	.	.	1.0
3	AUGUSTA	5	4.78	72.4	37	79	1.1	100	159	3.4	3.6	3.5	.	.	.	1.5
4	FRANKENMUTH	8	4.38	74.2	36	79	2.3	100	158	3.0	3.4	4.0	.	.	.	0.5
5	HARUS	6	4.63	74.0	37	82	0.8	94	156	2.0	3.7	3.5	.	.	.	2.0
6	ENA	2	4.80	74.7	37	85	1.6	99	157	2.6	3.8	4.0	.	.	.	1.0
7	ANNETTE	4	4.79	74.2	41	82	3.9	101	158	0.4	4.3	3.7	.	.	.	1.5
8	HARMIL;OT.90.4.1	7	4.50	71.6	33	76	2.7	100	157	4.1	3.5	2.7	.	.	.	1.0
9	REBECCA;TW839.3	1	5.17	73.6	37	82	0.8	95	158	3.1	4.0	3.0	.	.	.	1.0
LOCATIONS		7	8	6	4	2	8	6	6	3	3	0	0	0	1	

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

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1990
LOCATION - WOODSLEE
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	.	.	.	.	.	.	109	153	2.0	1.7	.	.	.	.	.
2	HOUSER	.	.	.	.	.	.	97	156	1.0	1.8	.	.	.	.	.
3	AUGUSTA	.	.	.	.	.	.	94	157	1.0	2.8	.	.	.	.	.
4	FRANKENMUTH	.	.	.	.	.	.	98	156	1.0	2.2	.	.	.	.	.
5	HARUS	.	.	.	.	.	.	91	154	1.0	2.0	.	.	.	.	.
6	ENA	.	.	.	.	.	.	99	155	2.0	2.5	.	.	.	.	.
7	ANNETTE	.	.	.	.	.	.	95	156	0.0	2.8	.	.	.	.	.
8	HARMIL;OT.90.4.1	.	.	.	.	.	.	99	155	1.0	2.4	.	.	.	.	.
9	REBECCA;TW839.3	.	.	.	.	.	.	92	156	1.0	1.9	.	.	.	.	.
MEANS			.	.	.	.	.	97	155	1.1	2.2	.	.	.	.	.

LOCATION - RIDGETOWN
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	3.67	73.5	.	.	.	119	154	2.0	0.0	.	.	.	.	.
2	HOUSER	2	4.91	73.6	.	.	.	108	154	3.0	1.0	.	.	.	.	.
3	AUGUSTA	8	4.19	70.5	.	.	.	113	156	3.0	2.0	.	.	.	.	.
4	FRANKENMUTH	7	4.20	74.7	.	.	.	116	156	2.0	1.0	.	.	.	.	.
5	HARUS	5	4.44	74.3	.	.	.	112	154	2.0	1.0	.	.	.	.	.
6	ENA	4	4.57	75.6	.	.	.	114	154	2.0	1.0	.	.	.	.	.
7	ANNETTE	3	4.59	74.2	.	.	.	116	155	1.0	1.0	.	.	.	.	.
8	HARMIL;OT.90.4.1	6	4.25	71.0	.	.	.	116	154	3.0	0.0	.	.	.	.	.
9	REBECCA;TW839.3	1	5.08	75.0	.	.	.	109	154	3.0	2.0	.	.	.	.	.
MEANS			4.43	73.6	.	.	.	114	155	2.3	1.0	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1990
LOCATION - MORPETH
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	YIELD T/HA	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
1	FREDRICK	.	.	76.3	37	.	0.0	110	154	2.5	.	3.0	.	.	.	.
2	HOUSER	.	.	72.8	37	.	0.0	103	155	4.5	.	4.0	.	.	.	.
3	AUGUSTA	.	.	73.1	34	.	0.0	107	154	4.0	.	4.0	.	.	.	.
4	FRANKENMUTH	.	.	74.5	34	.	0.0	110	154	5.0	.	3.0	.	.	.	.
5	HARUS	.	.	74.9	36	.	0.0	104	149	2.0	.	3.0	.	.	.	.
6	ENA	.	.	75.1	37	.	0.0	105	153	4.5	.	3.0	.	.	.	.
7	ANNETTE	.	.	75.1	39	.	3.0	112	155	0.0	.	2.0	.	.	.	.
8	HARMIL;OT.90.4.1	.	.	72.3	31	.	3.0	107	154	7.0	.	3.0	.	.	.	.
9	REBECCA;TW839.3	.	.	74.8	39	.	0.0	100	154	3.5	.	2.0	.	.	.	.
MEANS			.	74.3	36	.	0.7	106	154	3.7	.	3.0	.	.	.	.

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	YIELD T/HA	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
1	FREDRICK	9	5.02	75.5	36	98	2.5	108	153	1.0	4.0	5.0	.	.	.	3.5
2	HOUSER	2	5.44	72.3	36	93	2.5	100	155	2.0	8.0	6.5	.	.	.	1.0
3	AUGUSTA	1	5.47	73.3	34	90	2.3	104	156	3.0	6.0	4.5	.	.	.	1.5
4	FRANKENMUTH	8	5.15	75.2	33	96	4.5	109	156	1.0	7.0	7.0	.	.	.	0.5
5	HARUS	4	5.34	75.4	34	98	1.5	100	154	0.0	8.0	5.5	.	.	.	2.0
6	ENA	6	5.25	76.3	35	91	3.3	105	156	1.0	8.0	7.0	.	.	.	1.0
7	ANNETTE	5	5.27	74.8	34	96	4.8	106	156	0.0	9.0	7.0	.	.	.	1.5
8	HARMIL;OT.90.4.1	6	5.25	73.1	30	95	2.3	100	155	4.0	8.0	4.0	.	.	.	1.0
9	REBECCA;TW839.3	2	5.44	74.5	34	96	1.5	98	156	3.0	8.0	5.0	.	.	.	1.0
MEANS			5.29	74.5	34	95	2.8	103	155	1.7	7.3	5.7	.	.	.	1.4

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

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1990
LOCATION - LONDON
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	3.60	70.3	.	.	.	.	.	2.0	.	2.0	.	.	.	.
2	HOUSER	2	4.76	66.2	.	.	.	.	.	1.0	.	3.0	.	.	.	.
3	AUGUSTA	7	3.95	69.6	.	.	.	.	.	2.0	.	2.0	.	.	.	.
4	FRANKENMUTH	8	3.62	68.8	.	.	.	.	.	2.0	.	2.0	.	.	.	.
5	HARUS	1	4.81	70.6	.	.	.	.	.	1.0	.	2.0	.	.	.	.
6	ENA	3	4.73	70.6	.	.	.	.	.	2.0	.	2.0	.	.	.	.
7	ANNETTE	5	4.52	68.9	.	.	.	.	.	0.0	.	2.0	.	.	.	.
8	HARMIL;OT.90.4.1	6	4.30	67.3	.	.	.	.	.	2.0	.	1.0	.	.	.	.
9	REBECCA;TW839.3	4	4.71	69.8	.	.	.	.	.	2.0	.	2.0	.	.	.	.
MEANS			4.33	69.1	.	.	.	.	.	1.6	.	2.0	.	.	.	.

LOCATION - WOODSTOCK
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	6	3.79	73.6	37	.	.	70	159	.	.	.	.	.	.	.
2	HOUSER	3	4.16	69.9	41	.	.	67	159	.	.	.	.	.	.	.
3	AUGUSTA	2	4.29	71.7	38	.	.	70	161	.	.	.	.	.	.	.
4	FRANKENMUTH	8	3.63	72.3	38	.	.	65	161	.	.	.	.	.	.	.
5	HARUS	9	3.43	73.0	38	.	.	63	159	.	.	.	.	.	.	.
6	ENA	5	3.83	71.7	38	.	.	67	158	.	.	.	.	.	.	.
7	ANNETTE	7	3.69	72.3	43	.	.	70	159	.	.	.	.	.	.	.
8	HARMIL;OT.90.4.1	4	3.84	69.9	34	.	.	68	159	.	.	.	.	.	.	.
9	REBECCA;TW839.3	1	4.40	70.5	36	.	.	65	159	.	.	.	.	.	.	.
MEANS			3.89	71.7	38	.	.	67	159	.	.	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1990
LOCATION - ELORA
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	9	5.78	74.8	38	88	.	103	167	6.0	.	.	.	.	.	.
2	HOUSER	7	6.09	73.0	38	96	.	93	167	7.0	.	.	.	.	.	.
3	AUGUSTA	2	6.75	71.7	36	100	.	103	167	7.3	.	.	.	.	.	.
4	FRANKENMUTH	4	6.28	74.8	34	98	.	102	167	7.0	.	.	.	.	.	.
5	HARUS	6	6.14	74.8	36	96	.	95	166	6.0	.	.	.	.	.	.
6	ENA	5	6.27	76.1	34	100	.	92	167	4.0	.	.	.	.	.	.
7	ANNETTE	3	6.39	74.8	42	98	.	98	167	1.3	.	.	.	.	.	.
8	HARMIL;OT.90.4.1	8	5.99	71.7	30	95	.	102	167	7.7	.	.	.	.	.	.
9	REBECCA;TW839.3	1	6.89	73.0	34	98	.	98	166	6.3	.	.	.	.	.	.
MEANS			6.29	73.9	36	96	.	99	167	5.9	.	.	.	.	.	.

LOCATION - BATH
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	7	4.65	76.0	41	98	.	114	.	.	.	.	.	.	.	.
2	HOUSER	4	4.78	75.6	44	98	.	102	.	.	.	.	.	.	.	.
3	AUGUSTA	3	4.84	72.6	40	98	.	109	.	.	.	.	.	.	.	.
4	FRANKENMUTH	6	4.67	74.8	40	97	.	105	.	.	.	.	.	.	.	.
5	HARUS	9	4.46	73.4	41	99	.	98	.	.	.	.	.	.	.	.
6	ENA	8	4.47	74.0	40	98	.	109	.	.	.	.	.	.	.	.
7	ANNETTE	5	4.77	74.8	43	98	.	107	.	.	.	.	.	.	.	.
8	HARMIL;OT.90.4.1	1	5.26	72.8	40	98	.	108	.	.	.	.	.	.	.	.
9	REBECCA;TW839.3	2	5.08	73.6	40	98	.	103	.	.	.	.	.	.	.	.
MEANS			4.78	74.2	41	98	.	106	.	.	.	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; FALL WHITE WHEAT 1990
LOCATION - KEMPTVILLE
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	FREDRICK	6	3.67	78.8	41	30	.	104	.	.	.	.	.	.	.	.
2	HOUSER	7	3.45	74.7	41	25	.	95	.	.	.	.	.	.	.	.
3	AUGUSTA	4	3.97	76.7	39	28	.	100	.	.	.	.	.	.	.	.
4	FRANKENMUTH	8	3.13	78.8	39	23	.	96	.	.	.	.	.	.	.	.
5	HARUS	5	3.78	75.8	38	36	.	90	.	.	.	.	.	.	.	.
6	ENA	2	4.50	78.2	38	49	.	98	.	.	.	.	.	.	.	.
7	ANNETTE	3	4.30	78.8	47	34	.	100	.	.	.	.	.	.	.	.
8	HARMIL;OT.90.4.1	9	2.64	74.7	33	17	.	98	.	.	.	.	.	.	.	.
9	REBECCA;TW839.3	1	4.60	77.8	40	34	.	95	.	.	.	.	.	.	.	.
MEANS			3.78	77.1	40	31	.	97	.	.	.	.	.	.	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1990

INDEX

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
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
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;FALL RED WHEAT 1990

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 VERY HIGH TEST WEIGHT AND THOUSAND KERNEL WEIGHT. SUSCEPTIBLE TO MILDEW, SEPTORIA, AND HEAD BLIGHT.

KARAT:
P.EXTREM/BEZ-1. DEVELOPED IN AUSTRIA AND MARKETED IN CANADA BY C&M SEEDS,PALMERSTON,ONT. A HIGH YIELDING VARIETY WITH GOOD TEST WEIGHT.GOOD RESISTANCE TO MILDEW AND MODERATE RESISTANCE TO HEAD BLIGHT.

PERLO:
P.EXTREM/BEZ-1. DEVELOPED IN AUSTRIA AND MARKETED IN CANADA BY C&M SEEDS,PALMERSTON,ONT. A HIGH YIELDING VARIETY WITH GOOD RESISTANCE TO GLUME BLOTCH AND HEAD BLIGHT.

URBAN:
KRANICH/DIPLOMAT. DEVELOPED AT BAUER BREEDING STATION, BAVARIA, GERMANY. MARKETED IN CANADA BY W.G. THOMPSON AND SONS LTD. SHORT, STRONG STRAWED VARIETY WITH GOOD MILLING AND BAKING QUALITIES. RESISTANT TO SEPTORIA, MILDEW, AND HEAD BLIGHT. MODERATE YIELD AND WINTER HARDINESS. REGISTERED FOR SALE IN EASTERN CANADA.

ORBITA:
KANRED/FULCASTER//UKRAINKA/3/BEZ-1. DEVELOPED IN THE U.S.S.R. A HIGH YIELDING WHEAT WITH VERY GOOD WINTER SURVIVAL. SOME RESISTANCE TO HEAD BLIGHT AND GLUME BLOTCH; SUSCEPTIBLE TO LEAF RUST. RELATIVELY SOFT, MIDDLE STRENGTH WHEAT WITH A THREE YEAR INTERIM REGISTRATION IN EASTERN CANADA. MARKETED BY KING AGRO INC.

RUBY,(TW84BU039):
FREDRICK/PRIBOY. DEVELOPED AT HYLAND FARMS CROP RESEARCH, MORPETH, CANADA.MARKETED IN CANADA BY W.G. THOMPSON AND SONS LTD. HIGH YIELDING, SHORT STRAWED, VARIETY WITH EXCELLENT WINTER SURVIVAL. MODERATE SUSCEPTIBILITY TO DISEASES. A MIDDLE STRENGTH WHEAT WITH A THREE YEAR INTERIM REGISTRATION IN EASTERN CANADA.

ONTARIO REGIONAL;FALL RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	WE87N	CM87N	RN87N	WE88N	RN88N	HW89N	RN89N	RN90N	MEAN
1	ABSOLVENT	3.18	3.07	4.74	4.49	5.51	2.65	3.09	3.70	3.80
2	KARAT	4.45	3.17	5.49	4.54	5.14	2.56	2.63	4.14	4.01
4	PERLO	3.60	3.13	4.09	3.71	5.70	2.05	2.63	4.06	3.62
7	URBAN	2.98	3.62	4.00	3.39	4.52	2.62	2.04	3.05	3.28
8	ORBITA	4.57	3.26	5.89	4.82	6.25	2.99	3.61	4.55	4.49
9	RUBY	5.27	3.72	5.73	4.94	6.56	4.70	4.84	5.00	5.09
	LOCATION MEAN	4.01	3.33	4.99	4.32	5.61	2.93	3.14	4.08	4.05

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	WE87N	CM87N	RN87N	WE88N	RN88N	HW89N	RN89N	RN90N	MEAN8
1	ABSOLVENT	79	92	95	104	98	90	98	91	94
2	KARAT;M.4.3	111	95	110	105	92	87	84	101	98
4	PERLO;M.4.2	90	94	82	86	102	70	84	99	88
7	URBAN	74	109	80	79	81	89	65	75	81
8	ORBITA	114	98	118	112	111	102	115	111	110
9	RUBY;TW84BU039	131	112	115	114	117	161	154	122	128
	LOCATION MEAN	4.01	3.33	4.99	4.32	5.61	2.93	3.14	4.08	4.05

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL;FALL RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NN87N	WK87N	EA88N	WK88N	NN88N	HN88N	LL88N	EA89N	WK89N
1	ABSOLVENT	2.25	2.60	4.78	4.55	4.22	3.87	4.01	3.65	4.55
2	KARAT	2.95	2.83	4.38	3.47	4.21	3.29	4.14	4.06	3.77
4	PERLO	2.83	3.11	3.61	4.22	4.44	3.36	4.25	2.98	4.05
7	URBAN	3.21	2.82	3.96	4.53	3.94	3.03	3.68	4.03	4.45
8	ORBITA	2.06	4.21	4.78	5.81	4.36	4.10	4.35	4.50	4.87
9	RUBY;WGT	3.21	4.10	4.91	5.28	4.51	4.13	4.22	5.72	5.73
LOCATION MEAN		2.75	3.28	4.40	4.64	4.28	3.63	4.11	4.16	4.57

KEY	NAME	NN89N	HN89N	LL89N	NN90N	WK90N	EA90N	HN90N	MEAN
1	ABSOLVENT	2.59	4.11	3.01	5.38	4.47	6.41	5.94	4.15
2	KARAT	2.70	3.93	3.13	6.02	4.39	7.50	6.45	4.20
4	PERLO	3.26	3.49	3.18	5.90	4.09	6.75	6.22	4.11
7	URBAN	2.37	4.84	3.55	4.55	4.35	5.07	5.25	3.98
8	ORBITA	3.39	4.59	3.58	6.15	4.89	6.73	6.53	4.68
9	RUBY;WGT	3.28	4.96	4.01	6.04	4.39	6.65	6.54	4.86
LOCATION MEAN		2.93	4.32	3.41	5.67	4.43	6.52	6.16	4.33

ONTARIO REGIONAL TRIALS;FALL RED WHEAT 1990

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 87-90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NN87N	WK87N	EA88N	WK88N	NN88N	HN88N	LL88N	EA89N	WK89N	NN89N
1	ABSOLVENT	82	79	109	98	99	107	98	88	100	88
2	KARAT;M.4.3	107	86	99	75	98	91	101	98	82	92
4	PERLO;M.4.2	103	95	82	91	104	93	103	72	89	111
7	URBAN	117	86	90	98	92	83	90	97	97	81
8	ORBITA	75	128	109	125	102	113	106	108	107	116
9	RUBY;TW84BU039	117	125	112	114	105	114	103	138	125	112
	LOCATION MEAN	2.75	3.28	4.40	4.64	4.28	3.63	4.11	4.16	4.57	2.93

KEY	NAME	HN89N	LL89N	NN90N	WK90N	EA90N	HN90N	MEAN*
1	ABSOLVENT	95	88	95	101	98	97	95
2	KARAT;M.4.3	91	92	106	99	115	105	96
4	PERLO;M.4.2	81	93	104	92	104	101	95
7	URBAN	112	104	80	98	78	85	93
8	ORBITA	106	105	108	110	103	106	108
9	RUBY;TW84BU039	115	118	106	99	102	106	113
	LOCATION MEAN	4.32	3.41	5.67	4.43	6.52	6.16	4.33

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL;FALL RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	KE87N	O187N	O287N	O188N	KE88N	RW89N	MEAN
1	ABSOLVENT	3.83	4.40	4.84	3.05	2.97	3.44	3.75
2	KARAT	3.95	5.02	5.36	3.03	2.94	5.05	4.23
4	PERLO	3.82	5.13	5.14	2.35	1.86	4.81	3.85
7	URBAN	4.06	4.47	4.49	2.39	1.48	4.89	3.63
8	ORBITA	4.62	6.02	5.64	4.03	3.57	4.49	4.73
9	RUBY	.	5.24	5.94	4.03	3.98	4.44	4.73
LOCATION MEAN		4.06	5.05	5.24	3.15	2.80	4.52	4.13

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	KE87N	O187N	O287N	O188N	KE88N	RW89N	MEAN*
1	ABSOLVENT	94	87	92	97	106	76	92
2	KARAT;M.4.3	97	99	102	96	105	112	102
4	PERLO;M.4.2	94	102	98	75	66	106	90
7	URBAN	100	89	86	76	53	108	85
8	ORBITA	114	119	108	128	128	99	116
9	RUBY;TW84BU039	.	104	113	128	142	98	117
LOCATION MEAN		4.06	5.05	5.24	3.15	2.80	4.52	4.13

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGISTRATION TRIALS;FALL RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90
MGMT : NORMAL

KEY NAME	AREA 1 (8)*	AREA 2 (16)	AREA 3 (6)	PROVINCE (30)**
1 ABSOLVENT	3.80	4.15	3.75	3.98
2 KARAT;M.4.3	4.01	4.20	4.23	4.16
4 PERLO;M.4.2	3.62	4.11	3.85	3.93
7 URBAN	3.28	3.98	3.63	3.72
8 ORBITA	4.49	4.68	4.73	4.64
9 RUBY;TW84BU039	5.09	4.86	4.73	4.90
OVERALL MEAN	4.05	4.33	4.13	4.22

MEAN OF THE RELATIVE YIELDS OVER ALL LOCATIONS

KEY NAME	AREA 1	AREA 2	AREA 3	PROVINCE
1 ABSOLVENT	93.5	95.0	92.2	94.1
2 KARAT;M.4.3	98.2	96.1	102.0	97.8
4 PERLO;M.4.2	88.3	94.8	90.3	92.2
7 URBAN	81.4	93.0	85.2	88.4
8 ORBITA	110.2	108.0	116.0	110.2
9 RUBY;TW84BU039	128.3	113.1	117.1	118.0
OVERALL MEAN	4.05	4.33	4.13	4.22

* # OF LOCATIONS
** WEIGHTED AVERAGE

ONTARIO REGIONAL TRIALS;FALL RED WHEAT 1990

YEAR(S): 87-90
MGMT : NORMAL
AREA : 1

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	4	3.80	76.0	45	97	1.5	90	153	3.6	.	5.4	3.0	5.5	.	.
2	KARAT;M.4.3	3	4.01	75.3	41	92	2.0	105	154	1.6	.	5.1	3.0	3.3	.	.
4	PERLO;M.4.2	5	3.62	75.5	41	78	2.5	98	156	2.4	.	5.6	4.0	1.8	.	.
7	URBAN	6	3.28	70.2	40	83	1.5	85	159	0.8	.	4.3	4.0	0.5	.	.
8	ORBITA	2	4.49	74.5	49	97	3.0	99	153	2.8	.	5.2	3.0	2.2	.	.
9	RUBY;TW84BU039	1	5.09	76.6	43	100	2.0	93	151	3.2	.	3.5	3.0	3.0	.	.
LOCATIONS		8	4	1	2	2	8	8	5	0	2	1	2	0	0	

AREA : 2

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	4	4.15	76.4	38	91	1.6	87	157	4.3	3.5	5.1	3.5	2.7	.	4.0
2	KARAT;M.4.3	3	4.20	75.8	36	90	0.2	100	159	1.7	3.6	4.6	3.1	1.6	.	3.0
4	PERLO;M.4.2	5	4.11	75.1	34	84	1.0	93	157	2.3	4.1	4.3	2.3	2.1	.	7.0
7	URBAN	6	3.98	71.5	32	(82)	0.0	80	167	1.7	3.7	3.3	2.5	1.1	.	6.0
8	ORBITA	2	4.68	74.9	40	92	1.3	95	158	3.4	4.7	4.3	2.8	1.7	.	3.0
9	RUBY;TW84BU039	1	4.86	75.6	35	93	0.5	87	157	3.7	3.7	4.3	2.9	2.2	.	2.0
LOCATIONS		16	15	11	14	2	15	16	13	6	10	4	2	0	1	

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

ONTARIO REGIONAL TRIALS;FALL RED WHEAT 1990

YEAR(S): 87-90
MGMT : NORMAL
AREA : 3

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	3.75	84.0	48	72	3.3	85	161	.	.	8.0	.	.	.	.
2	KARAT;M.4.3	3	4.23	84.4	47	70	1.8	97	163	.	.	5.0	.	.	.	.
4	PERLO;M.4.2	4	3.85	83.9	48	51	2.7	92	163	.	.	5.5	.	.	.	.
7	URBAN	6	3.63	82.5	45	53	1.6	81	166	.	.	3.0	.	.	.	.
8	ORBITA	1	4.73	83.1	49	83	3.3	93	161	.	.	6.5	.	.	.	.
9	RUBY;TW84BU039	1	4.73	81.4	43	81	2.9	83	160	.	.	6.5	.	.	.	.
LOCATIONS			6	6	4	7	4	7	6	0	0	1	0	0	0	0

AREA(S): 1- 3

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	4	3.98	78.2	41	86	2.4	87	157	4.1	3.5	5.3	3.4	4.1	.	4.0
2	KARAT;M.4.3	3	4.16	77.8	39	84	1.4	101	159	1.7	3.6	4.7	3.1	2.5	.	3.0
4	PERLO;M.4.2	5	3.93	77.3	38	74	2.2	94	158	2.4	4.1	4.6	2.7	2.0	.	7.0
7	URBAN	6	3.72	74.0	36	73	1.2	82	165	1.4	3.7	3.4	2.8	0.8	.	6.0
8	ORBITA	2	4.64	76.9	43	90	2.7	96	157	3.2	4.7	4.6	2.8	1.9	.	3.0
9	RUBY;TW84BU039	1	4.90	77.0	37	90	2.1	88	156	3.6	3.7	4.3	2.9	2.6	.	2.0
LOCATIONS			30	25	16	23	8	30	30	18	6	13	5	4	0	1

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

ONTARIO REGIONAL;FALL RED WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	RN90N	MEAN
1	ABSOLVENT	3.70	3.70
2	KARAT	4.14	4.14
4	PERLO	4.06	4.06
7	URBAN	3.05	3.05
8	ORBITA	4.55	4.55
9	RUBY;WGT	5.00	5.00
	LOCATION MEAN	4.08	4.08

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	RN90N	MEAN
1	ABSOLVENT	90.6	90.6
2	KARAT	101.4	101.4
4	PERLO	99.4	99.4
7	URBAN	74.7	74.7
8	ORBITA	111.4	111.4
9	RUBY;WGT	122.4	122.4
	LOCATION MEAN	4.08	4.08

ONTARIO REGIONAL;FALL RED WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NN90N	WK90N	EA90N	HN90N	MEAN
1	ABSOLVENT	5.38	4.47	6.41	5.94	5.55
2	KARAT	6.02	4.39	7.50	6.45	6.09
4	PERLO	5.90	4.09	6.75	6.22	5.74
7	URBAN	4.55	4.35	5.07	5.25	4.80
8	ORBITA	6.15	4.89	6.73	6.53	6.08
9	RUBY	6.04	4.39	6.65	6.54	5.90
LOCATION MEAN		5.67	4.43	6.52	6.16	5.69

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	NN90N	WK90N	EA90N	HN90N	MEAN*
1	ABSOLVENT	95	101	98	97	98
2	KARAT	106	99	115	105	106
4	PERLO	104	92	104	101	100
7	URBAN	80	98	78	85	85
8	ORBITA	108	110	103	106	107
9	RUBY	106	99	102	106	104
LOCATION MEAN		5.67	4.43	6.52	6.16	5.69

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;FALL RED WHEAT 1990

YEAR : 90
MGMT : NORMAL
AREA : 1

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	3.70	76.2	.	.	.	91	154	2.5	.	.	.	.	.	.
2	KARAT;M.4.3	3	4.14	77.4	.	.	.	109	156	1.5	.	.	.	.	.	.
4	PERLO;M.4.2	4	4.06	76.8	.	.	.	106	158	1.5	.	.	.	.	.	.
7	URBAN	6	3.05	72.8	.	.	.	96	161	0.5	.	.	.	.	.	.
8	ORBITA	2	4.55	.	.	.	.	101	153	2.0	.	.	.	.	.	.
9	RUBY;TW84BU039	1	5.00	77.3	.	.	.	95	151	1.5	.	.	.	.	.	.
LOCATIONS		1	1	0	0	0	2	2	2	0	0	0	0	0	0	

AREA : 2

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	5.55	76.7	.	96	0.3	98	160	4.9	4.0	5.3	3.8	.	.	4.0
2	KARAT;M.4.3	1	6.09	77.1	.	95	0.3	109	162	2.1	2.0	3.9	3.7	.	.	3.0
4	PERLO;M.4.2	4	5.74	76.6	.	90	2.0	103	163	3.5	6.0	3.9	2.8	.	.	7.0
7	URBAN	6	4.80	69.8	.	83	0.0	90	167	1.8	6.0	2.8	3.0	.	.	6.0
8	ORBITA	2	6.08	75.7	.	96	0.5	104	160	3.5	6.0	3.9	3.3	.	.	3.0
9	RUBY;TW84BU039	3	5.90	75.9	.	97	1.0	94	158	3.2	2.0	4.3	3.3	.	.	2.0
LOCATIONS		4	4	0	3	1	3	4	3	1	2	1	0	0	1	

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

ONTARIO REGIONAL TRIALS;FALL RED WHEAT 1990

YEAR : 90
MGMT : NORMAL
AREA : 3

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	.	.	.	.	43	.	86	164	.	.	.	.	.	.	.
2	KARAT;M.4.3	.	.	.	.	51	.	99	163	.	.	.	.	.	.	.
4	PERLO;M.4.2	.	.	.	.	17	.	95	165	.	.	.	.	.	.	.
7	URBAN	.	.	.	.	23	.	80	.	.	.	.	.	.	.	.
8	ORBITA	.	.	.	.	59	.	100	163	.	.	.	.	.	.	.
9	RUBY;TW84BU039	.	.	.	.	58	.	86	163	.	.	.	.	.	.	.
LOCATIONS		0	0	0	1	0	1	1	0	0	0	0	0	0	0	

AREA(S): 1- 3

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	5.18	76.6	.	83	0.2	94	159	4.0	4.0	5.3	3.8	.	.	4.0
2	KARAT;M.4.3	3	5.70	77.2	.	84	0.2	107	161	1.9	2.0	3.9	3.7	.	.	3.0
4	PERLO;M.4.2	4	5.40	76.7	.	72	1.0	103	162	2.7	6.0	3.9	2.8	.	.	7.0
7	URBAN	6	4.45	70.4	.	68	0.0	90	165	1.3	6.0	2.8	3.0	.	.	6.0
8	ORBITA	1	5.77	75.7	.	87	0.3	102	158	2.9	6.0	3.9	3.3	.	.	3.0
9	RUBY;TW84BU039	2	5.72	76.2	.	88	0.5	93	157	2.5	2.0	4.3	3.3	.	.	2.0
LOCATIONS		5	5	0	4	2	6	7	5	1	2	1	0	0	1	

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

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1990

LOCATION - WOODSLEE
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	.	.	.	.	.	.	80	154	2.0	.	.	.	.	.	.
2	KARAT;M.4.3	.	.	.	.	.	.	99	156	1.0	.	.	.	.	.	.
4	PERLO;M.4.2	.	.	.	.	.	.	93	158	1.0	.	.	.	.	.	.
7	URBAN	.	.	.	.	.	.	87	160	0.0	.	.	.	.	.	.
8	ORBITA	.	.	.	.	.	.	87	154	2.0	.	.	.	.	.	.
9	RUBY;TW84BU039	.	.	.	.	.	.	84	153	1.0	.	.	.	.	.	.
MEANS		.	.	.	.	.	.	88	156	1.2	.	.	.	.	.	.

LOCATION - RIDGETOWN
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	3.70	76.2	.	.	.	102	153	3.0	.	.	.	.	.	.
2	KARAT;M.4.3	3	4.14	77.4	.	.	.	119	156	2.0	.	.	.	.	.	.
4	PERLO;M.4.2	4	4.06	76.8	.	.	.	119	157	2.0	.	.	.	.	.	.
7	URBAN	6	3.05	72.8	.	.	.	104	161	1.0	.	.	.	.	.	.
8	ORBITA	2	4.55	.	.	.	.	114	152	2.0	.	.	.	.	.	.
9	RUBY;TW84BU039	1	5.00	77.3	.	.	.	106	149	2.0	.	.	.	.	.	.
MEANS		.	4.08	76.1	.	.	.	111	155	2.0	.	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1990

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	5.38	79.8	40	99	0.3	93	154	5.0	4.0	7.0	.	.	.	4.0
2	KARAT;M.4.3	3	6.02	80.1	42	94	0.3	109	157	2.0	2.0	3.0	.	.	.	3.0
4	PERLO;M.4.2	4	5.90	80.3	40	90	2.0	99	157	4.0	6.0	3.0	.	.	.	7.0
7	URBAN	6	4.55	75.3	31	96	0.0	92	158	1.0	6.0	3.0	.	.	.	6.0
8	ORBITA	1	6.15	79.1	46	100	0.5	100	154	3.0	6.0	4.0	.	.	.	3.0
9	RUBY;TW84BU039	2	6.04	79.0	40	99	1.0	89	150	3.0	2.0	4.0	.	.	.	2.0
MEANS		.	5.67	78.9	40	96	0.7	97	155	3.0	4.3	4.0	.	.	.	4.2

LOCATION - WOODSTOCK
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	2	4.47	74.8	43	.	.	100	157	.	.	.	.	.	.	.
2	KARAT;M.4.3	3	4.39	76.1	42	.	.	110	158	.	.	.	.	.	.	.
4	PERLO;M.4.2	6	4.09	74.4	41	.	.	105	160	.	.	.	.	.	.	.
7	URBAN	5	4.35	71.7	41	.	.	90	164	.	.	.	.	.	.	.
8	ORBITA	1	4.89	73.6	45	.	.	108	156	.	.	.	.	.	.	.
9	RUBY;TW84BU039	3	4.39	73.6	41	.	.	95	155	.	.	.	.	.	.	.
MEANS		.	4.43	74.0	42	.	.	101	158	.	.	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1990

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	6.41	77.3	42	95	.	100	166	7.3	.	.	.	.	.	.
2	KARAT;M.4.3	1	7.50	77.0	41	100	.	108	167	3.0	.	.	.	.	.	.
4	PERLO;M.4.2	2	6.75	77.3	40	92	.	105	168	5.0	.	.	.	.	.	.
7	URBAN	6	5.07	64.9	31	82	.	88	173	4.0	.	.	.	.	.	.
8	ORBITA	3	6.73	76.1	46	98	.	105	165	6.0	.	.	.	.	.	.
9	RUBY;TW84BU039	4	6.65	76.7	41	100	.	97	165	4.7	.	.	.	.	.	.
MEANS		.	6.52	74.9	40	95	.	101	167	5.0	.	.	.	.	.	.

LOCATION - HARRISTON
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	T/HA	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
1	ABSOLVENT	5	5.94	75.0	48	95	.	.	164	2.5	.	3.5	3.8	.	.	.
2	KARAT;M.4.3	3	6.45	75.2	45	91	.	.	167	1.3	.	4.8	3.7	.	.	.
4	PERLO;M.4.2	4	6.22	74.5	42	87	.	.	168	1.5	.	4.8	2.8	.	.	.
7	URBAN	6	5.25	67.1	36	71	.	.	173	0.5	.	2.5	3.0	.	.	.
8	ORBITA	2	6.53	74.1	47	90	.	.	165	1.5	.	3.8	3.3	.	.	.
9	RUBY;TW84BU039	1	6.54	74.5	42	93	.	.	163	1.8	.	4.5	3.3	.	.	.
MEANS		.	6.16	73.4	43	88	.	.	167	1.5	.	4.0	3.3	.	.	.

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

ONTARIO REGIONAL TRIALS; FALL RED WHEAT 1990

LOCATION - KEMPTVILLE
MANAGEMENT - NORMAL

KEY	NAME	YIELD RK	YIELD T/HA	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
1	ABSOLVENT	.	.	.	.	43	.	86	164	.	.	.	.	.	.	.
2	KARAT;M.4.3	.	.	.	.	51	.	99	163	.	.	.	.	.	.	.
4	PERLO;M.4.2	.	.	.	.	17	.	95	165	.	.	.	.	.	.	.
7	URBAN	.	.	.	.	23	.	80	.	.	.	.	.	.	.	.
8	ORBITA	.	.	.	.	59	.	100	163	.	.	.	.	.	.	.
9	RUBY;TW84BU039	.	.	.	.	58	.	86	163	.	.	.	.	.	.	.
	MEANS	.	.	.	.	42	.	91	163	.	.	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1990

INDEX

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

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1990

DESCRIPTION OF REGISTERED VARIETIES

MAX:
HARRO/GRAND//OPAL. DEVELOPED IN GERMANY AND MARKETED IN CANADA BY C & M SEEDS, PALMERSTON, ONTARIO. GOOD MILDEW RESISTANCE, MODERATE SEPTORIA RESISTANCE, HOWEVER, POOR LEAF RUST AND HEAD BLIGHT RESISTANCE. HIGH YIELDING IN AREA 3. LATE HEADING VARIETY WITH LOW FLOUR AND GRAIN PROTEIN.

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.

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.

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.

ALGOT:
APU/SVENNO. ORIGINATED AT WEIBULLSHOLM PLANT BREEDING INSTITUTE, LANDSKRONA, SWEDEN AND MARKETED BY W.G.THOMSON AND SONS LTD. A GOOD YIELDING VARIETY WITH MODERATE RESISTANCE TO MILDEW AND LOOSE SMUT. SUSCEPTIBLE TO LEAF RUST.

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 88-89
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	HW88N	RN88N	RN89N	MEAN
1	MAX	1.86	3.05	0.36	1.76
2	COLUMBUS	1.42	2.67	1.01	1.70
3	KATEPWA	1.34	2.87	0.77	1.66
6	CELTIC	1.57	3.49	1.67	2.24
7	NORSEMAN	1.73	3.39	1.98	2.37
8	ROBLIN	1.33	3.58	2.16	2.36
	LOCATION MEAN	1.54	3.17	1.32	2.01

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	HW88N	RN88N	RN89N	MEAN*
1	MAX	121	96	27	81
2	COLUMBUS	92	84	76	84
3	KATEPWA	87	90	58	78
6	CELTIC	102	110	126	113
7	NORSEMAN	112	107	149	123
8	ROBLIN	86	113	163	121
	LOCATION MEAN	1.54	3.17	1.32	2.01

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 88-90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NN88N	EA88N	LL88N	HN88N	EA89N	NN89N
1	MAX	2.58	2.45	3.50	2.26	2.26	1.61
2	COLUMBUS	2.29	2.06	3.05	2.04	2.73	1.32
3	KATEPWA	2.32	2.16	3.49	2.13	2.67	1.36
6	CELTIC	2.44	2.38	3.63	2.45	3.84	2.28
7	NORSEMAN	2.51	2.09	3.76	2.39	3.78	2.73
8	ROBLIN	2.05	1.73	3.65	1.83	3.34	2.15
	LOCATION MEAN	2.37	2.15	3.51	2.18	3.10	1.91

KEY	NAME	LL89N	HN89N	EA90N	NN90N	HN90N	MEAN
1	MAX	2.15	2.57	2.61	2.14	3.93	2.55
2	COLUMBUS	2.24	3.02	1.98	1.87	2.44	2.28
3	KATEPWA	2.88	3.09	2.57	2.21	3.24	2.56
6	CELTIC	3.93	3.73	3.21	2.66	3.78	3.12
7	NORSEMAN	4.06	4.60	3.72	2.75	4.32	3.34
8	ROBLIN	3.52	4.13	3.81	2.64	4.29	3.01
	LOCATION MEAN	3.13	3.52	2.98	2.38	3.67	2.81

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 88-90
AREA : 2

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	NN88N	EA88N	LL88N	HN88N	EA89N	NN89N
1	MAX	109	114	100	104	73	84
2	COLUMBUS	97	96	87	93	88	69
3	KATEPWA	98	101	99	98	86	71
6	CELTIC	103	111	103	112	124	119
7	NORSEMAN	106	97	107	109	122	143
8	ROBLIN	87	81	104	84	108	113
	LOCATION MEAN	2.37	2.15	3.51	2.18	3.10	1.91

KEY	NAME	LL89N	HN89N	EA90N	NN90N	HN90N	MEAN*
1	MAX	69	73	87	90	107	92
2	COLUMBUS	72	86	66	79	67	82
3	KATEPWA	92	88	86	93	88	91
6	CELTIC	126	106	108	112	103	112
7	NORSEMAN	130	131	125	116	118	118
8	ROBLIN	112	117	128	111	117	106
	LOCATION MEAN	3.13	3.52	2.98	2.38	3.67	2.81

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 88-90
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	O188N	O189N	O190N	MEAN
1	MAX	2.79	3.26	4.41	3.49
2	COLUMBUS	2.27	2.90	3.69	2.95
3	KATEPWA	1.90	2.97	3.72	2.86
6	CELTIC	2.31	3.43	4.30	3.35
7	NORSEMAN	2.02	3.42	4.25	3.23
8	ROBLIN	1.84	3.31	3.86	3.00
	LOCATION MEAN	2.19	3.22	4.04	3.15

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	O188N	O189N	O190N	MEAN*
1	MAX	127	101	109	113
2	COLUMBUS	104	90	91	95
3	KATEPWA	87	92	92	90
6	CELTIC	106	107	106	106
7	NORSEMAN	92	106	105	101
8	ROBLIN	84	103	96	94
	LOCATION MEAN	2.19	3.22	4.04	3.15

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGISTRATION TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR(S): 88-90
MGMT : NORMAL

KEY	NAME	***AREA 1 (3)*	AREA 2 (11)	AREA 3 (3)	AREAS 1-3 (17)**
1	MAX	1.76	2.55	3.49	2.58
2	COLUMBUS	1.70	2.28	2.95	2.29
3	KATEPWA	1.66	2.56	2.86	2.45
6	CELTIC	2.24	3.12	3.35	3.01
7	NORSEMAN	2.37	3.34	3.23	3.15
8	ROBLIN	2.36	3.01	3.00	2.90
	OVERALL MEAN	2.01	2.81	3.15	2.73

MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

KEY	NAME	***AREA 1 (3)*	AREA 2 (11)	AREA 3 (3)	AREAS 1-3 (17)**
1	MAX	81.3	91.8	112.7	93.6
2	COLUMBUS	84.1	81.7	95.1	84.5
3	KATEPWA	78.5	90.9	90.4	88.6
6	CELTIC	112.6	111.5	106.2	110.8
7	NORSEMAN	122.8	118.5	101.3	116.2
8	ROBLIN	120.7	105.5	94.2	106.2
	OVERALL MEAN	2.01	2.81	3.15	2.73

* # OF LOCATIONS
** WEIGHTED AVERAGE
*** AREA 1 BASED ON 88-89 DATA ONLY

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

YEAR(S): 88-89
MGMT : NORMAL

AREA : 1

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	MAX	4	1.76	65.8	23	2.0	82	68	0.0	.	.	.	.	.	.
2	COLUMBUS	5	1.70	71.9	26	2.0	87	67	2.0	.	.	.	.	.	.
3	KATEPWA	6	1.66	71.9	25	2.5	83	64	3.0	.	.	.	.	.	.
6	CELTIC	3	2.24	73.5	29	1.0	76	62	2.0	.	.	.	.	.	.
7	NORSEMAN	1	2.37	70.1	26	1.0	67	65	1.0	.	.	.	.	.	.
8	ROBLIN	2	2.36	75.7	32	1.5	81	57	2.0	.	.	.	.	.	.
LOCATIONS		3	2	2	2	3	3	1	0	0	0	0	0	0	

YEARS : 88-90
MGMT : NORMAL
AREA : 2

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	MAX	5	2.55	68.4	27	1.0	90	62	0.3	5.1	2.8	4.4	.	.	4.4
2	COLUMBUS	6	2.28	72.1	30	3.0	94	62	4.3	2.6	3.7	5.0	.	.	6.0
3	KATEPWA	4	2.56	71.8	30	2.0	91	58	4.7	3.0	3.8	6.7	.	.	5.6
6	CELTIC	2	3.12	72.5	33	1.0	80	57	4.3	1.5	3.0	6.0	.	.	4.3
7	NORSEMAN	1	3.34	71.0	32	0.0	71	60	2.8	1.2	2.9	5.9	.	.	4.9
8	ROBLIN	3	3.01	71.9	33	1.5	84	54	3.6	1.4	3.1	4.8	.	.	5.7
LOCATIONS		11	11	11	1	10	12	9	8	4	2	0	0	2	

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

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

YEAR(S): 88-90
MGMT : NORMAL

AREA : 3

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	MAX	1	3.49	75.3	37	0.0	84	58	.	.	.	.	.	.	.
2	COLUMBUS	5	2.95	75.6	34	0.0	93	58	.	.	.	.	.	.	.
3	KATEPWA	6	2.86	74.4	31	0.5	87	54	.	.	.	.	.	.	.
6	CELTIC	2	3.35	76.3	37	0.0	74	55	.	.	.	.	.	.	.
7	NORSEMAN	3	3.23	73.1	33	0.0	62	57	.	.	.	.	.	.	.
8	ROBLIN	4	3.00	74.2	34	0.5	72	51	.	.	.	.	.	.	.
LOCATIONS		3		3	2	1	3	1	0	0	0	0	0	0	0

MGMT : NORMAL
AREA(S): 1- 3**

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	MAX	4	2.58	69.3	27	1.3	87	63	.3	5.1	2.8	4.4	.	.	4.4
2	COLUMBUS	6	2.29	72.8	30	1.8	93	62	4.1	2.6	3.7	5.0	.	.	6.0
3	KATEPWA	5	2.45	72.3	29	1.9	89	59	4.5	3.0	3.8	6.7	.	.	5.6
6	CELTIC	2	3.01	73.3	33	.8	78	58	4.1	1.5	3.0	6.0	.	.	4.3
7	NORSEMAN	1	3.15	71.3	31	.5	69	61	2.6	1.2	2.9	5.9	.	.	4.9
8	ROBLIN	3	2.90	72.8	33	1.3	82	54	3.4	1.4	3.1	4.8	.	.	5.7
LOCATIONS		17		16	15	4	16	16	10	8	4	2	0	0	2

* DAYS FROM PLANTING
** AREA 1 BASED ON 88-89 DATA ONLY
A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

YEAR(S): 87-89
MGMT : NORMAL

AREA : 1

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	MAX	3	2.76	70.2	23	2.0	82	67	0.0	0.5	1.0	.	.	.	.
2	COLUMBUS	5	2.25	73.1	26	2.0	88	66	2.0	0.0	2.0	.	.	.	.
3	KATEPWA	4	2.32	73.6	25	2.3	83	63	3.0	0.0	2.0	.	.	.	.
6	CELTIC	1	2.83	74.8	29	1.3	76	62	2.0	0.0	2.0	.	.	.	.
7	NORSEMAN	2	2.82	71.9	26	1.0	66	64	1.0	1.5	2.0	.	.	.	.
LOCATIONS		5	3	2	3	5	5	1	2	1	0	0	0	0	

YEARS : 87-90
MGMT : NORMAL
AREA : 2

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	MAX	3	2.81	69.6	28	3.9	89	61	0.3	5.2	3.2	4.4	7.0	.	4.4
2	COLUMBUS	5	2.46	72.0	31	3.9	94	61	4.4	2.2	3.3	5.0	4.2	.	6.0
3	KATEPWA	4	2.70	72.4	31	4.4	89	57	4.4	2.4	3.9	6.7	3.2	.	5.6
6	CELTIC	2	3.13	73.0	34	1.7	78	57	4.3	1.2	3.0	6.0	2.2	.	4.3
7	NORSEMAN	1	3.37	71.3	33	0.6	69	59	2.4	1.0	3.2	5.9	2.7	.	4.9
LOCATIONS		15	15	14	3	14	15	12	11	7	2	1	0	2	

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

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

YEAR(S): 87-90
MGMT : NORMAL

AREA : 3

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	MAX	1	3.65	75.1	37	1.8	86	63	1.0	.	.	.	.	.	.
2	COLUMBUS	5	2.95	75.0	34	3.8	98	63	6.8	.	.	.	.	.	.
3	KATEPWA	4	3.01	74.6	31	4.3	93	57	5.8	.	.	.	.	.	.
6	CELTIC	2	3.50	76.3	37	0.8	77	60	5.0	.	.	.	.	.	.
7	NORSEMAN	3	3.48	73.1	33	0.5	66	62	2.5	.	.	.	.	.	.
LOCATIONS			4	4	2	2	4	2	1	0	0	0	0	0	0

MGMT : NORMAL
AREA(S): 1- 3**

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	MAX	3	2.94	70.7	28	2.7	87	62	.4	4.5	3.0	4.4	7.0	.	4.4
2	COLUMBUS,CHECK	5	2.50	72.7	31	3.2	93	62	4.4	1.8	3.2	5.0	4.2	.	6.0
3	KATEPWA,CHECK	4	2.67	73.0	30	3.6	88	59	4.4	2.1	3.7	6.7	3.2	.	5.6
6	CELTIC	2	3.13	73.8	34	1.3	78	58	4.2	1.0	2.9	6.0	2.2	.	4.3
7	NORSEMAN	1	3.27	71.7	32	.7	68	60	2.3	1.1	3.1	5.9	2.7	.	4.9
LOCATIONS			24	22	18	8	23	22	14	13	8	2	1	0	2

* DAYS FROM PLANTING
** AREA 1 BASED ON 87-89 DATA ONLY
A HIGH SCORE IS UNDESIRABLE IN THE LODGING AND DISEASE RATINGS

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	EA90N	NN90N	HN90N	MEAN
1	MAX	2.61	2.14	3.93	2.89
2	COLUMBUS	1.98	1.87	2.44	2.10
3	KATEPWA	2.57	2.21	3.24	2.67
6	CELTIC	3.21	2.66	3.78	3.22
7	NORSEMAN	3.72	2.75	4.32	3.60
8	ROBLIN	3.81	2.64	4.29	3.58
14	ALGOT	3.30	2.39	3.48	3.06
	LOCATION MEAN	3.03	2.38	3.64	3.02

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	EA90N	NN90N	HN90N	MEAN*
1	MAX	86	90	108	95
2	COLUMBUS	65	79	67	70
3	KATEPWA	85	93	89	89
6	CELTIC	106	112	104	107
7	NORSEMAN	123	116	119	119
8	ROBLIN	126	111	118	118
14	ALGOT	109	100	96	102
	LOCATION MEAN	3.03	2.38	3.64	3.02

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	O190N	MEAN
1	MAX	4.41	4.41
2	COLUMBUS	3.69	3.69
3	KATEPWA	3.72	3.72
6	CELTIC	4.30	4.30
7	NORSEMAN	4.25	4.25
8	ROBLIN	3.86	3.86
14	ALGOT	3.79	3.79
	LOCATION MEAN	4.00	4.00

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	O190N	MEAN
1	MAX	110	110
2	COLUMBUS	92	92
3	KATEPWA	93	93
6	CELTIC	107	107
7	NORSEMAN	106	106
8	ROBLIN	96	96
14	ALGOT	95	95
	LOCATION MEAN	4.00	4.00

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

TRAIT : YIELD
YEAR : 90
AREA : 5

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NL90N	RR90N	MEAN
1	MAX	3.09	2.44	2.76
2	COLUMBUS	2.90	2.68	2.79
3	KATEPWA	2.31	3.00	2.65
6	CELTIC	2.64	3.77	3.20
7	NORSEMAN	3.45	3.61	3.53
8	ROBLIN	3.62	3.19	3.40
14	ALGOT	2.64	1.34	1.99
	LOCATION MEAN	2.95	2.86	2.91

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	NL90N	RR90N	MEAN*
1	MAX	105	85	95
2	COLUMBUS	98	94	96
3	KATEPWA	78	105	92
6	CELTIC	89	132	111
7	NORSEMAN	117	126	122
8	ROBLIN	123	111	117
14	ALGOT	89	47	68
	LOCATION MEAN	2.95	2.86	2.91

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

YEAR : 90
MGMT : NORMAL
AREA : 2

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	MAX	5	2.89	68.2	26	1.0	99	64	0.0	4.6	4.5	4.4	.	.	6.5
2	COLUMBUS	7	2.10	70.4	29	3.0	104	63	5.7	3.9	5.7	5.0	.	.	6.0
3	KATEPWA	6	2.67	71.5	30	2.0	100	59	5.6	4.7	5.8	6.7	.	.	6.0
6	CELTIC	3	3.22	69.7	31	1.0	87	59	5.1	2.6	4.6	6.0	.	.	5.0
7	NORSEMAN	1	3.60	68.6	30	0.0	84	61	3.6	1.6	4.5	5.9	.	.	4.8
8	ROBLIN	2	3.58	73.2	35	1.5	95	55	4.5	2.7	4.3	4.8	.	.	7.8
14	ALGOT	4	3.06	69.8	27	1.5	104	63	2.6	6.6	5.4	4.2	.	.	7.0
LOCATIONS		3		3	3	1	3	3	3	3	2	2	0	0	1

MGMT : NORMAL
AREA : 3

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	MAX	1	4.41	76.1	42	.	95	58	.	.	.	.	.	.	.
2	COLUMBUS	7	3.69	75.0	37	.	103	58	.	.	.	.	.	.	.
3	KATEPWA	6	3.72	73.6	33	.	95	54	.	.	.	.	.	.	.
6	CELTIC	2	4.30	76.3	40	.	80	55	.	.	.	.	.	.	.
7	NORSEMAN	3	4.25	73.7	35	.	69	57	.	.	.	.	.	.	.
8	ROBLIN	4	3.86	72.5	35	.	81	51	.	.	.	.	.	.	.
14	ALGOT	5	3.79	73.1	36	.	96	58	.	.	.	.	.	.	.
LOCATIONS		1		1	1	0	1	1	0	0	0	0	0	0	0

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

ONTARIO REGIONAL TRIALS;SPRING RED WHEAT 1990

YEAR : 90
MGMT : NORMAL
AREA : 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	MAX	5	2.76	67.2	19	1.0	86	60	.	.	.	.	.	.	.
2	COLUMBUS	4	2.79	69.1	25	1.0	98	57	.	.	.	.	.	.	.
3	KATEPWA	6	2.65	69.4	23	1.0	94	56	.	.	.	.	.	.	.
6	CELTIC	3	3.20	69.4	22	1.0	82	55	.	.	.	.	.	.	.
7	NORSEMAN	1	3.53	66.2	23	1.0	72	56	.	.	.	.	.	.	.
8	ROBLIN	2	3.40	70.7	26	1.0	96	52	.	.	.	.	.	.	.
14	ALGOT	7	1.99	65.7	20	2.0	89	56	.	.	.	.	.	.	.
LOCATIONS		2		2	2	1	2	2	0	0	0	0	0	0	0

MGMT : NORMAL
AREA(S): 2, 3, & 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	MAX	4	3.10	69.2	26	1.0	94	62	0.0	4.6	4.5	4.4	.	.	6.5
2	COLUMBUS	7	2.59	70.7	29	2.0	102	60	5.7	3.9	5.7	5.0	.	.	6.0
3	KATEPWA	5	2.84	71.1	28	1.5	97	57	5.6	4.7	5.8	6.7	.	.	6.0
6	CELTIC	3	3.39	70.7	29	1.0	84	57	5.1	2.6	4.6	6.0	.	.	5.0
7	NORSEMAN	1	3.68	68.6	29	0.5	77	59	3.6	1.6	4.5	5.9	.	.	4.8
8	ROBLIN	2	3.57	72.3	32	1.3	93	54	4.5	2.7	4.3	4.8	.	.	7.8
14	ALGOT	6	2.82	69.0	26	1.8	97	60	2.6	6.6	5.4	4.2	.	.	7.0
LOCATIONS		6		6	6	2	6	6	3	3	2	2	0	0	1

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

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1990

LOCATION - ELORA
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	MAX	5	2.61	62.4	25	.	98	67	0.0	4.5	.	5.5	.	.	.
2	COLUMBUS	7	1.98	67.4	28	.	103	65	7.7	4.5	.	5.0	.	.	.
3	KATEPWA	6	2.57	68.6	30	.	105	61	7.7	6.5	.	8.0	.	.	.
6	CELTIC	4	3.21	63.6	28	.	93	61	6.7	2.0	.	6.0	.	.	.
7	NORSEMAN	2	3.72	63.0	26	.	83	64	5.3	0.5	.	6.5	.	.	.
8	ROBLIN	1	3.81	72.3	34	.	98	57	7.3	3.0	.	5.5	.	.	.
14	ALGOT	3	3.30	68.0	26	.	108	64	1.3	9.0	.	5.0	.	.	.
MEANS			3.03	66.5	28	.	98	63	5.1	4.3	.	5.9	.	.	.

LOCATION - NAIRN
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	MAX	6	2.14	70.3	24	1.0	84	58	0.0	7.0	7.5	.	.	.	6.5
2	COLUMBUS	7	1.87	71.5	29	3.0	97	58	5.0	7.0	6.5	.	.	.	6.0
3	KATEPWA	5	2.21	72.2	28	2.0	85	54	5.0	7.0	6.5	.	.	.	6.0
6	CELTIC	2	2.66	74.0	31	1.0	74	53	4.5	5.5	6.0	.	.	.	5.0
7	NORSEMAN	1	2.75	72.2	32	0.0	80	55	2.5	4.0	6.5	.	.	.	4.8
8	ROBLIN	3	2.64	72.6	33	1.5	88	50	2.5	5.0	6.0	.	.	.	7.8
14	ALGOT	4	2.39	70.4	27	1.5	85	56	3.0	7.0	7.5	.	.	.	7.0
MEANS			2.38	71.9	29	1.4	85	55	3.2	6.1	6.6	.	.	.	6.2

LOCATION - HARRISTON
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	MAX	3	3.93	71.8	29	.	115	68	0.1	2.3	1.5	3.3	.	.	.
2	COLUMBUS	7	2.44	72.4	29	.	113	67	4.5	0.3	4.8	5.0	.	.	.
3	KATEPWA	6	3.24	73.6	32	.	110	63	4.0	0.5	5.0	5.3	.	.	.
6	CELTIC	4	3.78	71.6	33	.	95	62	4.0	0.3	3.2	6.0	.	.	.
7	NORSEMAN	1	4.32	70.6	33	.	88	65	3.0	0.3	2.5	5.3	.	.	.
8	ROBLIN	2	4.29	74.8	39	.	100	59	3.8	0.1	2.7	4.0	.	.	.
14	ALGOT	5	3.48	71.0	28	.	118	68	3.5	3.7	3.3	3.3	.	.	.
MEANS			3.64	72.3	32	.	106	65	3.3	1.1	3.3	4.6	.	.	.

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

ONTARIO REGIONAL TRIALS; SPRING RED WHEAT 1990

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	MAX	1	4.41	76.1	42	.	95	58	.	.	.	.	.	.	.
2	COLUMBUS	7	3.69	75.0	37	.	103	58	.	.	.	.	.	.	.
3	KATEPWA	6	3.72	73.6	33	.	95	54	.	.	.	.	.	.	.
6	CELTIC	2	4.30	76.3	40	.	80	55	.	.	.	.	.	.	.
7	NORSEMAN	3	4.25	73.7	35	.	69	57	.	.	.	.	.	.	.
8	ROBLIN	4	3.86	72.5	35	.	81	51	.	.	.	.	.	.	.
14	ALGOT	5	3.79	73.1	36	.	96	58	.	.	.	.	.	.	.
MEANS			4.00	74.3	37	.	88	56	.	.	.	.	.	.	.

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	MAX	3	3.09	67.3	21	1.0	85	61	.	.	.	.	.	.	.
2	COLUMBUS	4	2.90	66.1	28	1.0	100	59	.	.	.	.	.	.	.
3	KATEPWA	6	2.31	64.8	21	1.0	101	57	.	.	.	.	.	.	.
6	CELTIC	5	2.64	64.8	21	1.0	87	56	.	.	.	.	.	.	.
7	NORSEMAN	2	3.45	62.3	24	1.0	78	57	.	.	.	.	.	.	.
8	ROBLIN	1	3.62	67.3	25	1.0	94	50	.	.	.	.	.	.	.
14	ALGOT	5	2.64	67.3	22	2.0	87	58	.	.	.	.	.	.	.
MEANS			2.95	65.7	23	1.1	90	57	.	.	.	.	.	.	.

LOCATION - RAINY RIVER
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	MAX	6	2.44	67.0	17	.	87	59	.	.	.	.	.	.	.
2	COLUMBUS	5	2.68	72.0	21	.	95	54	.	.	.	.	.	.	.
3	KATEPWA	4	3.00	74.0	24	.	87	54	.	.	.	.	.	.	.
6	CELTIC	1	3.77	74.0	23	.	76	54	.	.	.	.	.	.	.
7	NORSEMAN	2	3.61	70.0	22	.	65	54	.	.	.	.	.	.	.
8	ROBLIN	3	3.19	74.0	27	.	97	54	.	.	.	.	.	.	.
14	ALGOT	7	1.34	64.0	17	.	90	54	.	.	.	.	.	.	.
MEANS			2.86	70.7	22	.	85	55	.	.	.	.	.	.	.

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

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1990

INDEX

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

DI	DELHI
EA	ELORA
HN	HARRISTON
NN	NAIRN
RN	RIDGETOWN

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 1990

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

TRAIT : YIELD

YEAR(S): 89-90
AREA : 1

KEY NAME	DI89N	DI90N	RN90N	MEAN
1 MEDORA	1.33	1.74	2.36	1.81
2 EDMORE	2.15	1.55	2.86	2.19
LOCATION MEAN	1.74	1.64	2.61	2.00

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	DI89N	DI90N	RN90N	MEAN*
1 MEDORA	76	106	90	91
2 EDMORE	124	94	110	109
LOCATION MEAN	1.74	1.64	2.61	2.00

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

YEAR(S): 87-90
AREA : 2

KEY NAME	EA87N	NN88N	EA88N	HN88N	EA89N	NN89N	HN89N	EA90N	NN90N	HN90N	MEAN
1 MEDORA	2.84	3.04	2.33	2.26	4.13	3.01	2.24	4.12	2.97	3.45	3.04
2 EDMORE	3.26	2.63	2.14	2.28	4.92	2.72	2.71	3.99	2.95	4.38	3.20
LOC.MEAN	3.05	2.84	2.24	2.27	4.53	2.87	2.47	4.05	2.96	3.91	3.12

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY NAME	EA87N	NN88N	EA88N	HN88N	EA89N	NN89N	HN89N	EA90N	NN90N	HN90N	MEAN*
1 MEDORA	93	107	104	100	91	105	91	102	100	88	98
2 EDMORE	107	93	96	100	109	95	109	98	100	112	102
LOC.MEAN	3.05	2.84	2.24	2.27	4.53	2.87	2.47	4.05	2.96	3.91	3.12

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGISTRATION TRIALS;SPRING DURUM WHEAT 1990

TRAIT : YIELD
YEAR(S): 87-90 *

KEY NAME	AREA 1 (3)	AREA 2 (10)**	AREAS 1-2 (13)***
1 MEDORA	1.81	3.04	2.76
2 EDMORE	2.19	3.20	2.96
OVERALL MEAN	2.00	3.12	2.86

MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

KEY NAME	AREA 1	AREA 2	AREAS 1-3
1 MEDORA	91	98	96
2 EDMORE	109	102	104
OVERALL MEAN	2.00	3.12	2.86

* 2 YR. AVERAGE (1989-90) FOR AREA 1
** # OF LOCATIONS
*** WEIGHTED AVERAGE

ONTARIO REGIONAL TRIALS;SPRING DURUM WHEAT 1990

YEAR(S): 89-90
AREA : 1

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 MEDORA	2	1.81	66.5	27	2.0	93	67	3.0	.	.	.	.	.	.
2 EDMORE	1	2.19	70.0	34	1.0	95	67	5.0	.	.	.	.	.	.
LOCATIONS		3	3	2	1	2	2	1	0	0	0	0	0	0

YEAR(S): 87-90
AREA : 2

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 MEDORA	2	3.04	73.2	38	3.5	94	60	4.0	0.9	3.5	.	1.7	.	6.6
2 EDMORE	1	3.20	71.8	44	3.8	94	59	4.0	2.0	2.9	.	1.0	.	4.0
LOCATIONS		10	9	8	3	9	10	9	4	4	0	1	0	2

YEAR(S): 87-90
AREA(S): 1- 2

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 MEDORA	2	2.76	71.5	36	3.1	94	61	3.9	0.9	3.5	.	1.7	.	6.6
2 EDMORE	1	2.96	71.4	42	3.1	94	61	4.1	2.0	2.9	.	1.0	.	4.0
LOCATIONS		13	12	10	4	11	12	10	4	4	0	1	0	2

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

ONTARIO REGIONAL TRIALS;SPRING DURUM WHEAT 1990

TRAIT : YIELD
YEAR : 90

AREA : 1

KEY	NAME	DI90N	RN90N	MEAN
1	MEDORA	1.74	2.36	2.05
2	EDMORE	1.55	2.86	2.20
	OVERALL MEAN	1.64	2.61	2.13

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	DI90N	RN90N	MEAN*
1	MEDORA	106	90	98
2	EDMORE	94	110	102
	OVERALL MEAN	1.64	2.61	2.13

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

AREA : 2

KEY	NAME	EA90N	NN90N	HN90N	MEAN
1	MEDORA	4.12	2.97	3.45	3.51
2	EDMORE	3.99	2.95	4.38	3.77
	OVERALL MEAN	4.05	2.96	3.91	3.64

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	EA90N	NN90N	HN90N	MEAN*
1	MEDORA	102	100	88	97
2	EDMORE	98	100	112	103
	OVERALL MEAN	4.05	2.96	3.91	3.64

* MEAN OF RELATIVE YIELDS OVER ALL LOCATIONS

ONTARIO REGIONAL TRIALS;SPRING DURUM WHEAT 1990

YEAR : 90
MGMT : NORMAL

AREA : 1

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 MEDORA	2	2.05	69.9	33	2.0	89	62	3.0	.	.	.	.	.	.
2 EDMORE	1	2.20	71.2	37	1.0	86	62	5.0	.	.	.	.	.	.
LOCATIONS		2	2	1	1	1	1	1	0	0	0	0	0	0

AREA : 2

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 MEDORA	2	3.51	71.9	35	2.0	100	61	4.0	3.0	5.3	.	.	.	5.7
2 EDMORE	1	3.77	70.4	41	2.5	101	61	3.4	6.0	4.7	.	.	.	4.3
LOCATIONS		3	3	3	1	3	3	3	1	2	0	0	0	1

AREA(S): 1- 2

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 MEDORA	2	2.93	71.1	35	2.0	97	61	3.8	3.0	5.3	.	.	.	5.7
2 EDMORE	1	3.15	70.7	40	1.8	97	62	3.8	6.0	4.7	.	.	.	4.3
LOCATIONS		5	5	4	2	4	4	4	1	2	0	0	0	1

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

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1990

LOCATION - DELHI
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 MEDORA	1	1.74	76.6	33	.	.	.	.	.	.	.	.	.	.
2 EDMORE	2	1.55	76.5	37	.	.	.	.	.	.	.	.	.	.
MEANS		1.65	76.6	35	.	.	.	.	.	.	.	.	.	.

LOCATION - RIDGETOWN
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 MEDORA	2	2.36	63.3	.	2.0	89	62	3.0	.	.	.	.	.	.
2 EDMORE	1	2.86	65.8	.	1.0	86	62	5.0	.	.	.	.	.	.
MEANS		2.61	64.6	.	1.5	88	62	4.0	.	.	.	.	.	.

LOCATION - NAIRN
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 MEDORA	1	2.97	74.3	38	2.0	88	55	4.0	3.0	7.0	.	.	.	5.7
2 EDMORE	2	2.95	73.3	43	2.5	99	57	4.0	6.0	7.0	.	.	.	4.3
MEANS		2.96	73.8	40	2.3	94	56	4.0	4.5	7.0	.	.	.	5.0

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

ONTARIO REGIONAL TRIALS; SPRING DURUM WHEAT 1990

LOCATION - HARRISTON
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 MEDORA	2	3.45	70.8	34	.	108	66	2.3	.	3.7	.	.	.	.
2 EDMORE	1	4.38	73.1	42	.	105	65	1.3	.	2.3	.	.	.	.
MEANS		3.91	72.0	38	.	107	66	1.8	.	3.0	.	.	.	.

LOCATION - ELORA
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 MEDORA	1	4.12	70.5	33	.	103	62	5.7	.	.	.	.	.	.
2 EDMORE	2	3.99	64.9	37	.	98	62	5.0	.	.	.	.	.	.
MEANS		4.05	67.7	35	.	100	62	5.3	.	.	.	.	.	.

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

CO-OPERATORS AND LOCATIONS OF REGIONAL TESTS, 1990

Testing area	County or District	Co-operators	Crops				
			Barley	Oats	Winter Barley	Winter Wheat	Spring Wheat
I	Kent I	RN = Ridgetown C.A.T., Ridgetown, Ont.	X	X	X	R+W	D
	Kent II	MH = W.G.Thompson and Sons Ltd., Morpeth, Ont.			X	W	
	Lambton	ID = Ridgetown C.A.T., Ridgetown, Ont. (Inwood)	X**	X**		W**	
	Essex I	HW - Harrow Research Station, Agriculture Canada				R**+W**	
	Essex	WE = Woodslee Soil Substation, Agriculture Canada				R+W	
	Haldimant - Norfolk	DI = Agriculture Canada, Delhi Research Station					D
II	Oxford	WK = Crop Science Department, OAC, Woodstock, Ont.	X	X	X	R+W	
	Huron	W.G. Thompson & 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., Palmerston, 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*	
	Manitoulin Island	J. Gilpen, Spring Bay, Manitoulin Island	X*	X*			
	Lennox Addington	BH = L. Seaman, Agriculture Canada				W	

CO-OPERATORS AND LOCATIONS OF REGIONAL TESTS, 1990 (cont'd)

Testing area	County or District	Co-operators	Crops			
			Barley	Oats	Winter Wheat	Spring Wheat
III	Sormont, 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.			W*	
	Renfrew I	K. Dick, R.R. # 1 Douglas, Ont.	X	X		
	Renfrew	RW = L. Seaman, Agriculture Canada, Bath, Ont.			R+W*	
	Lanark	C. Proc. Pakenham, Ont.	X	X*		
	Prescott & Russell	Alfred College of Agriculture & Food Tech., Alfred, Ont.	X	X		
IV	Wellington I	EA = Crop Science Dept., OAC, Elora, Ont.	X	X		
V	Temiskaming	NL = New Liskeard C.A.T., New Liskeard, Ont.	X	X		S
	Thunder Bay	N.L.C.A.T., Thunder Bay Experimental farm, Thunder Bay, Ont.	X	X		
	Nipissing-Sudbury	New Liskeard C.A.T., New Liskeard, Ont.	X	X		S
	Rainy River District	RR = N.L.C.A.T., 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
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