Department of Crop Science

1989 PROGRESS REPORT

BARLEY, OATS, WINTER BARLEY, SOFT WHITE AND HARD RED WINTER WHEAT, WINTER TRITICALE 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
Thunder Bay Experimental Farm

ONTARIO MINISTRY OF AGRICULTURE AND FOOD

Agricultural Representatives Branch
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INTRODUCTION

In 1989, Regional Tests of spring barley, oats, winter wheat, winter barley and winter triticale were conducted in cooperation with the members of the Ontario Soil and Crop Improvement Association, commercial plant breeders, CAT Colleges and Agriculture Canada.

SPRING CEREALS

Reliable test data were obtained from 11 machine planted and harvested locations for spring barley, and oats across the province in 1989. This year the 3rd year entries in the Coop trials were also included in the Regional Tests so that two years of data would be available by the time cultivars would be commercially released in Ontario. The yields in 1989 were up slightly from the 1988 yields with barley averaging 4.5 t/ha and oats averging 3.8 t/ha across the test locations. Area VI had the highest average yields for barley while Area V had the highest average yields for oats. Areas II and III had the lowest barley yields while Area I had the lowest yields for oats.

Spring Barley

Across the province, Sabina at 4.81 t/ha was the highest yielding six-rowed barley with Joly at 4.70 t/ha, Leger at 4.66 t/ha and Chapais at 4.65 t/ha following. In two-rowed barley, Morrison at 4.79 t/ha was considerably higher yielding than the other entries. Overall, Sabina was the highest yielding six-rowed barley in Areas II at 4.20 t/ha and V at 5.83 t/ha, Joly in Areas I at 4.64 t/ha and VI at 6.45 t/ha, Leger in Area III at 4.62 t/ha and Chapais in Area IV at 4.68 t/ha. Cultivar Morrison was the highest yielding two-rowed cultivar in Areas I, II, III, V and VI while Micmac was the highest in Area IV. There was reasonable lodging and disease at several sites in 1989.

Oats

The highest yielding oat cultivar in 1989 across the province was Marion at 4.42 t/ha. Ogle was the highest yielding cultivar in Area I, Area II and Area III. Newman in Area IV, Marion in Area V, and Baldwin in Area VI. In most parts of the province lodging and disease were not major problems in 1989. The milling quality of the crop was good with a considerably quantity from the south western part of the province being exported to the U.S. to fill in for another poor crop in the Midwest. Exports of oats to the U.S. are expected to increase in the near future.

WINTER CEREALS

Winter Barley

Test data were obtained from five sites for winter barley in 1989. The crop averaged about 4.2 t/ha, Area I being somewhat lower yielding than Area II. The highest yielding cultivar across the 1989 test sites was OAC Elmira. There were no appreciable differences in winter kill among the

cultivars with all of them having around 80% survival. OAC Acton had the lowest yield, test weight, and poorest lodging resistance, possibly stemming from its high susceptibility to mildew. Severe leaf rust was noted at several locations in 1989. Lodging was not a major problem in the 1989 crop year.

Soft, White Winter Wheat

Yield data on soft, white winter wheat were obtained from 9 locations in 1989. Area II had the highest yields while Area III had the lowest yields. Over all, the crop averaged about 4.3 t/ha. Ot90.4.1 was the highest yielding cultivar across the province. Annette had the highest kernel weight and also very good resistance to mildew. Ena had a lower head blight score than other cultivars. Ot90.4.1 had better lodging resistance than other cultivars. Overall disease was fairly severe in many areas of the province.

Red Winter Wheat

Yield data were obtained from 8 locations in 1989 for fall sown red winter wheat. Overall average yield was about 3.4 t/ha, MJ-50 was the highest yielding cultivar at 3.8 t/ha. Absolvent had the highest test weight, and thousand kernel weight, while MJ-50 showed the poorest lodging resistance. Disease was fairly heavy on the red winter wheat crop this year.

Winter Triticale

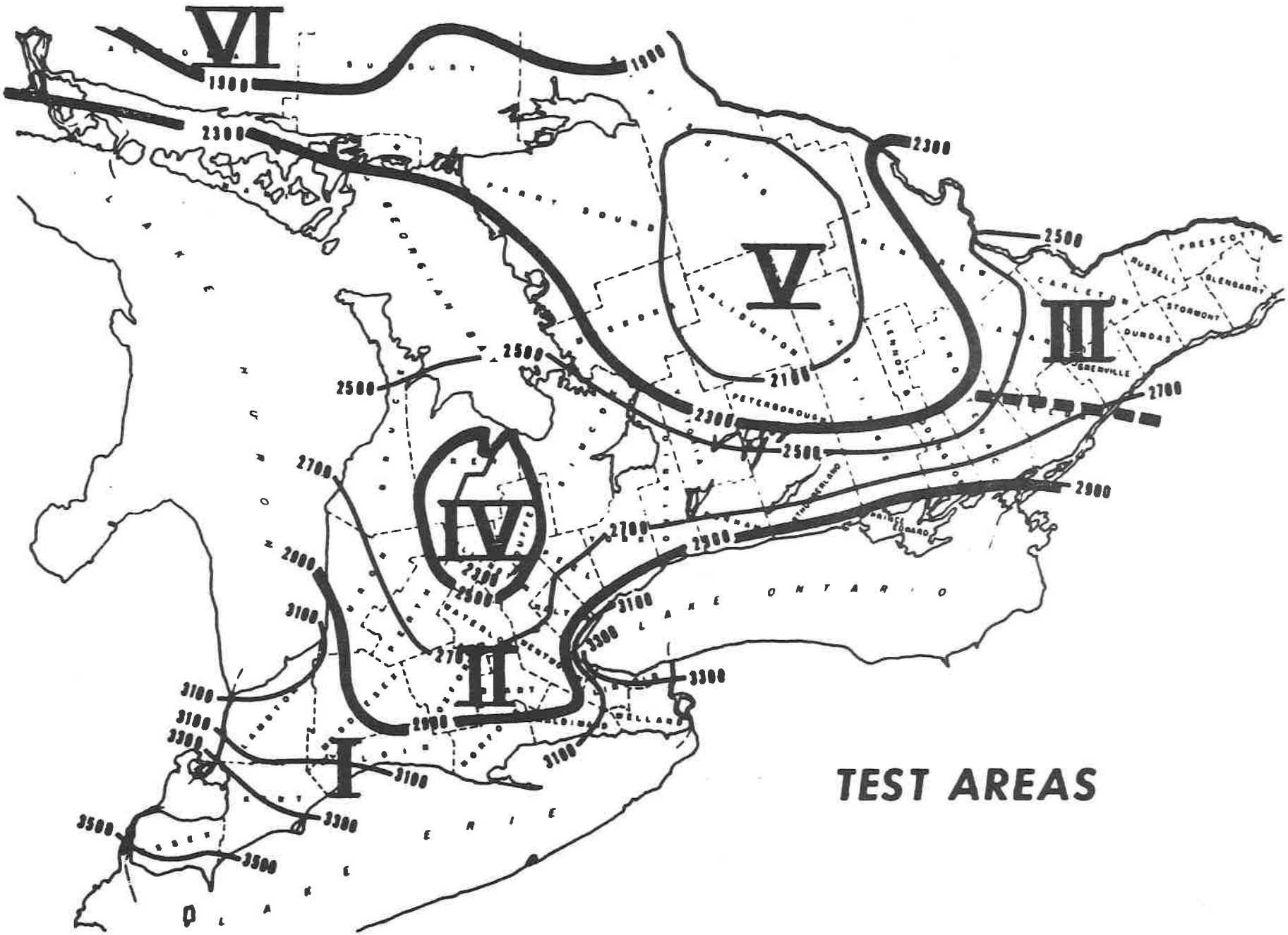
The Triticale cultivar OAC Trillium was consistently higher yielding, had higher test weight and, although taller, had better lodging resistance than OAC Decade. Both cultivars were very similar in heading date.

GROWING CONDITIONS

The autumn of 1988 was good in most districts with most of the intended winter cereal acreage being sown. Because of the fall conditions, there was good hardening and after a reasonably normal winter, resulted in only modest winter kill.

Spring sowing conditions were generally average for most spring cereals. After a fairly cool and dry spring, rains came in June and essentially stayed on for the whole month in most of the province. There was very little rain in July and that only as sporadic thunderstorms in most of the growing area. In August, conditions varied widely with thundershowers providing most of the moisture. Yields tend to be variable but average, overall quality was generally quite good. Harvest dates were average in most of the province however rains delayed harvest in some areas and did cause some weathering damage.

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


VI
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3300
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PETERBOROUGH
PRESCOTT
RUSSELL
GLENGARRY
STORMONT
DUNDAS
GRENVILLE
LAKE ONTARIO
LAKE ERIE
TEST AREAS

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 1989 tests and the average performance of cultivars over the past two to six 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 - "1989-90 Field Crop Recommendations for Ontario".

TESTING AREA I
BARLEY
AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	3.94	66.7	43.5	80	1.0	98
BIRKA	3.60	66.8	41.9	80	0.5	100
CRAIG	3.40	66.8	40.0	79	1.5	98
HELENA	3.84	68.4	41.9	76	0.0	97
MICMAC	3.65	64.4	38.2	83	3.0	98
MORRISON	4.46	66.3	43.0	82	1.5	99
RODEO	3.97	65.8	41.5	83	1.0	98
SYMKO	3.84	65.9	40.5	87	3.0	99
WINTHROP	4.12	64.4	40.0	84	1.0	98
CHAPAIS	3.81	60.2	44.1	80	0.0	99
ETIENNE	3.72	62.0	39.8	87	0.0	101
JOLY	3.84	58.9	38.3	92	1.5	98
LEGER	3.76	59.9	38.8	97	1.5	99
MASKOT	3.56	63.6	38.2	91	0.5	100
MINGO	3.70	63.5	39.6	95	2.0	100
OAC KIPPEN	3.46	65.0	38.6	92	1.0	99
SABINA	3.70	64.3	40.9	90	1.0	100
SOPHIE	3.40	59.2	36.5	91	2.5	100

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	4.36	66.8	45.3	78	1.3	102
BIRKA	4.13	67.9	43.8	77	0.7	103
HELENA	4.22	68.9	44.0	73	0.5	101
MICMAC	4.05	65.8	41.2	81	2.9	101
RODEO	4.47	66.9	43.7	79	1.3	102
JOLY	3.99	60.1	38.6	86	2.2	101
LEGER	4.17	61.3	39.5	93	1.9	103
MINGO	4.12	65.0	41.1	92	2.3	103
OAC KIPPEN	3.95	65.3	39.6	89	1.2	103
SOPHIE	3.87	61.0	38.6	88	3.3	103

a/ no. of days from seeding to maturity

TESTING AREA I
BARLEY
YIELD in kg per ha, 1989

CULTIVAR	KENT I	Average t/ha	Average lbs/a	Average bu/a	RANK
ALBANY	4275	4.28	3811	79.4	10
BIRKA	3798	3.80	3384	70.5	21
CRAIG	3591	3.59	3197	66.6	23
HARRINGTON	3521	3.52	3134	65.3	24
HELENA	4457	4.46	3972	82.8	5
MICMAC	3900	3.90	3473	72.4	19
MORRISON	4869	4.87	4337	90.4	1
RODEO	4433	4.43	3945	82.2	6
SYMKO	4141	4.14	3687	76.8	13
WINTHROP	4405	4.41	3927	81.8	7
AB93-2	3890	3.89	3464	72.2	20
AB94-11	4343	4.34	3865	80.5	8
TBR 579-5	4556	4.56	4060	84.6	3
CHAPAIS	4507	4.51	4017	83.7	4
ETIENNE	4251	4.25	3785	78.9	11
JOLY	4635	4.64	4132	86.1	2
LEGER	4099	4.10	3651	76.1	14
MASKOT	4045	4.05	3606	75.1	16
MINGO	3964	3.96	3526	73.5	18
OAC KIPPEN	3784	3.78	3366	70.1	22
SABINA	4292	4.29	3820	79.6	9
SOPHIE	3979	3.98	3544	73.8	17
OS84-696	4228	4.23	3767	78.5	12
TBP854-35	4056	4.06	3615	75.3	15
MEAN	4168	4.17	3713	77.4	--
C.V.%	8.0	--	--	--	--
L.S.D.(0.05)	314	--	--	--	--

TESTING AREA II
BARLEY
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (3)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	HEIGHT cm (3)	LODGING 0-9 (3)	MATURITY a/ DAYS (2)	LEAF RUST 0-9 (1)	MILDEW 0-9 (3)
ALBANY	4.14	65.9	43.6	85	1.6	91	7.5	0.0
BIRKA	4.06	67.9	42.8	81	0.0	93	0.0	0.0
CRAIG	4.02	67.6	41.4	85	0.8	91	7.5	0.0
HARRINGTON	3.64	61.7	39.7	88	1.6	92	8.5	0.0
HELENA	4.05	68.1	43.6	85	0.3	91	8.0	0.0
MICMAC	4.24	65.4	40.9	91	1.6	90	7.0	0.1
MORRISON	4.29	67.0	44.3	84	1.8	90	8.0	0.0
RODEO	4.14	66.0	41.9	88	1.9	91	7.0	0.0
SYMKO	4.09	66.2	42.7	91	2.7	91	7.5	0.0
WINTHROP	3.95	65.2	40.4	87	2.2	91	7.5	0.0
AB 93-2	4.19	65.7	40.9	89	1.4	90	6.5	0.0
AB 94-11	4.20	66.8	43.2	92	1.4	90	6.0	0.0
TBR 579-5	4.41	67.7	46.2	81	1.3	91	6.0	0.0
CHAPAIS	4.13	64.3	44.9	87	0.3	89	7.5	2.4
ETIENNE	4.02	64.2	38.6	94	0.0	91	8.0	4.5
JOLY	3.92	61.1	37.2	102	3.6	91	8.0	1.2
LEGER	4.09	63.7	38.2	104	1.4	91	9.0	4.6
MASKOT	3.93	65.1	37.5	99	0.3	91	8.5	0.5
MINGO	3.72	66.0	37.3	101	1.5	91	8.0	5.7
OAC KIPPEN	4.14	65.5	38.7	103	1.8	89	7.5	0.0
SABINA	4.20	65.0	38.7	95	1.0	90	9.0	0.0
SOPHIE	3.29	60.8	36.5	101	3.7	91	7.5	3.4
OS 84-696	3.59	65.6	42.8	102	0.9	91	8.0	5.0
TBP 854-35	4.17	64.3	47.1	101	1.0	90	7.0	0.2

a/ no. of days from seeding to maturity
* no. of locations

TESTING AREA II
BARLEY
AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS	MILDEW 0-9
ALBANY	3.82	65.3	41.9	75	0.8	87	0.0
BIRKA	3.73	66.6	41.4	73	0.2	89	0.0
CRAIG	3.78	65.8	39.7	75	0.6	87	0.0
HELENA	3.65	66.6	41.9	74	0.4	87	0.0
MICMAC	3.69	64.4	39.2	80	1.8	86	0.0
MORRISON	3.84	66.3	43.1	75	1.5	87	0.0
RODEO	3.72	64.9	41.6	77	1.0	87	0.0
SYMKO	3.66	65.4	41.1	78	1.9	87	0.0
WINTHROP	3.67	66.8	39.0	78	1.1	87	0.0
CHAPAIS	3.83	61.3	42.2	77	0.6	84	1.2
ETIENNE	3.74	62.7	37.3	82	0.3	87	4.5
JOLY	3.41	59.2	35.0	85	2.0	86	0.6
LEGER	3.82	62.0	36.5	88	0.8	86	3.3
MASKOT	3.63	63.5	37.4	85	0.2	87	0.3
MINGO	3.56	64.3	37.8	88	1.5	86	6.4
OAC KIPPEN	3.77	64.5	36.9	87	1.5	85	0.0
SABINA	3.74	63.1	38.2	81	0.6	86	0.0
SOPHIE	3.13	59.5	35.4	85	2.0	87	1.7

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS	MILDEW 0-9
ALBANY	3.39	64.8	42.6	72	1.6	88	0.0
BIRKA	3.29	65.9	42.1	71	1.0	90	0.1
HELENA	3.40	66.5	43.5	72	1.0	88	0.1
MICMAC	3.45	64.1	40.4	77	2.4	88	0.1
RODEO	3.45	64.7	41.8	75	1.5	89	0.2
JOLY	3.29	58.9	36.2	83	2.3	88	0.1
LEGER	3.47	61.4	37.2	86	1.2	88	3.3
MINGO	3.35	63.5	38.8	86	1.8	88	5.6
OAC KIPPEN	3.55	63.7	38.3	84	1.9	87	0.0
SOPHIE	2.98	58.5	35.6	86	2.9	89	1.9

a/ no. of days from seeding to maturity

TESTING AREA II
BARLEY
YIELD in kg per ha, 1989

CULTIVAR	OXFORD	MIDDLESEX I	HURON	Average t/ha	Average lbs/a	Average bu/a	RANK
ALBANY	3678	4510	4234	4.14	3685	76.8	8
BIRKA	3707	4473	4002	4.06	3614	75.3	14
CRAIG	3411	4546	4097	4.02	3576	74.5	16
HARRINGTON	2936	4129	3868	3.64	3243	67.6	22
HELENA	3294	4600	4241	4.05	3600	75.0	15
MICMAC	3976	4491	4263	4.24	3776	78.7	3
MORRISON	3587	4817	4473	4.29	3820	79.6	2
RODEO	3531	4528	4347	4.14	3680	76.7	10
SYMKO	3544	4238	4481	4.09	3638	75.8	13
WINTHROP	3648	4328	3858	3.94	3511	73.1	18
AB93-2	3376	4763	4437	4.19	3731	77.7	6
AB94-11	3614	4691	4307	4.20	3742	77.9	4
TBR 579-5	3638	5017	4582	4.41	3927	81.8	1
CHAPAIS	3475	4872	4031	4.13	3672	76.5	11
ETIENNE	2992	5017	4035	4.01	3573	74.4	17
JOLY	3230	4582	3934	3.91	3484	72.6	20
LEGER	3014	5144	4115	4.09	3641	75.9	12
MASKOT	2792	4962	4042	3.93	3499	72.9	19
MINGO	3272	4636	3260	3.72	3313	69.0	21
OAC KIPPEN	3299	4709	4405	4.14	3683	76.7	9
SABINA	3136	4799	4665	4.20	3738	77.9	5
SOPHIE	2966	3713	3180	3.29	2925	60.9	24
OS84-696	2851	4618	3282	3.58	3190	66.5	23
TBP 854-35	2979	4999	4542	4.17	3714	77.4	7
MEAN	3331	4633	4112	4.03	3582	74.6	--
C.V.%	10.0	8.0	13.9	--	--	--	--
L.S.D. (0.05)	470	527	807	--	--	--	--

TESTING AREA III
BARLEY
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (2)*	hl/wt kg (4)	KERNEL WEIGHT g/1000 (4)	HEIGHT cm (4)	LODGING 0-9 (2)	MATURITY a/ DAYS (3)
ALBANY	4.01	64.5	46.7	69	0.3	84
BIRKA	3.75	65.1	44.3	69	0.0	86
CRAIG	3.69	64.5	40.6	68	0.3	84
HARRINGTON	3.41	60.5	41.0	71	0.5	85
HELENA	3.99	65.8	46.8	67	0.5	84
MICMAC	3.95	63.5	42.0	74	0.8	84
MORRISON	4.28	64.0	44.2	69	0.3	86
RODEO	3.71	64.4	43.1	71	0.3	85
SYMKO	4.01	65.3	45.7	75	1.0	86
WINTHROP	3.79	62.8	42.7	75	0.0	86
AB 93-2	3.79	63.0	43.0	68	0.3	84
AB 94-11	3.82	64.9	47.5	73	0.5	84
TBR 579-5	3.76	64.6	46.4	67	0.3	84
CHAPAIS	3.89	58.8	45.6	67	0.5	85
ETIENNE	3.36	59.8	38.0	75	0.3	85
JOLY	4.21	59.0	38.8	78	0.0	84
LEGER	4.62	59.4	37.5	86	1.5	84
MASKOT	4.01	62.1	39.8	81	0.0	85
MINGO	3.95	61.6	39.5	82	2.0	84
OAC KIPPEN	3.58	60.9	38.9	82	1.5	84
SABINA	4.25	61.1	38.1	78	0.5	85
SOPHIE	4.29	58.8	39.9	86	1.5	86
OS 84-696	3.90	61.4	44.9	81	0.3	85
TBP 854-35	3.69	58.6	46.7	75	0.5	86

a/ no. of days from seeding to maturity
* no. of locations

TESTING AREA III
BARLEY
AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	4.14	64.9	43.7	66	0.7	85
BIRKA	3.83	66.4	42.6	67	0.2	87
CRAIG	3.92	65.4	39.6	66	0.4	85
HELENA	4.07	66.6	43.9	65	0.8	85
MICMAC	3.96	64.9	40.7	71	0.9	85
MORRISON	4.20	64.8	41.0	66	0.6	86
RODEO	3.91	65.3	41.5	68	0.9	85
SYMKO	4.16	65.7	42.3	70	1.0	86
WINTHROP	4.05	64.4	41.0	71	0.6	86
CHAPAIS	3.89	60.0	44.4	65	0.8	86
ETIENNE	3.56	60.9	37.5	72	0.5	86
JOLY	4.15	60.1	37.7	75	0.6	85
LEGER	4.42	61.0	37.2	81	1.2	85
MASKOT	4.00	62.7	39.8	77	0.3	86
MINGO	4.00	63.1	39.7	80	1.5	85
OAC KIPPEN	3.95	62.1	37.3	80	0.9	86
SABINA	4.20	63.3	39.0	76	0.4	86
SOPHIE	4.07	60.2	39.0	82	1.3	86

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	4.02	66.0	43.0	69	1.6	87
BIRKA	3.72	67.2	40.6	68	0.7	89
HELENA	4.04	67.8	42.7	68	1.6	87
MICMAC	3.83	65.8	39.8	71	2.0	87
RODEO	3.83	66.1	40.8	69	1.4	87
JOLY	4.20	61.3	37.0	77	1.2	87
LEGER	4.32	62.5	36.9	81	1.2	87
MINGO	3.94	64.2	38.2	81	2.5	87
OAC KIPPEN	3.84	64.0	37.1	80	1.6	88
SOPHIE	3.77	61.9	36.6	83	3.1	88

a/ no. of days from seeding to maturity

TESTING AREA III
BARLEY
YIELD in kg per ha, 1989

CULTIVAR	CARLTON	RENFREW*	LANARK	PRESCOTT* & RUSSELL	Average t/ha	Average lbs/a	Average bu/a	RANK
ALBANY	4789	2389	3238	5200	4.01	3572	74.4	6
BIRKA	4024	1986	3469	5100	3.75	3335	69.5	18
CRAIG	4248	1664	3126	5100	3.69	3281	68.4	21
HARRINGTON	4194	2609	2618	4300	3.41	3031	63.2	23
HELENA	5013	2609	2957	4700	3.98	3547	73.9	9
MICMAC	4489	2951	3418	5300	3.95	3519	73.3	10
MORRISON	5161	2090	3393	5000	4.28	3807	79.3	3
RODEO	4131	2383	3283	5700	3.71	3299	68.7	19
SYMKO	4707	2531	3303	5400	4.01	3564	74.3	8
WINTHROP	5111	3215	2476	5500	3.79	3377	70.3	15
AB 93-2	4500	2397	3087	4300	3.79	3377	70.3	15
AB 94-11	4483	2687	3148	5600	3.82	3396	70.8	14
TBR 579-5	4302	2606	3216	4700	3.76	3345	69.7	17
CHAPAIS	4942	2180	2843	5300	3.89	3465	72.2	13
ETIENNE	4176	1487	2546	4300	3.36	2991	62.3	24
JOLY	4663	2568	3759	6500	4.21	3748	78.1	5
LEGER	4987	2261	4242	5200	4.61	4107	85.6	1
MASKOT	4739	2188	3287	5100	4.01	3562	74.4	7
MINGO	4061	2745	3840	4700	3.95	3516	73.3	11
OAC KIPPEN	4352	1832	2813	4900	3.58	3189	66.4	22
SABINA	4820	2629	3669	4700	4.24	3778	78.7	4
SOPHIE	4557	3310	4029	5800	4.29	3821	79.6	2
OS 84-696	4839	2826	2953	4900	3.90	3467	72.2	12
TBP 854-35	3950	1931	3429	3300	3.69	3284	68.4	20
MEAN	4552	2420	3256	5000	3.90	3471	72.3	--
C.V.%	10.6	25.8	10.3	17.2	--	--	--	--
L.S.D.(0.05)	683	1025	472	1221	--	--	--	--

* data not included in mean

TESTING AREA IV
BARLEY
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (1)*	hl/wt kg (2)	KERNEL WEIGHT g/1000 (2)	HEIGHT cm (2)	LODGING 0-9 (2)	MATURITY a/ DAYS (1)	LEAF RUST 0-9 (1)	MILDEW 0-9 (2)
ALBANY	5.13	64.0	43.1	64	0.0	85	1.0	0.0
BIRKA	5.10	67.9	43.4	76	0.3	87	0.0	0.0
CRAIG	4.84	65.2	40.1	67	0.0	85	2.0	0.0
HARRINGTON	4.16	59.0	39.9	65	0.0	84	2.5	0.0
HELENA	4.88	66.0	44.8	79	0.0	83	1.0	0.0
MICMAC	5.20	65.3	42.1	85	0.7	85	1.0	0.0
MORRISON	4.96	65.3	44.3	78	0.2	87	0.0	0.0
RODEO	4.77	64.8	43.9	81	0.0	86	1.0	0.0
SYMKO	4.94	65.1	43.4	85	0.0	84	1.0	0.0
WINTHROP	4.55	62.5	39.8	79	0.0	84	1.0	0.0
AB 93-2	4.64	61.4	39.6	84	0.0	83	0.0	0.0
AB 94-11	4.96	65.2	46.5	86	0.9	84	1.0	0.0
TBR 579-5	4.78	66.1	48.3	83	0.5	86	0.5	0.5
CHAPAIS	4.68	59.1	44.5	86	0.0	82	4.5	3.9
ETIENNE	3.41	58.9	36.2	95	0.2	82	7.0	6.5
JOLY	3.63	57.5	34.0	96	0.7	84	8.5	2.9
LEGER	4.12	59.3	33.7	93	0.5	82	5.5	4.4
MASKOT	3.80	61.2	36.0	95	0.3	83	3.0	1.8
MINGO	3.62	61.0	36.5	97	2.8	81	3.5	5.5
OAC KIPPEN	4.46	64.6	39.9	96	0.0	80	1.0	0.0
SABINA	4.07	60.8	37.3	98	0.2	85	3.0	0.4
SOPHIE	3.79	55.0	34.7	98	2.8	84	0.5	3.9
OS 84-696	3.60	59.5	41.2	98	1.3	83	5.5	5.2
TBP 854-35	3.97	62.6	49.3	104	0.0	86	1.5	0.0

a/ no. of days from seeding to maturity
* no. of locations

TESTING AREA IV
BARLEY
AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY a/ DAYS
ALBANY	4.27	63.6	42.1	58	0.0	85
BIRKA	4.27	65.5	41.5	65	0.3	87
CRAIG	4.13	64.4	39.0	60	0.0	85
HELENA	4.03	65.0	41.8	65	0.0	84
MICMAC	4.22	64.0	40.4	72	0.7	86
MORRISON	4.31	64.7	43.1	66	0.2	86
RODEO	4.16	63.9	42.4	69	0.0	86
SYMKO	4.11	64.9	42.2	71	0.0	85
WINTHROP	3.89	62.2	39.7	68	0.0	85
CHAPAIS	4.10	58.2	41.7	69	0.0	83
ETIENNE	3.52	59.1	36.1	79	0.2	83
JOLY	3.36	56.8	34.4	78	0.7	83
LEGER	3.80	58.7	33.6	78	0.5	83
MASKOT	3.62	61.4	36.8	79	0.3	83
MINGO	3.40	59.7	36.9	81	2.8	82
OAC KIPPEN	3.97	62.1	37.2	81	0.0	82
SABINA	3.80	60.7	37.3	81	0.2	84
SOPHIE	3.47	55.7	35.4	83	2.8	85

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

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY a/ DAYS	MILDEW 0-9*
ALBANY	4.18	63.6	43.9	66	0.7	87	0.0
BIRKA	4.16	65.3	41.4	69	0.6	88	0.0
HELENA	4.10	65.7	43.9	70	0.4	86	0.4
MICMAC	4.23	63.8	40.6	76	1.2	87	0.4
RODEO	4.18	64.5	43.7	72	0.5	87	0.0
JOLY	3.65	57.3	37.3	82	1.5	85	1.5
LEGER	4.00	59.3	36.1	84	1.2	85	5.0
MINGO	3.57	60.6	38.6	86	2.7	84	4.8
OAC KIPPEN	4.13	62.4	38.8	84	0.8	85	0.0
SOPHIE	3.55	56.4	37.8	88	3.2	87	4.3

a/ no. of days from seeding to maturity
* 1987, 1989 data only

TESTING AREA IV
BARLEY
YIELD in kg per ha, 1989

CULTIVAR	WELLINGTON I	PERTH *	AVERAGE			
			t/ha	lbs/a	bu/a	RANK
ALBANY	5134	4368	5.13	4569	95.2	2
BIRKA	5099	5163	5.10	4538	94.5	3
CRAIG	4861	4154	4.86	4326	90.1	8
HARRINGTON	4156	3295	4.16	3699	77.1	15
HELENA	4883	5575	4.88	4346	90.5	7
MICMAC	5203	5457	5.20	4631	96.5	1
MORRISON	4963	4771	4.96	4417	92.0	4
RODEO	4771	5209	4.77	4246	88.5	10
SYMKO	4942	4998	4.94	4398	91.6	6
WINTHROP	4547	5032	4.55	4047	84.3	13
AB 93-2	4638	4067	4.64	4128	86.0	12
AB 94-11	4961	5619	4.96	4415	92.0	5
TBR 579-5	4777	5769	4.78	4252	88.6	9
CHAPAIS	4683	5970	4.68	4168	86.8	11
ETIENNE	3414	6060	3.41	3038	63.3	24
JOLY	3627	6098	3.63	3228	67.3	21
LEGER	4123	4666	4.12	3669	76.4	16
MASKOT	3800	5487	3.80	3382	70.5	19
MINGO	3619	5441	3.62	3221	67.1	22
OAC KIPPEN	4459	6432	4.46	3968	82.7	14
SABINA	4070	5619	4.07	3622	75.5	17
SOPHIE	3790	5278	3.79	3373	70.3	20
OS 84-696	3595	4692	3.60	3200	66.7	23
TBP 854-35	3966	5685	3.97	3530	73.5	18
MEAN	4419	5204	4.42	3933	81.9	--
C.V.%	5.8	28.7	--	--	--	--
L.S.D.(0.05)	361	2106	--	--	--	--

* data not included in mean

TESTING AREA V
BARLEY
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (3)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	HEIGHT cm (3)	LODGING 0-9 (4)	MATURITY a/ DAYS (3)
ALBANY	4.62	60.4	47.5	77	2.1	92
BIRKA	4.60	61.1	49.4	78	0.8	95
CRAIG	4.97	60.1	45.5	79	1.8	94
HARRINGTON	4.63	60.3	47.6	80	2.9	94
HELENA	4.32	61.2	47.1	75	0.9	93
MICMAC	4.78	60.5	48.0	83	2.0	94
MORRISON	5.12	61.2	48.0	79	1.6	93
RODEO	4.79	61.1	48.4	81	1.7	94
SYMKO	4.94	61.7	49.2	81	1.7	94
WINTHROP	4.97	61.2	47.6	83	1.5	95
AB 93-2	4.92	61.8	47.8	82	2.0	93
AB 94-11	4.77	61.6	49.6	82	2.4	92
TBR 579-5	4.95	60.3	48.7	78	2.8	93
CHAPAIS	5.28	60.0	48.2	82	1.2	93
ETIENNE	5.04	57.1	45.0	88	0.8	94
JOLY	5.60	57.6	41.9	88	2.9	93
LEGER	5.05	57.9	42.9	97	2.5	93
MASKOT	4.82	59.1	45.5	93	1.3	94
MINGO	4.87	60.9	46.1	93	2.6	93
OAC KIPPEN	4.90	58.7	43.5	89	1.9	91
SABINA	5.83	61.5	48.2	92	0.9	94
SOPHIE	4.76	56.8	43.5	95	2.3	94
OS 84-696	5.36	62.3	50.1	90	2.4	94
TBP 854-35	4.00	59.4	50.5	92	1.5	94

a/ no. of days from seeding to maturity
* no. of locations

TESTING AREA V
BARLEY
AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	4.09	60.5	42.5	71	2.1	94
BIRKA	4.10	62.1	43.6	70	1.4	96
CRAIG	4.40	61.2	40.5	71	1.8	94
HELENA	3.99	62.7	43.0	67	1.3	94
MICMAC	4.35	60.8	43.2	76	2.3	95
MORRISON	4.50	60.5	43.3	71	1.8	94
RODEO	4.21	61.2	42.6	74	1.9	95
SYMKO	4.34	60.3	43.9	74	1.6	95
WINTHROP	4.52	61.2	42.4	76	1.4	95
CHAPAIS	4.39	57.8	43.8	69	0.9	94
ETIENNE	4.40	57.4	40.4	78	1.0	95
JOLY	4.50	56.6	37.4	78	2.8	94
LEGER	4.41	57.8	39.4	87	2.1	94
MASKOT	4.31	59.8	39.9	83	0.9	95
MINGO	4.30	60.3	42.0	85	2.3	94
OAC KIPPEN	4.48	59.7	39.6	83	1.5	93
SABINA	4.97	60.8	42.0	82	0.9	95
SOPHIE	4.26	56.5	38.6	85	2.9	96

a/ no. of days from seeding to maturity

AGRNOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	3.91	60.8	42.1	70	2.0	95
BIRKA	3.91	62.6	42.1	71	1.5	97
HELENA	3.83	63.2	42.5	68	1.7	94
MICMAC	4.07	61.4	42.3	76	2.7	96
RODEO	4.03	61.8	41.3	74	1.8	95
JOLY	4.31	56.7	36.5	79	3.0	95
LEGER	4.27	58.9	38.6	86	2.4	95
MINGO	4.16	61.0	40.8	85	2.5	95
OAC KIPPEN	4.31	60.3	37.8	84	2.2	94
SOPHIE	4.08	57.1	37.8	85	3.3	97

a/ no. of days from seeding to maturity

TESTING AREA V
BARLEY
YIELD in kg per ha, 1989

CULTIVAR	ALGOMA*	TEMIS-KAMING	NIPIS-SING DISTRICT	RAINY RIVER DISTRICT	Average t/ha	Average lbs/a	Average bu/a	RANK
ALBANY	2033	6666	3977	3216	4.62	4112	85.7	21
BIRKA	2351	6892	3568	3328	4.60	4090	85.2	22
CRAIG	2262	7286	3997	3616	4.97	4420	92.1	9
HARRINGTON	2188	6829	3690	3377	4.63	4122	85.9	20
HELENA	2030	6758	3145	3052	4.32	3843	80.1	23
MICMAC	2305	6772	3463	4095	4.78	4252	88.6	17
MORRISON	2390	7018	4220	4110	5.12	4553	94.9	5
RODEO	2276	7016	3586	3766	4.79	4262	88.8	16
SYMKO	2380	6765	4229	3821	4.94	4395	91.6	11
WINTHROP	2016	7300	3973	3643	4.97	4425	92.2	8
AB 93-2	--	7206	3638	3925	4.92	4381	91.3	12
AB 94-11	--	6908	3730	3657	4.77	4241	88.4	18
TBR 579-5	--	7132	3767	3952	4.95	4405	91.8	10
CHAPAIS	2470	7787	3878	4185	5.28	4702	98.0	4
ETIENNE	2633	7135	4648	3324	5.04	4482	93.4	7
JOLY	2519	8516	3630	4657	5.60	4985	103.9	2
LEGER	2507	7611	3785	3754	5.05	4494	93.6	6
MASKOT	2571	7486	3646	3332	4.82	4291	89.4	15
MINGO	2482	7109	3715	3728	4.87	4335	90.3	14
OAC KIPPEN	2590	6989	3851	3852	4.90	4358	90.8	13
SABINA	2470	8606	4447	4432	5.83	5187	108.1	1
SOPHIE	2832	6942	3088	4262	4.76	4240	88.3	19
OS 84-696	--	8000	3862	4231	5.36	4774	99.5	3
TBP 854-35	--	6710	2509	2772	4.00	3557	74.1	24
MEAN	2383	7227	3754	3754	4.91	4371	91.1	
C.V.%	13.1	11.5	13.4	11.2	--	--	--	--
L.S.D.(0.05)	441	505	307	257	--	--	--	--

*data not included in mean

TESTING AREA VI
BARLEY
AGRONOMIC DATA, 1989

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)
ALBANY	5.74	71.0	45.4	82	1.0	97
BIRKA	4.48	72.3	42.6	89	6.3	101
CRAIG	5.81	73.0	42.2	81	2.3	98
HARRINGTON	5.95	67.1	42.8	83	6.0	97
HELENA	5.48	72.7	43.8	88	3.8	98
MICMAC	5.77	71.0	41.2	85	4.0	98
MORRISON	6.12	72.2	47.5	83	3.3	98
RODEO	5.73	71.4	44.6	89	2.5	98
SYMKO	5.75	72.8	47.1	86	2.5	98
WINTHROP	5.74	70.8	44.3	83	3.5	97
AB 93-2	5.37	70.5	42.9	83	4.5	97
AB 94-11	5.94	72.1	46.4	86	3.3	97
TBR 579-5	5.57	71.6	46.7	86	3.0	97
CHAPAIS	6.00	67.1	47.4	88	1.8	97
ETIENNE	6.13	67.5	41.1	88	3.5	97
JOLY	6.45	68.9	42.6	93	3.3	97
LEGER	6.40	67.5	39.3	99	4.0	98
MASKOT	5.91	69.8	40.3	98	3.3	97
MINGO	5.57	70.6	41.6	97	4.0	97
OAC KIPPEN	5.21	65.5	39.3	91	4.8	97
SABINA	6.01	70.8	39.4	93	3.8	97
SOPHIE	5.17	65.7	37.4	95	5.8	101
OS 84-696	5.27	70.7	44.1	95	5.0	99
TBP 854-35	5.10	68.3	47.0	95	5.5	99

a/ no. of days from seeding to maturity
* no. of locations

TESTING AREA VI
BARLEY
AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	5.06	67.4	43.7	69	1.0	98
BIRKA	4.16	67.9	44.0	73	4.1	101
CRAIG	5.02	68.3	40.7	70	1.4	99
HELENA	4.72	67.9	42.6	71	2.0	98
MICMAC	5.05	67.7	41.8	75	2.5	98
MORRISON	5.50	68.7	45.4	71	2.0	98
RODEO	5.15	67.5	43.1	76	1.5	98
SYMKO	5.18	68.5	44.6	76	1.6	98
WINTHROP	5.26	67.6	43.9	73	2.0	97
CHAPAIS	5.30	64.0	45.2	72	1.5	98
ETIENNE	5.36	64.4	40.8	75	2.0	98
JOLY	5.71	65.0	40.2	80	2.2	95
LEGER	5.80	64.6	38.4	86	2.8	98
MASKOT	5.56	66.4	39.8	82	1.9	98
MINGO	5.26	66.3	40.5	84	3.4	97
OAC KIPPEN	4.73	63.3	37.5	80	3.7	98
SABINA	5.42	66.4	39.6	81	2.3	98
SOPHIE	4.94	63.2	36.9	82	3.7	101

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
ALBANY	4.15	65.7	41.5	68	2.5	101
BIRKA	3.47	66.9	42.3	70	4.4	104
HELENA	3.88	66.9	41.3	68	3.3	101
MICMAC	4.08	65.9	40.1	72	3.2	101
RODEO	4.18	65.9	41.4	72	2.5	101
JOLY	4.70	63.4	39.1	76	3.2	101
LEGER	4.81	63.8	37.4	82	3.9	101
MINGO	4.30	64.9	39.1	80	4.6	100
OAC KIPPEN	4.05	63.2	35.8	77	4.3	101
SOPHIE	4.05	61.8	36.5	80	4.2	104

a/ no. of days from seeding to maturity

TESTING AREA VI
BARLEY
YIELD in kg per ha, 1989

CULTIVAR	COCHRANE	Average t/ha	Average lbs/a	Average bu/a	RANK
ALBANY	5739	5.74	5108	106.4	13
BIRKA	4484	4.48	3991	83.1	24
CRAIG	5812	5.81	5173	107.8	10
HARRINGTON	5951	5.95	5296	110.3	7
HELENA	5480	5.48	4877	101.6	18
MICMAC	5766	5.77	5132	106.9	11
MORRISON	6117	6.12	5444	113.4	4
RODEO	5729	5.73	5099	106.2	15
SYMKO	5748	5.75	5116	106.6	12
WINTHROP	5739	5.74	5108	106.4	13
AB 93-2	5370	5.37	4779	99.6	19
AB 94-11	5942	5.94	5288	110.2	8
TBR 579-5	5573	5.57	4960	103.3	16
CHAPAIS	5997	6.00	5337	111.2	6
ETIENNE	6126	6.13	5452	113.6	3
JOLY	6449	6.45	5740	119.6	1
LEGER	6403	6.40	5699	118.7	2
MASKOT	5905	5.91	5255	109.5	9
MINGO	5573	5.57	4960	103.3	16
OAC KIPPEN	5213	5.21	4640	96.7	21
SABINA	6006	6.01	5345	111.4	5
SOPHIE	5167	5.17	4599	95.8	22
OS 84-696	5268	5.27	4689	97.7	20
TBP 854-35	5102	5.10	4541	94.6	23
MEAN	5627	5.63	5008	104.3	--
C.V.%	6.6	--	--	--	--
L.S.D.(0.05)	368	--	--	--	--

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1989

OATS

Baldwin - a Quebec (MacDonald College) selection from the cross Laurent/Q051.42. An early maturing oat with high yield, and good hectaliter 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.

Dumont - a Winnipeg selection from the cross Harmon HAM/Double Cross 7 with very good resistance to leaf rust, stem rust and smut. High yield, large kernels, later than Oxford. Registered in 1982.

Marion - a Quebec (Sainte-Foy) high yielding, early selection from the cross Q0130.4/Q051.27. Maturity range between Ogle and OAC Woodstock. Large kernels, high hectoliter 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.

Robert (OT238)- a newly registered oat cultivar developed by Agriculture Canada, Winnipeg with good crown and stem rust resistance. It has shown good yield potential and high hectoliter weight in Ontario. Kernels are tan colored. Registered in 1988.

Tibor - a hulless (naked) Ottawa selection with a complex parentage. Compared to Terra, it has higher groat yield, thousand kernel weight, hectoliter 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.

OA683-5 - an advanced line from the Agriculture Canada program in Ottawa.

OATS
MEAN YIELDS IN DIFFERENT AREAS*, 1989

CULTIVAR	I (1)** t/ha	RANK	II (3) t/ha	RANK	III (3) t/ha	RANK	IV (1) t/ha	RANK	V (2) t/ha	RANK	VI (1) t/ha	RANK	Province***(11) t/ha	lbs/a
BALDWIN	2.70	6	3.63	3	4.15	4	3.72	5	5.37	2	4.88	1	4.13	3678
DONALD	3.46	4	3.36	6	3.79	6	3.14	8	3.83	7	3.65	8	3.59	3197
DUMONT	2.00	8	2.92	8	3.59	8	3.37	6	3.72	8	4.07	7	3.31	2947
MARION	4.12	2	3.50	4	4.25	3	4.04	3	6.22	1	4.76	2	4.42	3936
NEWMAN	3.76	3	3.88	2	4.33	2	4.79	1	5.01	3	4.75	3	4.36	3882
OAC WOODSTOCK	2.15	7	3.26	7	3.83	5	4.08	2	4.96	4	4.44	4	3.81	3393
OGLE	4.36	1	4.11	1	4.40	1	3.78	4	4.96	4	4.30	6	4.35	3874
OXFORD	3.27	5	3.49	5	3.68	7	3.34	7	4.87	6	4.31	5	3.83	3411
TIBOR[1]	1.24	9	2.49	9	2.62	9	3.03	9	2.96	9	3.01	9	2.59	2306
MEAN	3.01	--	3.40	--	3.85	--	3.70	--	4.66	--	4.24	--	3.82	3403

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

RELATIVE OAT YIELDS, 1989

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
BALDWIN	89	107	108	101	115	115	108
DONALD	115	99	98	85	82	86	94
DUMONT	66	86	93	91	80	96	87
MARION	137	103	110	109	133	112	116
NEWMAN	125	114	112	129	108	112	114
OAC WOODSTOCK	71	96	99	110	106	105	100
OGLE	145	121	114	102	106	101	114
OXFORD	109	103	96	90	105	102	100
TIBOR[1]	41	73	68	82	64	71	68
MEAN YIELD t/ha	3.01	3.40	3.85	3.70	4.66	4.24	3.82

[1] hulless oats

OATS
MEAN YIELDS IN DIFFERENT AREAS*, 1989

CULTIVAR	I (1)** t/ha	RANK	II (3) t/ha	RANK	III (3) t/ha	RANK	IV (1) t/ha	RANK	V (2) t/ha	RANK	VI (1) t/ha	RANK	Province***(11) t/ha	lbs/a
BALDWIN	2.70	9	3.63	6	4.15	7	3.72	7	5.37	5	4.88	3	4.13	3678
DONALD	3.46	7	3.36	9	3.79	9	3.14	11	3.83	10	3.65	6	3.59	3197
DUMONT	2.00	11	2.92	11	3.59	11	3.37	8	3.72	11	4.07	11	3.31	2947
MARION	4.12	4	3.50	7	4.25	6	4.04	4	6.22	2	4.76	4	4.42	3936
NEWMAN	3.76	6	3.88	4	4.33	4	4.79	1	5.01	6	4.75	5	4.36	3882
OAC WOODSTOCK	2.15	10	3.26	10	3.83	8	4.08	3	4.96	7	4.44	8	3.81	3393
OGLE	4.36	3	4.11	2	4.40	3	3.78	6	4.96	7	4.30	10	4.35	3874
OXFORD	3.27	8	3.49	8	3.68	10	3.34	9	4.87	9	4.31	9	3.83	3411
ROBERT	4.37	2	4.04	3	4.41	2	4.27	2	6.02	3	4.62	7	4.61	4105
TIBOR[1]	1.24	12	2.49	12	2.62	12	3.03	12	2.96	12	3.01	12	2.59	2306
ULTIMA	4.06	5	4.16	1	4.81	1	3.87	5	6.44	1	6.03	1	4.89	4354
OA 683-5	4.64	1	3.70	5	4.28	5	3.15	10	5.48	4	5.02	2	4.34	3865
MEAN	3.34	--	3.55	--	4.01	--	3.72	--	4.99	--	4.49	--	4.02	3579

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

OATS
MEAN YIELDS, 1988-89

CULTIVAR	I (3) * t/ha	I (3) * RANK	II (7) t/ha	II (7) RANK	III (9) t/ha	III (9) RANK	IV (6) t/ha	IV (6) RANK	V (6) t/ha	V (6) RANK	VI (2) t/ha	VI (2) RANK	Province (33) t/ha	Province (33) lbs/ac
BALDWIN	2.61	7	3.19	4	4.02	2	3.65	5	4.61	3	4.80	2	3.82	3402
DONALD	3.44	5	2.95	7	3.53	9	3.14	9	3.43	9	4.10	8	3.36	2992
DUMONT	2.35	8	2.70	9	3.55	8	3.30	8	3.66	8	4.01	9	3.27	2912
MARION	3.81	1	3.28	3	4.01	3	3.84	3	5.10	2	4.49	4	4.03	3589
NEWMAN	3.61	4	3.19	4	3.86	5	4.01	1	4.12	6	4.54	3	3.79	3375
OAC WOODSTOCK	2.23	9	2.90	8	3.62	7	3.68	4	4.28	4	4.30	5	3.50	3117
OGLE	3.80	2	3.49	2	3.89	4	3.58	6	4.07	7	4.12	7	3.79	3375
OXFORD	2.96	6	2.99	6	3.67	6	3.31	7	4.27	5	4.24	6	3.56	3170
TIBOR[1]	1.29	10	2.09	10	2.61	10	2.69	10	2.76	10	2.76	10	2.51	2235
ULTIMA	3.72	3	3.54	1	4.36	1	3.87	2	5.33	1	5.59	1	4.33	3856
MEAN	2.98	--	3.03	--	3.71	--	3.51	--	4.16	--	4.30	--	3.60	3206

* no. of locations
[1] hulless oats

RELATIVE OAT YIELDS, 1988-89

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
BALDWIN	88	105	108	104	111	112	106
DONALD	115	97	95	89	82	95	93
DUMONT	79	89	96	94	88	93	91
MARION	128	108	108	109	123	104	112
NEWMAN	121	105	104	114	99	106	105
OAC WOODSTOCK	75	96	98	105	103	100	97
OGLE	128	115	105	102	98	96	105
OXFORD	99	99	99	94	103	99	99
TIBOR[1]	43	69	70	77	66	64	70
ULTIMA	125	117	118	110	128	130	120
MEAN YIELD t/ha	2.98	3.03	3.71	3.51	4.16	4.30	3.60

[1] hulless oats

OATS
MEAN YIELDS, 1987-89

CULTIVAR	I (5) * t/ha	RANK	II (19) t/ha	RANK	III (12) t/ha	RANK	IV (12) t/ha	RANK	V (9) t/ha	RANK	VI (5) t/ha	RANK	Province (62) t/ha	lbs/ac
BALDWIN	3.20	5	3.15	3	3.87	2	3.75	3	4.16	2	4.17	1	3.66	3259
DONALD	3.66	3	2.95	4	3.48	4	3.27	7	3.52	6	3.48	7	3.29	2930
DUMONT	2.91	6	2.72	7	3.38	7	3.38	6	3.37	7	3.57	5	3.17	2823
MARION	4.10	1	3.17	2	3.88	1	3.84	1	4.67	1	3.96	2	3.82	3402
OAC WOODSTOCK	2.90	7	2.89	6	3.45	5	3.79	2	3.92	5	3.71	4	3.40	3028
OGLE	3.90	2	3.38	1	3.72	3	3.60	4	4.01	3	3.56	6	3.65	3250
OXFORD	3.37	4	2.92	5	3.48	6	3.50	5	3.95	4	3.78	3	3.42	3045
TIBOR[1]	1.73	8	2.14	8	2.53	8	2.70	8	2.56	8	2.51	8	2.43	2164
MEAN	3.22	--	2.92	--	3.47	--	3.48	--	3.77	--	3.59	--	3.36	2992

* no. of locations
[1] hulless oats

RELATIVE OAT YIELDS

CULTIVAR	I	II	III	IV	V	VI	PROVINCE
BALDWIN	99	108	112	108	110	116	109
DONALD	114	101	100	94	93	97	98
DUMONT	90	93	97	97	89	99	94
MARION	127	109	112	110	124	110	114
OAC WOODSTOCK	90	99	99	109	104	103	101
OGLE	121	116	107	103	106	99	109
OXFORD	105	100	100	101	105	105	102
TIBOR[1]	54	73	73	78	68	70	72
MEAN YIELD t/ha	3.22	2.92	3.47	3.48	3.77	3.59	3.36

[1] hulless oats

TESTING AREA I
OATS
AGRONOMIC DATA, 1989

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)
BALDWIN	2.70	44.3	29.2	128	6	101
DONALD	3.46	42.6	32.9	119	6	102
DUMONT	2.00	42.2	27.5	117	3	105
MARION	4.12	44.2	34.9	124	6	103
NEWMAN	3.76	42.5	34.6	115	4	101
OAC WOODSTOCK	2.15	39.3	28.3	122	7	104
OGLE	4.36	43.2	30.1	115	0	101
OXFORD	3.27	42.7	30.0	115	0	104
ROBERT	4.37	45.0	38.8	114	1	105
TIBOR	1.24	54.6	28.8	129	4	102
ULTIMA	4.06	40.0	31.6	121	3	103
OA 683-5	4.64	44.7	34.3	124	0	104

a/ no. of days from seeding to maturity
* no. of locations

AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
BALDWIN	2.61	45.0	30.4	110	4.0	102
DONALD	3.44	46.1	34.9	103	3.5	103
DUMONT	2.35	44.3	28.8	100	2.0	106
MARION	3.81	44.4	35.1	109	3.5	104
NEWMAN	3.61	46.0	36.5	101	2.5	103
OAC WOODSTOCK	2.23	40.6	29.4	105	3.5	105
OGLE	3.80	43.4	30.3	96	0.0	102
OXFORD	2.96	41.9	29.6	103	0.5	106
TIBOR	1.29	55.7	25.4	111	2.5	104
ULTIMA	3.72	42.0	31.0	100	1.5	105

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
BALDWIN	3.20	46.0	33.0	107	3.3	106
DONALD	3.66	47.3	37.9	100	2.7	107
DUMONT	2.91	44.7	31.8	97	2.2	109
MARION	4.10	44.6	37.0	106	2.0	108
OAC WOODSTOCK	2.90	42.6	31.8	102	2.9	108
OGLE	3.90	44.0	31.3	92	0.2	106
OXFORD	3.37	42.6	31.7	94	0.3	109
TIBOR	1.73	55.3	27.3	108	2.0	107

a/ no. of days from seeding to maturity

TESTING AREA I
OATS
YIELD in kg per ha, 1989

CULTIVAR	KENT I	Average t/ha	lbs/a	bu/a	RANK
BALDWIN	2702	2.70	2404	70.7	9
DONALD	3461	3.46	3081	90.6	7
DUMONT	1999	2.00	1781	52.4	11
MARION	4117	4.12	3722	109.5	4
NEWMAN	3759	3.76	3348	98.5	6
OAC WOODSTOCK	2145	2.15	1915	56.3	10
OGLE	4359	4.36	3882	114.2	3
OXFORD	3273	3.27	2912	85.6	8
ROBERT	4369	4.37	3891	114.4	2
TIBOR	1243	1.24	1104	--	12
ULTIMA	4063	4.06	3615	106.3	5
OA683-5	4643	4.64	4132	121.5	1
MEAN	3345	3.34	2983	92.7	--
C.V.%	15.1	--	--	--	--
L.S.D.(0.05)	578	--	--	--	--

TESTING AREA II
OATS
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (3)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	HEIGHT cm (3)	LODGING 0-9 (2)	MATURITY a/ DAYS (2)	LEAF RUST 0-9 (3)	SEPTORIA 0-9 (2)
BALDWIN	3.63	45.3	30.0	115	4.4	90	5.8	6.3
DONALD	3.36	45.9	31.0	104	3.8	91	6.1	6.8
DUMONT	2.92	46.1	29.7	103	6.3	97	0.2	6.9
MARION	3.50	48.6	37.3	109	4.7	90	4.7	6.9
NEWMAN	3.88	49.5	37.7	99	4.7	92	0.0	7.8
OAC WOODSTOCK	3.26	46.0	30.3	106	3.9	96	1.8	4.9
OGLE	4.11	48.4	30.8	93	1.7	89	4.2	4.5
OXFORD	3.49	43.7	31.0	108	1.4	96	4.6	6.0
ROBERT	4.04	50.3	36.0	97	3.4	94	0.0	5.3
TIBOR	2.49	56.4	27.8	119	3.7	89	4.3	6.2
ULTIMA	4.16	47.4	32.0	96	3.5	93	3.1	5.5
OA 683-5	3.70	49.3	36.3	97	2.8	95	5.4	6.0

a/ no. of days from seeding to maturity
* no. of locations

AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS	SEPTORIA 0-9
BALDWIN	3.19	47.5	33.3	102	3.5	89	3.5
DONALD	2.95	47.9	35.1	93	2.6	90	3.8
DUMONT	2.70	47.9	33.6	93	4.2	95	3.8
MARION	3.28	47.1	37.6	98	3.0	89	3.9
NEWMAN	3.19	50.3	37.9	91	3.0	91	4.3
OAC WOODSTOCK	2.90	46.8	32.9	96	2.4	94	2.5
OGLE	3.49	47.4	31.3	84	0.9	88	2.3
OXFORD	2.99	44.8	32.1	92	1.3	95	3.1
TIBOR	2.09	55.6	27.8	102	3.1	89	3.2
ULTIMA	3.54	46.9	33.6	87	2.5	92	--

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS	SEPTORIA 0-9
BALDWIN	3.15	47.3	32.2	101	3.6	91	4.0
DONALD	2.95	48.6	37.5	89	2.8	90	5.3
DUMONT	2.72	47.2	32.6	90	4.2	94	5.0
MARION	3.17	47.5	38.5	96	3.4	90	4.2
OAC WOODSTOCK	2.89	47.0	33.8	93	2.6	93	3.2
OGLE	3.38	47.6	32.9	80	1.4	88	3.3
OXFORD	2.92	44.2	31.5	89	1.6	94	3.2
TIBOR	2.14	56.6	28.6	100	2.8	90	4.0

a/ no. of days from seeding to maturity

TESTING AREA II
OATS
YIELD in kg per ha, 1989

CULTIVAR	OXFORD	MIDDLESEX I	HURON	Average t/ha	Average lbs/a	Average bu/a	RANK
BALDWIN	2955	4002	3937	3.63	3232	95.0	6
DONALD	2502	3368	4216	3.36	2992	88.0	9
DUMONT	2816	3169	2785	2.92	2601	76.5	11
MARION	3022	3531	3934	3.50	3111	91.5	7
NEWMAN	3575	3568	4502	3.88	3455	101.6	4
OAC WOODSTOCK	3304	2934	3531	3.26	2898	85.2	10
OGLE	3523	4238	4564	4.11	3656	107.5	2
OXFORD	2910	4021	3531	3.49	3103	91.3	8
ROBERT	4155	3803	4165	4.04	3596	105.8	3
TIBOR	1824	2608	3032	2.49	2214	--	12
ULTIMA	3707	4111	4654	4.16	3700	108.8	1
OA 683-5	3230	3586	4292	3.70	3296	96.9	5
MEAN	3126	3579	3929	3.55	3159	95.3	--
C.V.%	9.9	12.9	8.0	--	--	--	--
L.S.D. (0.05)	445	668	451	--	--	--	--

TESTING AREA III
OATS
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (3)*	hl/wt kg (4)	KERNEL WEIGHT g/1000 (4)	HEIGHT cm (4)	LODGING 0-9 (2)	MATURITY a/ DAYS (3)
BALDWIN	4.15	45.3	30.7	95	4.0	94
DONALD	3.79	44.0	35.1	88	3.8	92
DUMONT	3.59	42.7	29.2	87	1.0	93
MARION	4.25	46.0	36.0	96	5.5	92
NEWMAN	4.33	44.3	36.0	88	2.5	92
OAC WOODSTOCK	3.83	43.0	31.3	95	2.8	93
OGLE	4.40	45.1	30.3	78	2.0	88
OXFORD	3.68	40.4	28.8	91	1.0	93
ROBERT	4.41	45.7	36.4	83	0.3	92
TIBOR	2.62	48.9	26.5	95	1.5	95
ULTIMA	4.81	44.9	33.5	83	0.8	90
OA 683-5	4.28	45.0	35.6	85	1.8	91

a/ no. of days from seeding to maturity
* no. of locations

AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
BALDWIN	4.02	47.6	34.1	100	3.5	94
DONALD	3.53	46.9	34.7	88	3.2	93
DUMONT	3.55	45.7	30.6	90	2.3	94
MARION	4.01	46.9	35.7	98	4.3	93
NEWMAN	3.86	47.4	36.2	89	2.5	93
OAC WOODSTOCK	3.62	44.3	30.5	95	2.8	94
OGLE	3.89	46.5	29.6	79	1.7	90
OXFORD	3.67	43.3	28.9	91	1.5	94
TIBOR	2.61	51.5	28.6	98	1.9	95
ULTIMA	4.36	45.6	32.3	85	1.4	92

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
BALDWIN	3.87	48.2	33.4	73	3.9	93
DONALD	3.48	47.9	34.5	65	3.6	93
DUMONT	3.38	45.8	30.7	65	3.6	94
MARION	3.88	47.0	35.5	70	4.2	93
OAC WOODSTOCK	3.45	45.0	31.2	69	3.3	94
OGLE	3.72	46.6	30.0	57	2.0	90
OXFORD	3.48	43.7	29.3	66	1.9	94
TIBOR	2.53	52.8	29.6	73	2.2	94

a/ no. of days from seeding to maturity

TESTING AREA III
OATS
YIELD in kg per ha, 1989

CULTIVAR	CARLTON	RENFREW*	LANARK	PRESCOTT	Average t/ha	Average lbs/a	Average bu/a	RANK
BALDWIN	3422	2546	4040	5000	4.15	3697	108.7	7
DONALD	2811	1720	3544	5000	3.79	3369	99.1	9
DUMONT	2742	2482	3123	4800	3.56	3167	93.1	11
MARION	3218	2676	4040	5500	4.25	3785	111.3	6
NEWMAN	3265	2265	4314	5400	4.33	3850	113.2	4
OAC WOODSTOCK	3120	2898	2962	5400	3.83	3406	100.2	8
OGLE	3113	2007	4287	5800	4.40	3916	115.2	3
OXFORD	2633	2522	3202	5200	3.68	3273	96.3	10
ROBERT	3224	2687	4690	5300	4.41	3920	115.2	2
TIBOR	2065	1809	2584	3200	2.62	2328	--	12
ULTIMA	4102	3002	4438	5900	4.81	4284	126.0	1
OA 683-5	3250	2905	4076	5500	4.28	3805	111.9	5
MEAN	3081	2457	3775	5200	4.01	3567	108.2	--
C.V.%	9.6	15.8	8.2	10.2	--	--	--	--
L.S.D. (0.05)	426	558	446	761	--	--	--	--

* data not included in mean

TESTING AREA IV
OATS
AGRONOMIC DATA, 1989

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	3.72	40.5	29.0	115	87	7.0	3.5
DONALD	3.14	38.1	27.0	105	86	6.5	1.5
DUMONT	3.37	39.9	28.6	100	89	0.0	1.0
MARION	4.04	44.9	32.8	110	85	6.0	3.0
NEWMAN	4.79	46.2	34.0	108	87	0.0	0.5
OAC WOODSTOCK	4.08	43.7	32.8	103	89	0.0	0.0
OGLE	3.78	42.4	32.0	91	84	3.5	2.0
OXFORD	3.34	36.2	26.2	98	90	4.0	2.5
ROBERT	4.27	45.5	32.4	93	90	0.0	1.0
TIBOR	3.03	49.3	23.4	108	88	4.0	1.0
ULTIMA	3.87	38.1	26.8	100	88	0.0	5.5
OA 683-5	3.15	38.1	32.2	98	89	5.0	1.0

a/ no. of days from seeding to maturity
* no. of locations

AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	MATURITY a/ DAYS	SEPTORIA 0-9
BALDWIN	3.65	44.9	33.8	98	85	3.3
DONALD	3.14	43.4	33.4	89	83	2.7
DUMONT	3.30	42.8	33.3	85	89	2.4
MARION	3.84	45.1	35.9	93	85	2.8
NEWMAN	4.01	47.5	39.0	89	84	2.3
OAC WOODSTOCK	3.68	44.4	35.0	89	88	1.3
OGLE	3.58	43.0	33.7	78	82	2.4
OXFORD	3.31	39.4	31.1	83	90	2.5
TIBOR	2.69	50.2	28.2	93	86	2.0
ULTIMA	3.87	40.9	33.0	83	87	4.7

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9*	MATURITY a/ DAYS	SEPTORIA 0-9
BALDWIN	3.75	46.3	33.1	104	2.8	88	3.6
DONALD	3.27	45.3	34.0	92	2.0	86	3.2
DUMONT	3.38	43.3	32.1	91	5.0	91	2.7
MARION	3.84	46.0	34.5	98	1.8	87	3.4
OAC WOODSTOCK	3.79	44.8	33.2	96	3.8	90	1.6
OGLE	3.60	43.7	33.0	81	0.0	85	0.7
OXFORD	3.50	41.2	30.0	91	1.1	91	2.5
TIBOR	2.70	53.2	27.7	99	0.6	88	2.6

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

TESTING AREA IV
OATS
YIELD in kg per ha, 1989

CULTIVAR	WELLINGTON I	Average t/ha	Average lbs/a	Average bu/a	RANK
BALDWIN	3723	3.72	3313	97.4	7
DONALD	3142	3.14	2796	82.2	11
DUMONT	3371	3.37	3000	88.2	8
MARION	4043	4.04	3598	105.8	4
NEWMAN	4787	4.79	4260	125.3	1
OAC WOODSTOCK	4078	4.08	3629	106.7	3
OGLE	3782	3.78	3366	99.0	6
OXFORD	3336	3.34	2969	87.3	9
ROBERT	4273	4.27	3803	111.9	2
TIBOR	3027	3.03	2694	--	12
ULTIMA	3870	3.87	3444	101.3	5
OA 683-5	3147	3.15	2801	82.4	10
MEAN	3715	3.72	3306	98.9	
C.V.%	15.8	--	--	--	--
L.S.D. (0.05)	845	--	--	--	--

TESTING AREA V
OATS
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha (2)*	hl/wt kg (3)	KERNEL WEIGHT g/1000 (3)	HEIGHT cm (2)	LODGING 0-9 (2)	MATURITY a/ DAYS (2)
BALDWIN	5.37	51.5	32.8	109	3.5	96
DONALD	3.83	49.0	35.3	99	4.0	98
DUMONT	3.72	49.5	33.7	97	2.5	99
MARION	6.22	53.2	39.2	104	2.5	97
NEWMAN	5.01	51.1	37.2	99	3.0	98
OAC WOODSTOCK	4.96	51.1	33.9	105	4.0	99
OGLE	4.96	50.3	33.3	85	0.0	98
OXFORD	4.87	48.6	31.0	101	0.5	99
ROBERT	6.02	51.5	36.4	98	1.0	99
TIBOR	2.96	62.3	32.4	107	1.5	96
ULTIMA	6.44	49.1	31.6	95	2.0	99
OA 683-5	5.48	48.6	37.5	96	1.5	100

a/ no. of days from seeding to maturity
* no. of locations

AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
BALDWIN	4.61	49.7	32.2	95	3.3	98
DONALD	3.43	47.6	33.7	86	3.4	99
DUMONT	3.66	48.2	31.8	84	3.7	100
MARION	5.10	49.9	36.1	91	3.1	98
NEWMAN	4.12	48.9	35.0	85	3.4	99
OAC WOODSTOCK	4.28	47.6	31.9	91	3.4	99
OGLE	4.07	47.7	30.1	76	0.3	97
OXFORD	4.27	46.5	29.5	87	1.0	99
TIBOR	2.76	58.7	30.3	94	1.5	99
ULTIMA	5.33	46.8	30.5	82	2.1	99

a/ no. of days from seeding to maturity

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	LODGING 0-9	MATURITY a/ DAYS
BALDWIN	4.16	48.2	31.5	61	2.8	99
DONALD	3.52	47.3	33.7	55	2.9	99
DUMONT	3.37	47.2	31.4	57	3.5	100
MARION	4.67	49.2	35.2	59	3.5	100
OAC WOODSTOCK	3.92	46.4	31.3	56	2.6	100
OGLE	4.01	47.3	30.1	52	0.3	98
OXFORD	3.95	45.1	29.7	56	1.6	101
TIBOR	2.56	56.8	30.0	64	1.2	99

a/ no. of days from seeding to maturity

TESTING AREA V
OATS
YIELD in kg per ha, 1989

CULTIVAR	ALGOMA*	TEMIS-KAMING	NIPIS-SING DISTRICT	RAINY RIVER* DISTRICT	Average t/ha	Average lbs/a	Average bu/a	RANK
BALDWIN	2269	6402	4339	3691	5.37	4779	140.6	5
DONALD	1813	5227	2422	2269	3.83	3409	100.3	10
DUMONT	1794	4576	2871	2593	3.72	3311	97.4	11
MARION	2103	7839	4594	3868	6.22	5536	162.8	2
NEWMAN	1600	6550	3471	3114	5.01	4459	131.1	6
OAC WOODSTOCK	1886	5523	4387	2911	4.96	4414	129.8	7
OGLE	1760	6863	3058	3206	4.96	4414	129.8	7
OXFORD	1810	6170	3565	2984	4.87	4334	127.5	9
ROBERT	2165	7491	4554	4105	6.02	5358	157.6	3
TIBOR	1306	3776	2134	1632	2.96	2634	--	12
ULTIMA	1938	7526	5346	3635	6.44	5732	168.6	1
OA 683-5	--	6908	4049	3354	5.48	4877	143.4	4
MEAN	1858	6238	3733	3113	4.99	4441	135.4	--
C.V.%	12.5	10.7	15.3	21.6	--	--	--	--
L.S.D.(0.05)	336	625	534	632	--	--	--	--

* data not included in mean

TESTING AREA VI
OATS
AGRONOMIC DATA, 1989

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)
BALDWIN	4.88	56.4	31.9	119	6.3	104
DONALD	3.65	55.2	32.0	113	5.5	103
DUMONT	4.07	48.2	30.4	109	4.8	106
MARION	4.76	52.9	34.7	112	5.0	102
NEWMAN	4.75	51.3	35.5	107	4.5	103
OAC WOODSTOCK	4.44	50.8	30.2	113	2.3	105
OGLE	4.30	49.0	27.1	93	1.3	102
OXFORD	4.31	49.1	30.1	109	1.8	104
ROBERT	4.62	51.6	32.9	105	2.0	103
TIBOR	3.01	61.6	29.6	118	1.5	104
ULTIMA	6.03	51.1	30.2	100	3.0	104
OA 683-5	5.02	52.5	36.8	109	3.8	104

a/ no. of days from seeding to maturity
* no. of locations

AGRONOMIC DATA, 1988-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	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
DUMONT	4.01	49.7	31.7	94	4.1	105
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

AGRONOMIC DATA, 1987-89

CULTIVAR	YIELD t/ha	hl/wt kg	KERNEL WEIGHT g/1000	HEIGHT cm	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
DUMONT	3.57	49.9	30.7	91	3.5	109
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

/ no. of days from seeding to maturity

TESTING AREA VI
OATS
YIELD in kg per ha, 1989

CULTIVAR	COCHRANE	Average t/ha	Average lbs/a	Average bu/a	RANK
BALDWIN	4881	4.88	4344	127.8	3
DONALD	3654	3.65	3252	95.6	11
DUMONT	4069	4.07	3621	106.5	10
MARION	4761	4.76	4237	124.6	4
NEWMAN	4751	4.75	4228	124.4	5
OAC WOODSTOCK	4438	4.44	3950	116.2	7
OGLE	4299	4.30	3826	112.5	9
OXFORD	4309	4.31	3835	112.8	8
ROBERT	4622	4.62	4114	121.0	6
TIBOR	3008	3.01	2677	--	12
ULTIMA	6034	6.03	5370	157.9	1
OA 683-5	5010	5.01	4459	131.1	2
MEAN	4558	4.56	4057	120.9	--
C.V.%	9.9	--	--	--	--
L.S.D.(0.05)	445	--	--	--	--

DESCRIPTION OF CULTIVARS IN REGIONAL TESTS, 1989

WINTER BARLEY

Huron - a six-rowed, early rough-awned Guelph selection with a high yield 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, 1989
TESTING AREA I, SUMMARY

CULTIVAR	YIELD t/ha (1)*	hl/wt kg (2)	KERNEL WEIGHT g/1000 (1)	WINTER SURVIVAL % (2)	HEIGHT cm (2)	LODGING 0-9 (1)	DATE HEAD JUNE (2)	DATE RIPE JULY (1)	MILDEW 0-9 (1)	SCALD 0-9 (1)
HURON	6.22	62.1	33.5	87	101	1.4	1	11	0.0	4
OAC HALTON	6.58	62.4	38.3	89	105	1.9	2	11	0.0	5
OAC ACTON	6.04	59.4	37.8	88	116	5.8	4	13	2.0	2
OAC ELMIRA	6.64	62.1	32.0	84	110	1.4	2	12	0.0	0

* no. of locations

TESTING AREA II, SUMMARY

CULTIVAR	YIELD t/ha (4)*	hl/wt kg (2)	KERNEL WEIGHT g/1000 (2)	WINTER SURVIVAL % (4)	HEIGHT cm (3)	LODGING 0-9 (2)	DATE HEAD JUNE (4)	DATE RIPE JULY (2)	MILDEW 0-9 (4)	SCALD 0-9 (2)	LEAF RUST 0-9
HURON	3.70	65.5	37.4	81	75	0.3	5	8	1.1	3.2	2.2
OAC HALTON	3.76	64.9	37.4	80	75	1.5	7	9	0.6	2.9	3.2
OAC ACTON	3.48	61.9	43.4	77	87	0.9	8	10	4.0	2.2	3.4
OAC ELMIRA	3.65	64.4	33.8	78	87	1.4	8	11	0.0	1.7	1.3

* no. of locations

TESTING AREA I & II t/ha

CULTIVAR	AREA I KENT II	AREA II WELLINGTON I	AREA II OXFORD	AREA II MIDDLESEX I	AREA II PERTH	MEAN AREA I&II
HURON	6.22	4.23	3.29	3.93	3.37	4.21
OAC HALTON	6.58	4.30	2.67	4.60	3.46	4.32
OAC ACTON	6.04	3.19	2.34	4.78	3.62	3.99
OAC ELMIRA	6.64	3.30	3.33	4.33	3.66	4.25
MEAN	6.37	3.76	2.91	4.41	3.53	4.19
C.V.%	10.2	10.0	6.7	16.5	6.0	10.1
L.S.D.(0.05)	1.0	.46	.24	1.2	.34	.59

WINTER BARLEY
TESTING AREA I & II
AGRONOMIC DATA, 1989

CULTIVAR	YIELD t/ha AREA I (1)*	YIELD t/ha AREA II (4)	YIELD t/ha MEAN (5)	hl/wt kg (4)	HEIGHT cm (5)	LODGING 0-9 (3)	WINTER SURVIVAL % (6)
HURON	6.22	3.70	4.21	63.8	86	0.6	83
OAC HALTON	6.58	3.76	4.32	63.6	87	1.3	83
OAC ACTON	6.04	3.48	3.99	60.7	99	2.5	81
OAC ELMIRA	6.64	3.65	4.25	63.3	96	1.4	80
MEAN	6.37	3.65	4.19	62.9	92	1.5	82

* no. of locations

AGRONOMIC DATA, 1985-89

CULTIVAR	YIELD t/ha AREA I (10)*	YIELD t/ha AREA II (16)	YIELD t/ha MEAN (21)	hl/wt kg	HEIGHT cm	LODGING 0-9	WINTER SURVIVAL %
HURON	4.55	3.85	4.20	63.1	88	--	83
OAC HALTON	5.14	4.18	4.66	63.8	91	--	85
OAC ACTON	5.00	4.13	4.57	60.0	100	--	83
OAC ELMIRA	5.22	4.45	4.84	63.6	99	--	84
MEAN	4.98	4.15	4.57	62.6	95	--	84

* no. of locations

AGRONOMIC DATA, 1983-89

CULTIVAR	YIELD t/ha AREA I (15)*	YIELD t/ha AREA II (25)	YIELD t/ha MEAN (40)	hl/wt kg	HEIGHT cm	LODGING 0-9	WINTER SURVIVAL %
HURON	4.38	4.00	4.19	62.9	89	--	80
OAC HALTON	4.93	4.32	4.63	63.3	92	--	83
OAC ACTON	4.87	4.35	4.61	60.4	101	--	83
MEAN	4.73	4.22	4.48	62.2	94	--	82

* no. of locations

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

DESCRIPTION OF VARIETIES TESTED

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 WITH A TENDENCY TO 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 WITH 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.

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

DESCRIPTION OF VARIETIES TESTED

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.

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 WITH REASONABLE LODGING RESISTANCE. SUPERIOR TO OTHER RECOMMENDED VARIETIES IN MILDEW RESISTANCE HOWEVER IT IS SLIGHTLY MORE SUSCEPTIBLE TO LEAF RUST THAN THE OTHER CULTIVARS.

OT.90.4.1
8077B92-1/TECUMSEH//FREDRICK - FROM AGRICULTURE CANADA HARROW 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.

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

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
HT - HEIGHT (CM)
HD - HEADING
MIL - MILDEW
LRS - LEAF RUST
SEP - SEPTORIA
GLB - GLUME BLOTCH
HBL - HEAD BLIGHT (% DISEASED HEADS)
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
DI	DELHI
EA	ELORA
HW	HARROW
ID	INWOOD
KE	KEMPTVILLE
KN	KIPPEN
LN	LONDON
MN	MALDEN
MH	MORPETH
NN	NAIRN
O1	OTTAWA-1
O2	OTTAWA-2
RW	RENFREW
RN	RIDGETOWN
WE	WOODSLEE
WK	WOODSTOCK

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

TRAIT : YIELD
YEAR(S): 86-89
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	MN86N	WE86N	ID86N	RN86N	MH86N	DI86N	HW87N	ID87N	MH87N	RN87N
1 FREDRICK	5.47	3.32	2.80	3.49	3.88	2.99	3.07	4.50	4.35	5.48
2 HOUSER	4.82	3.09	3.02	3.22	3.88	3.88	3.11	3.92	3.29	5.67
3 AUGUSTA	5.21	3.10	2.96	3.11	4.07	4.27	3.58	4.79	4.83	6.02
4 FRANKENMUTH	4.79	2.87	3.00	3.13	3.99	3.68	3.33	4.31	4.44	5.57
5 HARUS	5.84	3.57	3.57	3.76	4.22	3.06	3.46	4.69	5.01	5.62
6 ENA	5.26	3.79	3.33	3.93	4.59	3.29	3.79	4.10	4.17	5.74
7 ANNETTE	5.49	3.33	3.57	3.33	4.25	4.13	3.45	4.61	5.13	5.75
8 OT.90.4.1	6.07	3.30	2.92	3.57	4.44	3.76	3.49	4.48	4.77	5.74
LOCATION MEAN	5.37	3.30	3.15	3.44	4.16	3.63	3.41	4.43	4.50	5.70

CULTIVAR NAME	HW88N	WE88N	RN88N	ID88N	WE89N	RN89N	ID89N	MH89N	MEAN
1 FREDRICK	4.04	4.51	5.45	4.61	3.08	3.86	4.15	3.98	4.06
2 HOUSER	5.43	5.20	6.93	5.24	3.75	3.07	3.84	3.41	4.15
3 AUGUSTA	4.99	5.05	6.35	4.93	3.49	2.43	4.12	4.20	4.31
4 FRANKENMUTH	5.53	4.81	6.06	4.89	3.78	2.82	4.43	4.01	4.19
5 HARUS	4.31	4.87	5.76	4.85	4.48	3.98	4.64	4.89	4.48
6 ENA	4.79	4.93	5.92	5.21	3.62	3.63	4.31	3.30	4.32
7 ANNETTE	4.82	4.91	6.25	5.01	4.31	3.01	4.32	4.65	4.46
8 OT.90.4.1	4.60	4.57	6.15	4.69	4.42	4.06	4.38	4.98	4.47
LOCATION MEAN	4.81	4.86	6.11	4.93	3.87	3.36	4.27	4.18	4.30

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 86-89
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	MN86N	WE86N	ID86N	RN86N	MH86N	DI86N	HW87N	ID87N	MH87N	RN87N
1	FREDRICK	102	101	89	101	93	82	90	102	97	96
2	HOUSER	90	94	96	94	93	107	91	89	73	99
3	AUGUSTA	97	94	94	90	98	118	105	108	107	106
4	FRANKENMUTH	89	87	95	91	96	101	98	97	99	98
5	HARUS	109	108	113	109	101	84	101	106	111	99
6	ENA	98	115	106	114	110	91	111	93	93	101
7	ANNETTE	102	101	113	97	102	114	101	104	114	101
8	OT.90.4.1	113	100	93	104	107	104	102	101	106	101
	LOCATION MEAN	5.37	3.30	3.15	3.44	4.16	3.63	3.41	4.43	4.50	5.70

KEY	NAME	HW88N	WE88N	RN88N	ID88N	WE89N	RN89N	ID89N	MH89N	MEAN
1	FREDRICK	84	93	89	94	80	115	97	95	94
2	HOUSER	113	107	113	106	97	91	90	82	96
3	AUGUSTA	104	104	104	100	90	72	96	101	99
4	FRANKENMUTH	115	99	99	99	98	84	104	96	97
5	HARUS	90	100	94	98	116	119	109	117	105
6	ENA	100	102	97	106	94	108	101	79	101
7	ANNETTE	100	101	102	102	111	90	101	111	104
8	OT.90.4.1	96	94	101	95	114	121	102	119	104
	LOCATION MEAN	4.81	4.86	6.11	4.93	3.87	3.36	4.27	4.18	4.30

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

TRAIT : YIELD
YEAR(S): 86-89
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	AC86N	LN86N	AC87N	LN87N	WK87N	BH87N	NN88N	LN88N	WK88N	EA88N
1 FREDRICK	5.02	4.03	2.10	2.90	4.79	3.66	4.22	3.49	4.85	4.16
2 HOUSER	5.09	3.46	2.10	3.26	3.79	3.46	5.26	3.90	6.57	5.60
3 AUGUSTA	5.46	3.30	2.35	3.41	5.06	3.71	4.75	3.76	6.03	5.30
4 FRANKENMUTH	5.06	3.62	1.96	3.11	4.61	3.58	4.71	3.83	5.87	5.22
5 HARUS	5.46	4.08	2.42	2.83	5.75	2.67	4.56	4.16	5.45	4.81
6 ENA	5.22	3.69	2.10	3.26	3.91	3.67	4.38	3.74	4.31	4.95
7 ANNETTE	5.46	4.63	2.10	2.96	4.64	3.44	4.40	4.15	5.32	5.35
8 OT.90.4.1	5.63	4.27	2.72	3.16	4.06	3.32	4.49	3.44	4.76	5.06
LOCATION MEAN	5.30	3.89	2.23	3.11	4.58	3.44	4.60	3.81	5.40	5.06

CULTIVAR NAME	BH88N	LN89N	NN89N	WK89N	EA89N	MEAN
1 FREDRICK	5.29	4.41	3.51	5.53	5.44	4.23
2 HOUSER	4.74	4.38	3.44	4.94	5.61	4.37
3 AUGUSTA	4.84	4.08	3.49	4.53	6.03	4.41
4 FRANKENMUTH	4.47	4.52	3.15	5.50	6.06	4.35
5 HARUS	4.71	4.91	3.93	5.99	6.06	4.52
6 ENA	4.86	4.43	2.97	5.77	6.12	4.23
7 ANNETTE	5.04	4.59	3.39	6.18	6.07	4.51
8 OT.90.4.1	5.08	5.18	3.60	6.33	6.67	4.52
LOCATION MEAN	4.88	4.56	3.44	5.59	6.01	4.39

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 86-89
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	AC86N	LN86N	AC87N	LN87N	WK87N	BH87N	NN88N	LN88N	WK88N	EA88N
1	FREDRICK	95	104	94	93	105	106	92	92	90	82
2	HOUSER	96	89	94	105	83	101	114	102	122	111
3	AUGUSTA	103	85	105	110	111	108	103	99	112	105
4	FRANKENMUTH	95	93	88	100	101	104	102	101	109	103
5	HARUS	103	105	108	91	126	78	99	109	101	95
6	ENA	98	95	94	105	85	107	95	98	80	98
7	ANNETTE	103	119	94	95	101	100	96	109	99	106
8	OT.90.4.1	106	110	122	102	89	97	98	90	88	100
	LOCATION MEAN	5.30	3.89	2.23	3.11	4.58	3.44	4.60	3.81	5.40	5.06

KEY	NAME	BH88N	LN89N	NN89N	WK89N	EA89N	MEAN
1	FREDRICK	108	97	102	99	91	97
2	HOUSER	97	96	100	88	93	99
3	AUGUSTA	99	89	102	81	100	101
4	FRANKENMUTH	92	99	92	98	101	99
5	HARUS	97	108	114	107	101	103
6	ENA	100	97	86	103	102	96
7	ANNETTE	103	101	99	110	101	102
8	OT.90.4.1	104	114	105	113	111	103
	LOCATION MEAN	4.88	4.56	3.44	5.59	6.01	4.39

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

TRAIT : YIELD
YEAR(S): 86-89
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

CULTIVAR NAME	O186N	KE86N	KE87N	O187N	O287N	RW87N	O188N	KE88N	RW88N
1 FREDRICK	5.73	5.50	4.96	5.13	5.92	4.74	3.92	3.12	3.26
2 HOUSER	6.34	5.80	5.90	4.62	5.44	4.46	5.23	4.07	4.83
3 AUGUSTA	6.61	6.10	5.38	5.40	5.88	5.49	5.05	3.39	3.99
4 FRANKENMUTH	5.40	6.10	4.44	5.07	5.27	4.95	4.99	3.63	3.74
5 HARUS	5.86	5.80	4.73	5.49	6.25	4.83	4.08	3.00	3.38
6 ENA	5.57	5.00	5.28	4.48	5.69	4.74	4.07	2.80	3.04
7 ANNETTE	5.87	6.30	4.99	5.02	5.30	5.05	4.73	3.32	3.46
8 OT.90.4.1	5.44	5.90	4.83	4.76	6.30	5.06	4.19	2.99	3.89
LOCATION MEAN	5.85	5.81	5.06	5.00	5.76	4.91	4.53	3.29	3.70

CULTIVAR NAME	O289N	MEAN
1 FREDRICK	3.43	4.57
2 HOUSER	3.27	5.00
3 AUGUSTA	3.35	5.06
4 FRANKENMUTH	3.69	4.73
5 HARUS	3.02	4.64
6 ENA	2.74	4.34
7 ANNETTE	4.25	4.83
8 OT.90.4.1	3.54	4.69
LOCATION MEAN	3.41	4.73

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 86-89
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	0186N	KE86N	KE87N	0187N	0287N	RW87N	0188N	KE88N	RW88N
1	FREDRICK	98	95	98	103	103	96	86	95	88
2	HOUSER	108	100	117	92	95	91	115	124	131
3	AUGUSTA	113	105	106	108	102	112	111	103	108
4	FRANKENMUTH	92	105	88	101	92	101	110	110	101
5	HARUS	100	100	93	110	109	98	90	91	91
6	ENA	95	86	104	90	99	96	90	85	82
7	ANNETTE	100	108	99	100	92	103	104	101	94
8	OT.90.4.1	93	102	95	95	109	103	92	91	105
	LOCATION MEAN	5.85	5.81	5.06	5.00	5.76	4.91	4.53	3.29	3.70

KEY	NAME	0289N	MEAN
1	FREDRICK	101	96
2	HOUSER	96	107
3	AUGUSTA	98	107
4	FRANKENMUTH	108	101
5	HARUS	89	97
6	ENA	80	91
7	ANNETTE	125	103
8	OT.90.4.1	104	99
	LOCATION MEAN	3.41	4.73

ONTARIO REGIONAL; FALL WHITE WHEAT 1989

TRAIT: YIELD
YEAR(S): 86-89
AREA(S): 1-3

KEY	NAME	AREA I (18)*	AREA 2 (15)	AREA 3 (10)	PROVINCE (43)**
1	FREDRICK	4.06	4.23	4.57	4.24
2	HOUSER	4.15	4.37	5.00	4.42
3	AUGUSTA	4.31	4.41	5.06	4.52
4	FRANKENMUTH	4.19	4.35	4.73	4.37
5	HARUS	4.48	4.52	4.64	4.53
6	ENA	4.32	4.23	4.34	4.30
7	ANNETTE	4.46	4.51	4.83	4.56
8	OT. 90.4.1	4.47	4.52	4.69	4.54
MEAN YIELD t/ha		4.30	4.39	4.73	4.44

* no. of locations
** weighted average

RELATIVE YIELDS

KEY	NAME	AREA I	AREA 2	AREA 3	PROVINCE
1	FREDRICK	95	95	98	95
2	HOUSER	98	100	106	100
3	AUGUSTA	100	100	109	102
4	FRANKENMUTH	98	100	100	100
5	HARUS	105	102	98	102
6	ENA	100	95	91	98
7	ANNETTE	105	102	102	105
8	OT. 90.4.1.	105	102	100	102
MEAN YIELD t/ha		4.3	4.4	4.7	4.4

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	8	4.06	74.5	34	99	2.7	106	152	2.5	1.9	2.8	2.7	1.7	.	.
2	HOUSER	7	4.15	70.0	36	99	4.3	95	153	2.0	3.3	3.9	2.0	2.2	.	.
3	AUGUSTA	5	4.31	70.5	34	100	3.0	101	154	2.9	2.4	2.7	2.9	4.0	.	.
4	FRANKENMUTH	6	4.19	73.3	33	100	3.6	100	154	2.6	2.7	3.2	4.5	3.6	.	.
5	HARUS	1	4.48	73.8	35	99	2.5	97	152	2.2	3.4	2.4	2.7	1.7	.	.
6	ENA	4	4.32	72.6	33	100	2.5	100	153	2.6	2.4	3.6	2.0	1.0	.	.
7	ANNETTE	3	4.46	72.9	39	100	4.2	101	153	.4	3.8	3.0	3.5	2.3	.	.
8	OT.90.4.1	2	4.47	72.5	31	100	2.3	104	153	3.0	3.1	2.0	3.3	2.6	.	.
LOCATIONS			18	13	10	2	11	17	14	9	6	4	3	6	0	0

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	7	4.23	74.6	35	92	1.7	104	158	3.2	4.6	4.5	3.8	4.1	.	3.0
2	HOUSER	5	4.37	71.5	36	86	2.0	90	159	2.4	4.9	4.2	2.8	4.3	.	2.0
3	AUGUSTA	4	4.41	72.0	35	93	2.6	99	160	3.7	5.8	4.0	2.8	4.3	.	2.0
4	FRANKENMUTH	6	4.35	74.5	34	90	2.5	98	160	2.7	5.9	4.1	4.5	3.3	.	2.0
5	HARUS	1	4.52	74.0	35	93	1.0	93	157	2.6	4.9	3.8	3.3	3.3	.	2.0
6	ENA	7	4.23	74.9	34	95	1.4	98	159	2.7	4.2	4.3	2.8	2.3	.	2.0
7	ANNETTE	3	4.51	74.0	40	91	2.4	98	160	1.2	5.4	4.0	3.3	4.4	.	.
8	OT.90.4.1	1	4.52	73.7	33	89	1.0	100	158	3.4	5.7	3.9	3.8	5.4	.	.
LOCATIONS			15	12	11	6	8	15	9	10	4	6	2	2	0	1

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	7	4.57	81.5	41	74	1.5	100	159	7.0	4.0	4.5	.	4.0	.	.
2	HOUSER	2	5.00	77.5	43	78	1.7	89	159	7.5	8.0	4.0	.	7.0	.	.
3	AUGUSTA	1	5.06	78.4	40	76	1.5	97	159	7.3	8.0	4.5	.	9.0	.	.
4	FRANKENMUTH	4	4.73	80.1	39	77	1.7	95	160	7.0	8.0	2.5	.	7.0	.	.
5	HARUS	6	4.64	79.9	40	73	1.3	93	158	7.0	8.0	5.5	.	5.0	.	.
6	ENA	8	4.34	80.6	39	77	1.4	96	159	7.5	8.0	5.5	.	5.0	.	.
7	ANNETTE	3	4.83	80.3	46	75	1.6	96	159	5.0	8.0	5.0	.	8.0	.	.
8	OT.90.4.1	5	4.69	79.2	38	74	1.5	96	159	7.3	8.0	4.0	.	6.0	.	.
LOCATIONS			10	12	9	9	7	11	7	1	1	1	0	1	0	0

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	8	4.24	76.8	37	83	2.0	104	156	3.0	3.1	3.9	3.1	2.5	.	3.0
2	HOUSER	5	4.43	72.9	38	83	2.9	92	156	2.5	4.3	4.1	2.3	3.2	.	2.0
3	AUGUSTA	2	4.52	73.6	36	85	2.5	99	157	3.5	4.1	3.6	2.8	4.6	.	2.0
4	FRANKENMUTH	6	4.37	75.9	35	84	2.7	98	157	2.8	4.4	3.6	4.5	3.9	.	2.0
5	HARUS	3	4.53	75.9	37	83	1.7	94	155	2.6	4.4	3.4	2.9	2.4	.	2.0
6	ENA	7	4.29	75.9	35	86	1.9	99	156	2.9	3.6	4.2	2.3	1.7	.	2.0
7	ANNETTE	1	4.57	75.7	41	83	3.0	98	157	1.0	4.8	3.7	3.4	3.4	.	.
8	OT.90.4.1	4	4.54	75.1	34	82	1.7	101	156	3.4	4.5	3.2	3.5	3.6	.	.
LOCATIONS			43	37	30	17	26	43	30	20	11	11	5	9	0	1

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

TRAIT : YIELD
YEAR : 89
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	WE89N	RN89N	ID89N	MH89N	MEAN
1	FREDRICK	3.08	3.86	4.15	3.98	3.77
2	HOUSER	3.75	3.07	3.84	3.41	3.52
3	AUGUSTA	3.49	2.43	4.12	4.20	3.56
4	FRANKENMUTH	3.78	2.82	4.43	4.01	3.76
5	HARUS	4.48	3.98	4.64	4.89	4.50
6	ENA	3.62	3.63	4.31	3.30	3.71
7	H95-9	4.31	3.01	4.32	4.65	4.07
8	O-90-4-1	4.42	4.06	4.38	4.98	4.46
	LOCATION MEAN	3.87	3.36	4.27	4.18	3.92

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	WE89N	RN89N	ID89N	MH89N	MEAN
1	FREDRICK	80	115	97	95	97
2	HOUSER	97	91	90	82	90
3	AUGUSTA	90	72	96	101	90
4	FRANKENMUTH	98	84	104	96	95
5	HARUS	116	119	109	117	115
6	ENA	94	108	101	79	95
7	H95-9	111	90	101	111	103
8	O-90-4-1	114	121	102	119	114
	LOCATION MEAN	3.87	3.36	4.27	4.18	3.92

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

TRAIT : YIELD
YEAR : 89
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	EA89N	WK89N	NN89N	LN89N	MEAN
1	FREDRICK	5.44	5.53	3.51	4.41	97
2	HOUSER	5.61	4.94	3.44	4.38	94
3	AUGUSTA	6.03	4.53	3.49	4.08	93
4	FRANKENMUTH	6.06	5.50	3.15	4.52	97
5	HARUS	6.06	5.99	3.93	4.91	107
6	ENA	6.12	5.77	2.97	4.43	97
7	H95-9	6.07	6.18	3.39	4.59	103
8	O-90-4-1	6.67	6.33	3.60	5.18	111
	LOCATION MEAN	6.01	5.59	3.44	4.56	4.90

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	EA89N	WK89N	NN89N	LN89N	MEAN
1	FREDRICK	91	99	102	97	97
2	HOUSER	93	88	100	96	94
3	AUGUSTA	100	81	102	89	93
4	FRANKENMUTH	101	98	92	99	97
5	HARUS	101	107	114	108	107
6	ENA	102	103	86	97	97
7	H95-9	101	110	99	101	103
8	O-90-4-1	111	113	105	114	111
	LOCATION MEAN	6.01	5.59	3.44	4.56	4.90

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

TRAIT : YIELD
YEAR : 89
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	0289N	MEAN
1	FREDRICK	3.43	3.43
2	HOUSER	3.27	3.27
3	AUGUSTA	3.35	3.35
4	FRANKENMUTH	3.69	3.69
5	HARUS	3.02	3.02
6	ENA	2.74	2.74
7	H95-9	4.25	4.25
8	0-90-4-1	3.54	3.54
LOCATION MEAN		3.41	3.41

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	0289N	MEAN
1	FREDRICK	101	101
2	HOUSER	96	96
3	AUGUSTA	98	98
4	FRANKENMUTH	108	108
5	HARUS	89	89
6	ENA	80	80
7	H95-9	125	125
8	0-90-4-1	104	104
LOCATION MEAN		3.41	3.41

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	4	3.77	70.3	30	.	2.3	118	157	3.3	.	3.7	3.8	3.0	.	.
2	HOUSER	8	3.52	66.5	29	.	4.9	104	157	1.8	.	4.8	2.8	4.0	.	.
3	AUGUSTA	7	3.56	64.5	30	.	4.0	111	159	3.8	.	2.8	3.8	5.0	.	.
4	FRANKENMUTH	5	3.76	67.9	26	.	4.5	112	159	3.2	.	3.4	6.0	4.0	.	.
5	HARUS	1	4.50	70.3	33	.	2.9	108	156	2.3	.	2.8	3.8	4.0	.	.
6	ENA	6	3.71	70.1	25	.	2.3	112	157	2.7	.	4.7	2.8	2.0	.	.
7	ANNETTE	3	4.07	69.1	34	.	4.3	111	158	.3	.	3.0	4.8	5.0	.	.
8	OT.90.4.1	2	4.46	68.9	28	.	1.8	115	158	3.0	.	2.1	4.3	6.0	.	.
LOCATIONS			4	3	1	0	4	4	3	3	0	2	2	1	0	0

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	6	4.72	72.3	32	99	1.4	119	162	3.2	5.6	7.0	5.5	4.1	.	.
2	HOUSER	7	4.59	68.6	32	99	2.4	105	162	2.2	6.3	4.3	3.5	4.3	.	.
3	AUGUSTA	8	4.53	68.6	32	97	2.2	115	164	3.8	6.2	4.0	3.5	4.3	.	.
4	FRANKENMUTH	5	4.81	71.8	30	98	2.8	114	164	2.6	6.9	4.3	7.0	3.3	.	.
5	HARUS	2	5.22	73.3	32	99	.7	107	161	3.0	5.8	4.5	4.5	3.3	.	.
6	ENA	4	4.82	72.5	29	98	1.0	110	163	3.0	5.6	5.3	3.5	2.3	.	.
7	ANNETTE	3	5.06	72.4	36	98	1.8	112	164	1.4	7.2	3.8	4.5	4.4	.	.
8	OT.90.4.1	1	5.45	71.4	30	98	.7	113	162	3.7	6.9	4.3	5.5	5.4	.	.
LOCATIONS			4	4	3	3	3	4	3	4	2	1	1	2	0	0

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	4	3.43	80.7	45	61	2.4	102	174	7.0	4.0	4.5	.	4.0	.	.
2	HOUSER	6	3.27	77.8	43	62	2.7	91	172	7.5	8.0	4.0	.	7.0	.	.
3	AUGUSTA	5	3.35	77.4	43	56	2.5	100	172	7.3	8.0	4.5	.	9.0	.	.
4	FRANKENMUTH	2	3.69	79.7	43	59	2.7	98	174	7.0	8.0	2.5	.	7.0	.	.
5	HARUS	7	3.02	79.4	43	54	2.0	95	170	7.0	8.0	5.5	.	5.0	.	.
6	ENA	8	2.74	80.3	42	58	2.2	98	171	7.5	8.0	5.5	.	5.0	.	.
7	ANNETTE	1	4.25	78.7	48	54	2.2	97	172	5.0	8.0	5.0	.	8.0	.	.
8	OT.90.4.1	3	3.54	78.6	41	57	2.1	97	173	7.3	8.0	4.0	.	6.0	.	.
LOCATIONS			1	3	3	4	3	3	1	1	1	1	0	1	0	0

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	FREDRICK	5	4.15	74.2	37	77	2.1	114	162	3.7	5.1	4.7	4.3	3.8	.	.
2	HOUSER	7	3.97	70.7	36	78	3.5	101	161	2.7	6.9	4.5	3.0	4.9	.	.
3	AUGUSTA	7	3.97	70.0	36	73	3.0	109	163	4.2	6.8	3.5	3.7	5.7	.	.
4	FRANKENMUTH	4	4.22	73.0	35	76	3.4	109	163	3.4	7.3	3.4	6.3	4.4	.	.
5	HARUS	2	4.66	74.2	37	73	2.0	104	160	3.3	6.5	3.9	4.0	3.9	.	.
6	ENA	6	4.10	74.1	34	75	1.9	107	162	3.4	6.4	5.0	3.0	2.9	.	.
7	ANNETTE	3	4.53	73.3	41	73	2.9	108	163	1.4	7.4	3.7	4.7	5.5	.	.
8	OT.90.4.1	1	4.80	72.8	35	75	1.6	109	162	3.9	7.3	3.1	4.7	5.7	.	.
LOCATIONS			9	10	7	7	10	11	7	8	3	4	3	4	0	0

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

LOCATION - WOODSLEE
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	8	3.08	.	.	.	1.3	113	156	.	.	5.3	.	.	.	.
2	HOUSER	5	3.75	.	.	.	3.8	103	157	.	.	5.2	.	.	.	.
3	AUGUSTA	7	3.49	.	.	.	1.0	108	158	.	.	3.7	.	.	.	.
4	FRANKENMUTH	4	3.78	.	.	.	2.0	106	158	.	.	4.8	.	.	.	.
5	HARUS	1	4.48	.	.	.	1.0	103	156	.	.	3.5	.	.	.	.
6	ENA	6	3.62	.	.	.	3.0	113	156	.	.	5.8	.	.	.	.
7	ANNETTE	3	4.31	.	.	.	4.3	109	157	.	.	2.5	.	.	.	.
8	OT.90.4.1	2	4.42	.	.	.	.3	111	157	.	.	2.2	.	.	.	.
MEANS			3.87	.	.	.	2.0	108	157	.	.	4.0	.	.	.	.

LOCATION - RIDGETOWN
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	3	3.86	66.7	.	.	5.0	127	159	4.0	.	.	2.0	3.0	.	.
2	HOUSER	5	3.07	61.1	.	.	5.0	106	157	2.0	.	.	2.0	4.0	.	.
3	AUGUSTA	8	2.43	57.1	.	.	6.0	115	160	4.0	.	.	4.0	5.0	.	.
4	FRANKENMUTH	7	2.82	63.4	.	.	6.0	117	160	4.0	.	.	5.0	4.0	.	.
5	HARUS	2	3.98	66.9	.	.	4.0	116	157	3.0	.	.	3.0	4.0	.	.
6	ENA	4	3.63	67.6	.	.	4.0	116	158	3.0	.	.	2.0	2.0	.	.
7	ANNETTE	6	3.01	62.3	.	.	5.0	114	160	.0	.	.	5.0	5.0	.	.
8	OT.90.4.1	1	4.06	65.3	.	.	4.0	124	159	4.0	.	.	3.0	6.0	.	.
MEANS			3.36	63.8	.	.	4.8	117	159	2.9	.	.	3.1	4.0	.	.

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

LOCATION - INWOOD
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	6	4.15	72.0	.	.	1.0	107	.	2.0	.	.	.	.	.	.
2	HOUSER	8	3.84	67.7	.	.	3.0	98	.	2.0	.	.	.	.	.	.
3	AUGUSTA	7	4.12	68.5	.	.	1.0	104	.	3.0	.	.	.	.	.	.
4	FRANKENMUTH	2	4.43	72.7	.	.	2.0	106	.	2.0	.	.	.	.	.	.
5	HARUS	1	4.64	72.0	.	.	1.0	97	.	2.0	.	.	.	.	.	.
6	ENA	5	4.31	71.0	.	.	1.0	103	.	3.0	.	.	.	.	.	.
7	ANNETTE	4	4.32	71.3	.	.	1.0	106	.	.0	.	.	.	.	.	.
8	OT.90.4.1	3	4.38	69.1	.	.	2.0	102	.	3.0	.	.	.	.	.	.
MEANS			4.27	70.5	.	.	1.4	103	.	2.0	.	.	.	.	.	.

LOCATION - MORPETH
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	6	3.98	72.3	30	.	2.0	125	157	4.0	.	2.0	5.5	.	.	.
2	HOUSER	7	3.41	70.7	29	.	8.0	108	157	1.5	.	4.5	3.5	.	.	.
3	AUGUSTA	4	4.20	67.8	30	.	8.0	115	158	4.5	.	2.0	3.5	.	.	.
4	FRANKENMUTH	5	4.01	67.6	26	.	8.0	118	158	3.5	.	2.0	7.0	.	.	.
5	HARUS	2	4.89	72.1	33	.	5.5	114	156	2.0	.	2.0	4.5	.	.	.
6	ENA	8	3.30	71.8	25	.	1.0	117	157	2.0	.	3.5	3.5	.	.	.
7	ANNETTE	3	4.65	73.6	34	.	7.0	116	158	1.0	.	3.5	4.5	.	.	.
8	OT.90.4.1	1	4.98	72.3	28	.	1.0	123	157	2.0	.	2.0	5.5	.	.	.
MEANS			4.18	71.0	29	.	4.9	117	157	2.5	.	2.6	4.6	.	.	.

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	8	5.44	70.5	29	100	.	112	164	1.3	.	.	.	4.2	.	.
2	HOUSER	7	5.61	67.4	28	99	.	97	165	.8	.	.	.	6.3	.	.
3	AUGUSTA	6	6.03	68.6	27	98	.	105	166	1.5	.	.	.	4.7	.	.
4	FRANKENMUTH	4	6.06	71.1	29	98	.	105	167	1.3	.	.	.	5.1	.	.
5	HARUS	4	6.06	74.2	30	98	.	100	163	1.8	.	.	.	3.9	.	.
6	ENA	2	6.12	72.3	27	98	.	102	165	1.0	.	.	.	3.1	.	.
7	ANNETTE	3	6.07	72.3	35	97	.	102	167	.3	.	.	.	5.4	.	.
8	OT.90.4.1	1	6.67	72.3	29	99	.	108	165	2.0	.	.	.	5.3	.	.
MEANS			6.01	71.1	29	98	.	104	165	1.1	.	.	.	4.6	.	.

LOCATION - WOODSTOCK
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	5	5.53	73.0	31	100	.3	121	160	3.3	3.7	.	.	3.9	.	.
2	HOUSER	7	4.94	69.9	35	99	.0	104	160	2.3	4.3	.	.	2.3	.	.
3	AUGUSTA	8	4.53	69.9	32	94	.3	115	161	3.3	4.3	.	.	3.9	.	.
4	FRANKENMUTH	6	5.50	72.3	32	100	1.0	113	161	2.3	5.3	.	.	1.5	.	.
5	HARUS	3	5.99	72.3	30	100	.0	111	158	3.3	3.0	.	.	2.6	.	.
6	ENA	4	5.77	74.8	32	99	.0	113	161	2.5	3.3	.	.	1.4	.	.
7	ANNETTE	2	6.18	73.0	37	100	1.0	113	161	.8	6.3	.	.	3.5	.	.
8	OT.90.4.1	1	6.33	71.7	32	100	.0	119	159	4.3	6.0	.	.	5.4	.	.
MEANS			5.59	72.1	33	99	.2	113	160	2.6	4.4	.	.	3.0	.	.

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	3	3.51	73.8	36	98	.0	113	161	5.3	7.5	7.0	5.5	.	.	.
2	HOUSER	5	3.44	70.3	33	98	1.3	104	162	3.8	8.3	4.3	3.5	.	.	.
3	AUGUSTA	4	3.49	69.3	37	98	1.3	113	164	6.3	8.0	4.0	3.5	.	.	.
4	FRANKENMUTH	7	3.15	73.4	30	97	2.3	112	164	3.8	8.5	4.3	7.0	.	.	.
5	HARUS	1	3.93	75.3	37	98	.0	100	161	5.0	8.5	4.5	4.5	.	.	.
6	ENA	8	2.97	71.8	29	96	.0	99	163	5.5	7.8	5.3	3.5	.	.	.
7	ANNETTE	6	3.39	73.2	35	96	1.5	108	164	2.3	8.0	3.8	4.5	.	.	.
8	OT.90.4.1	2	3.60	72.2	29	96	.0	102	162	4.5	7.8	4.3	5.5	.	.	.
MEANS			3.44	72.4	33	97	.7	106	163	4.4	7.9	4.6	4.6	.	.	.

LOCATION - LONDON
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	6	4.41	72.0	.	.	4.0	130	.	3.0	.	.	.	.	.	.
2	HOUSER	7	4.38	66.6	.	.	6.0	115	.	2.0	.	.	.	.	.	.
3	AUGUSTA	8	4.08	66.7	.	.	5.0	125	.	4.0	.	.	.	.	.	.
4	FRANKENMUTH	4	4.52	70.6	.	.	5.0	126	.	3.0	.	.	.	.	.	.
5	HARUS	2	4.91	71.3	.	.	2.0	118	.	2.0	.	.	.	.	.	.
6	ENA	5	4.43	71.0	.	.	3.0	124	.	3.0	.	.	.	.	.	.
7	ANNETTE	3	4.59	71.2	.	.	3.0	125	.	2.0	.	.	.	.	.	.
8	OT.90.4.1	1	5.18	69.5	.	.	2.0	124	.	4.0	.	.	.	.	.	.
MEANS			4.56	69.9	.	.	3.6	123	.	2.8	.	.	.	.	.	.

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

LOCATION - OTTAWA-1
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	.	.	.	.	14	.	.	.	.	.	.	.	.	.	.
2	HOUSER	.	.	.	.	26	.	.	.	.	.	.	.	.	.	.
3	AUGUSTA	.	.	.	.	12	.	.	.	.	.	.	.	.	.	.
4	FRANKENMUTH	.	.	.	.	27	.	.	.	.	.	.	.	.	.	.
5	HARUS	.	.	.	.	6	.	.	.	.	.	.	.	.	.	.
6	ENA	.	.	.	.	15	.	.	.	.	.	.	.	.	.	.
7	ANNETTE	.	.	.	.	10	.	.	.	.	.	.	.	.	.	.
8	OT.90.4.1	.	.	.	.	17	.	.	.	.	.	.	.	.	.	.
MEANS			.	.	.	16	.	.	.	.	.	.	.	.	.	.

LOCATION - OTTAWA-2
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	4	3.43	79.4	43	91	2.8	105	.	7.0	4.0	.	.	4.0	.	.
2	HOUSER	6	3.27	75.0	41	84	2.5	89	.	7.5	8.0	.	.	7.0	.	.
3	AUGUSTA	5	3.35	76.6	40	86	2.0	98	.	7.3	8.0	.	.	9.0	.	.
4	FRANKENMUTH	2	3.69	77.3	39	88	2.5	98	.	7.0	8.0	.	.	7.0	.	.
5	HARUS	7	3.02	77.3	40	86	2.0	90	.	7.0	8.0	.	.	5.0	.	.
6	ENA	8	2.74	77.6	38	88	2.3	94	.	7.5	8.0	.	.	5.0	.	.
7	ANNETTE	1	4.25	78.3	45	83	2.3	98	.	5.0	8.0	.	.	8.0	.	.
8	OT.90.4.1	3	3.54	77.0	38	85	2.0	98	.	7.3	8.0	.	.	6.0	.	.
MEANS			3.41	77.3	40	86	2.2	96	.	6.8	7.4	.	.	6.3	.	.

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

ONTARIO REGIONAL;FALL WHITE WHEAT 1989

LOCATION - RENFREW
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	.		75.0	40	65	2.5	102	.	.	.	4.5	.	.	.	.
2	HOUSER	.		72.9	39	64	3.5	83	.	.	.	4.0	.	.	.	.
3	AUGUSTA	.		73.5	38	64	2.5	93	.	.	.	4.5	.	.	.	.
4	FRANKENMUTH	.		75.1	37	61	2.5	91	.	.	.	2.5	.	.	.	.
5	HARUS	.		75.5	37	63	2.0	85	.	.	.	5.5	.	.	.	.
6	ENA	.		77.7	37	59	2.2	92	.	.	.	5.5	.	.	.	.
7	ANNETTE	.		72.4	44	58	2.2	90	.	.	.	5.0	.	.	.	.
8	OT.90.4.1	.		74.3	36	61	2.4	91	.	.	.	4.0	.	.	.	.
MEANS		.		74.5	38	62	2.4	91	.	.	.	4.3	.	.	.	.

LOCATION - KEMPTVILLE
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	FREDRICK	.		87.6	53	73	2.0	100	174	.	.	.	.	.	.	.
2	HOUSER	.		85.5	50	75	2.0	102	172	.	.	.	.	.	.	.
3	AUGUSTA	.		82.2	51	60	3.0	108	172	.	.	.	.	.	.	.
4	FRANKENMUTH	.		86.6	52	60	3.0	105	174	.	.	.	.	.	.	.
5	HARUS	.		85.5	53	61	2.0	110	170	.	.	.	.	.	.	.
6	ENA	.		85.5	51	69	2.0	108	171	.	.	.	.	.	.	.
7	ANNETTE	.		85.5	54	66	2.0	103	172	.	.	.	.	.	.	.
8	OT.90.4.1	.		84.4	50	65	2.0	102	173	.	.	.	.	.	.	.
MEANS		.		85.3	52	66	2.1	105	172	.	.	.	.	.	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

DESCRIPTION OF VARIETIES TESTED

VARIETY	PEDIGREE	COUNTRY OF ORIGIN	SPONSOR
MONOPOL	PANTHUS/ADMIRAL	G.F.R.	C&M SEEDS,PALMERSTON,ONT.
ABSOLVENT	BEZ-1/KORMORAN	G.F.R.	C&M SEEDS,PALMERSTON,ONT.
MJ-50	ARTEMOVKA/BEZ-4	U.S.S.R.	KING AGRO,LISTOWEL,ONT.
PERLO	P.EXTREM/BEZ-1	AUSTRIA	C&M SEEDS,PALMERSTON,ONT.
KARAT	P.EXTREM/BEZ-1	AUSTRIA	C&M SEEDS,PALMERSTON,ONT.
KASTOR	ODESSKAYA/KARAT	AUSTRIA	KING AGRO,LISTOWEL,ONT.

ONTARIO REGIONAL;FALL RED WHEAT 1989

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
HT - HEIGHT (CM)
HD - HEADING
MIL - MILDEW
LRS - LEAF RUST
SEP - SEPTORIA
GLB - GLUME BLOTCH
HBL - HEAD BLIGHT (% DISEASED HEADS)
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
DI	DELHI
EA	ELORA
HW	HARROW
HN	HARRISTON
ID	INWOOD
KE	KEMPTVILLE
KN	KIPPEN
LN	LONDON
LL	LISTOWEL
MN	MALDEN
MH	MORPETH
NN	NAIRN
O1	OTTAWA-1
O2	OTTAWA-2
RW	RENFREW
RN	RIDGETOWN
WE	WOODSLEE
WK	WOODSTOCK

ONTARIO REGIONAL;FALL RED WHEAT 1989

TRAIT : YIELD
YEAR(S): 86-89
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	WE86N	RN86N	WE87N	CM87N	RN87N	WE88N	RN88N	HW89N	RN89N	MEAN
1	MONOPOL	2.91	0.86	2.71	3.27	3.75	3.81	4.52	1.87	1.77	2.83
2	ABSOLVENT	3.23	2.50	3.18	3.07	4.74	4.49	5.51	2.65	3.09	3.61
3	MJ-50	3.87	3.44	4.68	3.41	5.80	4.63	6.50	3.43	3.51	4.36
4	PERLO	3.36	2.82	3.60	3.13	4.09	3.71	5.70	2.05	2.63	3.45
7	KARAT	3.08	2.50	4.45	3.17	5.49	4.54	5.14	2.56	2.63	3.73
8	KASTOR	3.32	2.53	4.42	3.67	5.15	4.97	6.49	2.52	2.24	3.92
	LOCATION MEAN	3.29	2.44	3.84	3.29	4.84	4.36	5.64	2.51	2.64	3.65

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	WE86N	RN86N	WE87N	CM87N	RN87N	WE88N	RN88N	HW89N	RN89N	MEAN
1	MONOPOL	88	36	71	99	78	87	80	74	67	76
2	ABSOLVENT	98	102	83	93	98	103	98	105	117	100
3	MJ-50	117	141	122	104	120	106	115	136	133	122
4	PERLO	102	115	94	95	85	85	101	82	99	95
7	KARAT	93	102	116	96	114	104	91	102	99	102
8	KASTOR	101	104	115	112	106	114	115	100	85	106
	LOCATION MEAN	3.29	2.44	3.84	3.29	4.84	4.36	5.64	2.51	2.64	3.65

ONTARIO REGIONAL;FALL RED WHEAT 1989

TRAIT : YIELD
YEAR(S): 86-89
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NN86N	NN87N	WK87N	EA88N	WK88N	NN88N	HN88N	LL88N	EA89N	WK89N
1	MONOPOL	3.74	2.66	3.79	3.78	5.16	3.92	3.66	3.82	3.76	3.33
2	ABSOLVENT	4.29	2.25	2.60	4.78	4.55	4.22	3.87	4.01	3.65	4.55
3	MJ-50	4.96	2.92	3.90	5.10	5.49	4.23	4.13	4.30	4.06	5.03
4	PERLO	4.72	2.83	3.11	3.61	4.22	4.44	3.36	4.25	2.98	4.05
7	KARAT	4.58	2.95	2.83	4.38	3.47	4.21	3.29	4.14	4.06	3.77
8	KASTOR	4.93	3.51	2.00	4.65	3.57	4.53	3.43	4.35	3.92	3.59
	LOCATION MEAN	4.54	2.85	3.04	4.38	4.41	4.26	3.62	4.14	3.74	4.05

KEY	NAME	NN89N	HN89N	LL89N	MEAN
1	MONOPOL	2.32	3.76	3.39	3.62
2	ABSOLVENT	2.59	4.11	3.01	3.73
3	MJ-50	2.68	3.90	3.64	4.18
4	PERLO	3.26	3.49	3.18	3.65
7	KARAT	2.70	3.93	3.13	3.65
8	KASTOR	2.70	4.40	2.79	3.72
	LOCATION MEAN	2.71	3.93	3.19	3.76

ONTARIO REGIONAL;FALL RED WHEAT 1989

DATA EXPRESSED RELATIVE TO LOCATION MEANS

TRAIT : YIELD
YEAR(S): 86-89
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	NN86N	NN87N	WK87N	EA88N	WK88N	NN88N	HN88N	LL88N	EA89N	WK89N
1	MONOPOL	82	93	125	86	117	92	101	92	101	82
2	ABSOLVENT	95	79	86	109	103	99	107	97	98	112
3	MJ-50	109	102	128	116	124	99	114	104	109	124
4	PERLO	104	99	102	82	96	104	93	103	80	100
7	KARAT	101	103	93	100	79	99	91	100	109	93
8	KASTOR	109	123	66	106	81	106	95	105	105	89
	LOCATION MEAN	4.54	2.85	3.04	4.38	4.41	4.26	3.62	4.14	3.74	4.05

KEY	NAME	NN89N	HN89N	LL89N	MEAN
1	MONOPOL	86	96	106	97
2	ABSOLVENT	96	105	94	98
3	MJ-50	99	99	114	111
4	PERLO	120	89	100	98
7	KARAT	100	100	98	97
8	KASTOR	100	112	87	99
	LOCATION MEAN	2.71	3.93	3.19	3.76

ONTARIO REGIONAL;FALL RED WHEAT 1989

TRAIT : YIELD
YEAR(S): 86-89
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	0186N	KE87N	0187N	0287N	0188N	KE88N	RW89N	MEAN
1	MONOPOL	4.33	4.19	4.29	4.75	1.98	2.03	4.07	3.66
2	ABSOLVENT	5.38	3.83	4.40	4.84	3.05	2.97	3.44	3.99
3	MJ-50	6.91	5.50	5.36	5.77	3.93	4.04	3.89	5.06
4	PERLO	5.48	3.82	5.13	5.14	2.35	1.86	4.81	4.08
7	KARAT	5.58	3.95	5.02	5.36	3.03	2.94	5.05	4.42
8	KASTOR	6.46	3.82	5.35	4.71	2.99	2.70	5.84	4.55
LOCATION MEAN		5.69	4.18	4.93	5.09	2.89	2.76	4.52	4.29

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	0186N	KE87N	0187N	0287N	0188N	KE88N	RW89N	MEAN
1	MONOPOL	76	100	87	93	69	74	90	84
2	ABSOLVENT	95	92	89	95	106	108	76	94
3	MJ-50	121	131	109	113	136	147	86	121
4	PERLO	96	91	104	101	81	67	106	93
7	KARAT	98	94	102	105	105	107	112	103
8	KASTOR	114	91	109	92	104	98	129	105
LOCATION MEAN		5.69	4.18	4.93	5.09	2.89	2.76	4.52	4.29

ONTARIO REGIONAL; FALL RED WHEAT 1989

TRAIT: YIELD
YEAR(S): 86-89
AREA(S): 1-3

KEY	NAME	AREA 1 (9)*	AREA 2 (13)	AREA 3 (7)	PROVINCE (29)**
1	MONOPOL	2.83	3.62	3.66	3.38
2	ABSOLVENT	3.61	3.73	3.99	3.76
3	MJ-50	4.36	4.18	5.06	4.45
4	PERLO	3.45	3.65	4.08	3.69
7	KARAT	3.73	3.65	4.42	3.86
8	KASTOR	3.92	3.72	4.55	3.98
MEAN	YIELD t/ha	3.65	3.76	4.29	3.85

* no. of locations
** weighted average

RELATIVE YIELDS

KEY	NAME	AREA I	AREA 2	AREA 3	PROVINCE
1	MONOPOL	76	95	86	87
2	ABSOLVENT	97	97	93	97
3	MJ-50	119	111	119	115
4	PERLO	95	97	95	95
7	KARAT	100	97	102	100
8	KASTOR	105	97	107	103
MEAN	YIELD t/ha	3.7	3.8	4.3	3.9

ONTARIO REGIONAL;FALL RED WHEAT 1989

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	2.83	70.0	41	99	2.0	92	156	5.5	4.2	4.3	6.0	3.8	.	.
2	ABSOLVENT	4	3.61	75.6	45	98	2.0	91	152	4.5	.6	5.4	3.0	4.2	.	.
3	MJ-50	1	4.36	73.4	47	100	3.5	99	151	4.3	.8	3.6	3.0	8.5	.	.
4	PERLO	5	3.45	75.0	41	85	3.5	97	154	2.8	.6	5.6	4.0	2.0	.	.
7	KARAT	3	3.73	73.4	41	95	2.5	104	153	1.8	1.1	5.1	3.0	3.6	.	.
8	KASTOR	2	3.92	74.3	42	98	3.0	98	153	1.8	.6	6.1	3.0	3.0	.	.
LOCATIONS		9		4	1	3	2	8	7	4	2	2	1	3	0	0

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.62	73.7	35	89	.0	88	164	5.2	4.2	4.0	3.5	2.2	.	.
2	ABSOLVENT	2	3.73	76.1	38	90	3.0	85	156	4.1	3.0	5.1	3.3	2.7	.	.
3	MJ-50	1	4.18	73.0	39	91	1.0	92	155	3.6	4.3	4.4	3.8	3.4	.	.
4	PERLO	4	3.65	74.7	35	83	.0	91	155	2.0	3.4	4.7	2.2	2.1	.	.
7	KARAT	4	3.65	75.2	36	88	.0	98	158	1.5	3.8	4.8	2.9	1.6	.	.
8	KASTOR	3	3.72	75.2	36	89	.0	92	158	2.3	3.0	5.5	2.2	1.4	.	.
LOCATIONS		13		12	12	11	1	13	13	11	6	9	3	2	0	0

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.66	81.8	52	73	1.6	86	165	8.0	.	4.0	.	.	.	.
2	ABSOLVENT	5	3.99	83.1	48	78	2.8	85	160	5.5	.	8.0	.	.	.	.
3	MJ-50	1	5.06	81.4	51	86	3.8	91	159	4.5	.	7.5	.	.	.	.
4	PERLO	4	4.08	83.3	48	61	2.4	91	163	3.5	.	5.5	.	.	.	.
7	KARAT	3	4.42	83.4	47	75	1.6	96	162	2.0	.	5.0	.	.	.	.
8	KASTOR	2	4.55	83.2	46	74	2.2	94	161	3.0	.	6.5	.	.	.	.
LOCATIONS			7	7	4	7	5	7	6	1	0	1	0	0	0	0

YEAR(S): 86-89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.39	75.5	39	85	1.5	89	162	5.5	4.2	4.0	4.1	3.1	.	.
2	ABSOLVENT	4	3.75	78.2	41	87	2.7	87	156	4.3	2.4	5.4	3.3	3.6	.	.
3	MJ-50	1	4.45	75.6	42	91	3.4	94	155	3.8	3.4	4.5	3.6	6.5	.	.
4	PERLO	5	3.70	77.4	38	76	2.3	93	157	2.3	2.7	4.9	2.6	2.1	.	.
7	KARAT	3	3.86	77.4	39	85	1.6	99	158	1.6	3.1	4.8	2.9	2.8	.	.
8	KASTOR	2	3.98	77.5	38	85	2.1	94	157	2.2	2.4	5.6	2.4	2.4	.	.
LOCATIONS			29	23	17	21	8	28	26	16	8	12	4	5	0	0

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	1.82	65.0	.	.	3.0	97	163	7.0	.	6.7	6.0	1.0	.	.
2	ABSOLVENT	2	2.87	71.2	.	.	3.0	96	157	4.0	.	6.9	3.0	4.0	.	.
3	MJ-50	1	3.47	67.7	.	.	5.0	104	156	5.0	.	4.2	3.0	4.0	.	.
4	PERLO	5	2.34	70.4	.	.	5.0	108	159	3.0	.	8.1	4.0	2.0	.	.
7	KARAT	3	2.60	70.5	.	.	4.0	116	157	2.0	.	8.1	3.0	3.0	.	.
8	KASTOR	4	2.38	68.4	.	.	5.0	107	158	2.0	.	8.1	3.0	3.0	.	.
LOCATIONS			2	1	0	0	1	2	2	1	0	1	1	1	0	0

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.31	69.8	32	91	.	94	166	4.7	5.0	3.7	3.8	2.2	.	.
2	ABSOLVENT	2	3.58	73.5	37	92	.	87	164	3.0	4.3	5.5	3.5	2.7	.	.
3	MJ-50	1	3.86	70.6	36	90	.	95	163	3.1	6.2	4.9	4.3	3.4	.	.
4	PERLO	5	3.39	71.3	32	84	.	98	157	1.2	4.6	5.6	2.3	2.1	.	.
7	KARAT	3	3.52	72.2	33	89	.	103	165	1.2	4.8	6.0	2.8	1.6	.	.
8	KASTOR	4	3.48	71.7	34	88	.	96	166	1.7	4.1	6.2	2.3	1.4	.	.
LOCATIONS			5	5	5	5	0	5	5	5	4	3	2	2	0	0

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	4	4.07	80.2	50	69	2.6	86	179	.	.	4.0	.	.	.	.
2	ABSOLVENT	6	3.44	80.7	50	66	3.6	83	173	.	.	8.0	.	.	.	.
3	MJ-50	5	3.89	78.1	48	79	5.1	88	172	.	.	7.5	.	.	.	.
4	PERLO	3	4.81	81.2	49	51	2.9	94	178	.	.	5.5	.	.	.	.
7	KARAT	2	5.05	81.7	48	60	2.0	96	176	.	.	5.0	.	.	.	.
8	KASTOR	1	5.84	81.5	49	62	2.4	94	174	.	.	6.5	.	.	.	.
LOCATIONS		1		2	2	3	2	2	1	0	0	1	0	0	0	0

YEAR : 89
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 %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.03	71.8	37	83	2.7	93	167	5.1	5.0	4.4	4.5	1.8	.	.
2	ABSOLVENT	4	3.39	75.0	41	83	3.4	88	163	3.2	4.3	6.3	3.3	3.1	.	.
3	MJ-50	1	3.77	72.1	39	86	5.1	95	162	3.4	6.2	5.3	3.8	3.6	.	.
4	PERLO	5	3.31	73.7	37	72	3.6	99	160	1.5	4.6	6.1	2.8	2.1	.	.
7	KARAT	3	3.48	74.4	37	78	2.7	104	165	1.3	4.8	6.2	2.9	2.1	.	.
8	KASTOR	2	3.50	73.7	38	79	3.3	98	165	1.7	4.1	6.6	2.5	1.9	.	.
LOCATIONS		8		8	7	8	3	9	8	6	4	5	3	3	0	0

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

TRAIT : YIELD
YEAR : 89
AREA : 1

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	HW89N	RN89N	MEAN
1	MONOPOL	1.87	1.77	1.82
2	ABSOLVENT	2.65	3.09	2.87
3	MJ-50	3.43	3.51	3.47
4	PERLO	2.05	2.63	2.34
7	KARAT	2.56	2.63	2.60
8	KASTOR	2.52	2.24	2.38
	LOCATION MEAN	2.51	2.64	2.58

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	HW89N	RN89N	MEAN
1	MONOPOL	74	67	71
2	ABSOLVENT	105	117	111
3	MJ-50	136	133	135
4	PERLO	82	99	90
7	KARAT	102	99	101
8	KASTOR	100	85	92
	LOCATION MEAN	2.51	2.64	2.58

ONTARIO REGIONAL;FALL RED WHEAT 1989

TRAIT : YIELD
YEAR : 89
AREA : 2

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	EA89N	WK89N	NN89N	HN89N	LL89N	MEAN
1	MONOPOL	3.76	3.33	2.32	3.76	3.39	3.31
2	ABSOLVENT	3.65	4.55	2.59	4.11	3.01	3.58
3	MJ-50	4.06	5.03	2.68	3.90	3.64	3.86
4	PERLO	2.98	4.05	3.26	3.49	3.18	3.39
7	KARAT	4.06	3.77	2.70	3.93	3.13	3.52
8	KASTOR	3.92	3.59	2.70	4.40	2.79	3.48
LOCATION MEAN		3.74	4.05	2.71	3.93	3.19	3.52

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	EA89N	WK89N	NN89N	HN89N	LL89N	MEAN
1	MONOPOL	101	82	86	96	106	94
2	ABSOLVENT	98	112	96	105	94	101
3	MJ-50	109	124	99	99	114	109
4	PERLO	80	100	120	89	100	98
7	KARAT	109	93	100	100	98	100
8	KASTOR	105	89	100	112	87	98
LOCATION MEAN		3.74	4.05	2.71	3.93	3.19	3.52

ONTARIO REGIONAL;FALL RED WHEAT 1989

TRAIT : YIELD
YEAR : 89
AREA : 3

ABBREVIATED HEADINGS REPRESENT LOCATION-YEAR-MANAGEMENT COMBINATION

KEY	NAME	RW89N	MEAN
1	MONOPOL	4.07	4.07
2	ABSOLVENT	3.44	3.44
3	MJ-50	3.89	3.89
4	PERLO	4.81	4.81
7	KARAT	5.05	5.05
8	KASTOR	5.84	5.84
	LOCATION MEAN	4.52	4.52

DATA EXPRESSED RELATIVE TO LOCATION MEANS

KEY	NAME	RW89N	MEAN
1	MONOPOL	90	90
2	ABSOLVENT	76	76
3	MJ-50	86	86
4	PERLO	106	106
7	KARAT	112	112
8	KASTOR	129	129
	LOCATION MEAN	4.52	4.52

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - RIDGETOWN
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	6	1.77	65.0	.	.	3.0	105	167	7.0	.	.	6.0	1.0	.	.
2	ABSOLVENT	2	3.09	71.2	.	.	3.0	106	159	4.0	.	.	3.0	4.0	.	.
3	MJ-50	1	3.51	67.7	.	.	5.0	114	158	5.0	.	.	3.0	4.0	.	.
4	PERLO	3	2.63	70.4	.	.	5.0	115	160	3.0	.	.	4.0	2.0	.	.
7	KARAT	3	2.63	70.5	.	.	4.0	122	159	2.0	.	.	3.0	3.0	.	.
8	KASTOR	5	2.24	68.4	.	.	5.0	112	160	2.0	.	.	3.0	3.0	.	.
MEANS			2.64	68.9	.	.	4.2	112	161	3.8	.	.	3.7	2.8	.	.

LOCATION - RIDGETOWN
MANAGEMENT - INTENSIVE

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	6	1.79	71.4	.	.	1.0	92	169	7.0	.	.	5.0	.0	.	.
2	ABSOLVENT	4	3.00	73.3	.	.	1.0	86	161	4.0	.	.	3.0	3.0	.	.
3	MJ-50	1	4.27	73.1	.	.	2.0	97	159	4.0	.	.	3.0	3.0	.	.
4	PERLO	3	3.30	74.4	.	.	2.0	98	162	2.0	.	.	2.0	2.0	.	.
7	KARAT	2	3.49	73.7	.	.	1.0	103	160	3.0	.	.	2.0	2.0	.	.
8	KASTOR	5	2.88	72.0	.	.	1.0	95	162	2.0	.	.	2.0	1.0	.	.
MEANS			3.12	73.0	.	.	1.2	95	162	3.7	.	.	3.2	1.8	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - HARROW
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	6	1.87	.	.	.	.	89	158	.	.	6.7	.	.	.	.
2	ABSOLVENT	2	2.65	.	.	.	.	85	155	.	.	6.9	.	.	.	.
3	MJ-50	1	3.43	.	.	.	.	94	153	.	.	4.2	.	.	.	.
4	PERLO	5	2.05	.	.	.	.	101	158	.	.	8.1	.	.	.	.
7	KARAT	3	2.56	.	.	.	.	109	155	.	.	8.1	.	.	.	.
8	KASTOR	4	2.52	.	.	.	.	101	155	.	.	8.1	.	.	.	.
MEANS			2.51	.	.	.	.	97	156	.	.	7.0	.	.	.	.

LOCATION - WOODSTOCK
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.33	64.2	24	100	.	103	166	6.3	6.0	.	.	2.3	.	.
2	ABSOLVENT	2	4.55	72.3	35	100	.	99	158	4.3	3.3	.	.	2.2	.	.
3	MJ-50	1	5.03	69.2	34	99	.	108	158	5.0	6.3	.	.	2.2	.	.
4	PERLO	3	4.05	68.6	28	98	.	105	163	3.0	2.7	.	.	1.5	.	.
7	KARAT	4	3.77	71.1	30	99	.	111	162	3.3	3.7	.	.	1.2	.	.
8	KASTOR	5	3.59	64.9	27	100	.	106	162	3.8	2.7	.	.	1.7	.	.
MEANS			4.05	68.4	30	99	.	105	162	4.3	4.1	.	.	1.9	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - ELORA
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	6	3.76	66.7	31	98	.	90	147	4.0	.	.	.	2.0	.	.
2	ABSOLVENT	4	3.65	71.7	34	98	.	83	167	1.8	.	.	.	3.1	.	.
3	MJ-50	1	4.06	69.2	35	100	.	93	165	2.3	.	.	.	4.7	.	.
4	PERLO	5	2.98	66.7	27	80	.	93	119	1.3	.	.	.	2.7	.	.
7	KARAT	1	4.06	69.2	30	98	.	97	168	.8	.	.	.	2.1	.	.
8	KASTOR	3	3.92	70.5	31	98	.	87	169	1.3	.	.	.	1.1	.	.
MEANS			3.74	69.0	31	95	.	91	156	1.9	.	.	.	2.6	.	.

LOCATION - ELORA
MANAGEMENT - INTENSIVE

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	3	4.09	66.1	.	98	.	92	172	4.0	.	.	.	.6	.	.
2	ABSOLVENT	4	4.01	72.3	.	99	.	88	164	2.5	.	.	.	1.8	.	.
3	MJ-50	1	4.94	69.9	.	100	.	95	163	2.5	.	.	.	3.0	.	.
4	PERLO	6	3.71	64.9	.	89	.	97	170	.5	.	.	.	.4	.	.
7	KARAT	2	4.42	67.4	.	95	.	100	166	.8	.	.	.	1.4	.	.
8	KASTOR	5	3.78	67.4	.	94	.	93	168	1.3	.	.	.	.4	.	.
MEANS			4.15	68.2	.	96	.	94	167	1.9	.	.	.	1.3	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - NAIRN
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	6	2.32	74.1	31	96	.	100	171	6.3	7.3	4.8	.	.	.	.
2	ABSOLVENT	5	2.59	77.2	36	94	.	83	161	4.3	7.5	7.5	.	.	.	.
3	MJ-50	4	2.68	74.7	38	91	.	89	161	4.0	8.0	7.5	.	.	.	.
4	PERLO	1	3.26	77.0	35	95	.	104	164	.0	7.0	6.5	.	.	.	.
7	KARAT	2	2.70	75.4	33	92	.	104	163	.3	7.8	8.3	.	.	.	.
8	KASTOR	2	2.70	75.6	36	93	.	99	164	1.0	8.0	7.8	.	.	.	.
MEANS			2.71	75.7	35	94	.	97	164	2.7	7.6	7.1	.	.	.	.

LOCATION - HARRISTON
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	5	3.76	71.4	34	68	.	88	176	2.3	1.8	1.8	1.5	.	.	.
2	ABSOLVENT	2	4.11	72.5	38	75	.	87	168	1.8	2.5	2.5	2.0	.	.	.
3	MJ-50	4	3.90	66.9	32	68	.	93	167	2.1	4.3	1.8	2.5	.	.	.
4	PERLO	6	3.49	70.5	32	66	.	94	171	.3	2.7	3.8	1.5	.	.	.
7	KARAT	3	3.93	72.8	34	71	.	103	169	.6	2.7	3.3	1.7	.	.	.
8	KASTOR	1	4.40	73.7	36	66	.	99	169	.8	2.5	3.8	1.5	.	.	.
MEANS			3.93	71.3	34	69	.	94	170	1.3	2.8	2.8	1.8	.	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - LISTOWEL
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	2	3.39	72.8	38	94	.	89	172	4.8	5.0	4.5	6.0	.	.	.
2	ABSOLVENT	5	3.01	73.8	42	95	.	84	164	3.0	4.0	6.5	5.0	.	.	.
3	MJ-50	1	3.64	73.2	40	94	.	91	164	2.0	6.0	5.5	6.0	.	.	.
4	PERLO	3	3.18	73.6	37	83	.	93	168	1.3	6.0	6.5	3.0	.	.	.
7	KARAT	4	3.13	72.6	39	86	.	99	165	1.0	5.0	6.5	4.0	.	.	.
8	KASTOR	6	2.79	73.6	38	85	.	90	166	1.5	3.0	7.0	3.0	.	.	.
MEANS			3.19	73.3	39	90	.	91	167	2.3	4.8	6.1	4.5	.	.	.

LOCATION - LISTOWEL
MANAGEMENT - INTENSIVE

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	1	5.36	75.2	46	95	.	91	.	2.5	5.0	4.0	4.0	.	.	.
2	ABSOLVENT	3	4.60	74.6	46	94	.	86	.	2.3	5.0	5.3	4.0	.	.	.
3	MJ-50	2	5.27	74.2	48	96	.	95	.	2.0	5.0	4.8	4.0	.	.	.
4	PERLO	4	4.56	75.4	46	81	.	94	.	.8	4.0	5.3	3.0	.	.	.
7	KARAT	5	4.40	76.2	44	90	.	100	.	.8	3.0	5.5	3.0	.	.	.
8	KASTOR	6	4.13	76.0	42	88	.	90	.	1.0	3.0	6.3	2.0	.	.	.
MEANS			4.72	75.3	45	91	.	93	.	1.6	4.2	5.2	3.3	.	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - RENFREW
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	4	4.07	77.6	43	80	2.2	90	.	.	.	4.0	.	.	.	.
2	ABSOLVENT	6	3.44	78.5	43	79	5.2	85	.	.	.	8.0	.	.	.	.
3	MJ-50	5	3.89	75.6	40	85	7.2	83	.	.	.	7.5	.	.	.	.
4	PERLO	3	4.81	79.1	43	80	3.8	96	.	.	.	5.5	.	.	.	.
7	KARAT	2	5.05	79.5	43	79	3.0	98	.	.	.	5.0	.	.	.	.
8	KASTOR	1	5.84	79.2	44	77	3.8	91	.	.	.	6.5	.	.	.	.
MEANS			4.52	78.3	43	80	4.2	91	.	.	.	6.1	.	.	.	.

LOCATION - OTTAWA-1
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	.	.	.	.	53	.	.	.	.	.	.	.	.	.	.
2	ABSOLVENT	.	.	.	.	43	.	.	.	.	.	.	.	.	.	.
3	MJ-50	.	.	.	.	70	.	.	.	.	.	.	.	.	.	.
4	PERLO	.	.	.	.	26	.	.	.	.	.	.	.	.	.	.
7	KARAT	.	.	.	.	43	.	.	.	.	.	.	.	.	.	.
8	KASTOR	.	.	.	.	49	.	.	.	.	.	.	.	.	.	.
MEANS		.	.	.	.	47	.	.	.	.	.	.	.	.	.	.

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

ONTARIO REGIONAL;FALL RED WHEAT 1989

LOCATION - KEMPTVILLE
MANAGEMENT - NORMAL

KEY #	CULTIVAR	YIELD RK	YIELD T/HA	TSTW K/HL	KW MG	SUR %	LOG 0-9	HT CM	HD *	MIL 0-9	LRS 0-9	SEP 0-9	GLB 0-9	HBL %	SSM 0-9	BYD 0-9
1	MONOPOL	.	.	82.8	56	73	3.0	81	179	.	.	.	.	.	.	.
2	ABSOLVENT	.	.	82.8	57	76	2.0	81	173	.	.	.	.	.	.	.
3	MJ-50	.	.	80.7	55	81	3.0	93	172	.	.	.	.	.	.	.
4	PERLO	.	.	83.3	55	46	2.0	91	178	.	.	.	.	.	.	.
7	KARAT	.	.	83.8	53	58	1.0	93	176	.	.	.	.	.	.	.
8	KASTOR	.	.	83.8	53	61	1.0	96	174	.	.	.	.	.	.	.
MEANS		.	.	82.9	55	66	2.0	89	175	.	.	.	.	.	.	.

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

ONTARIO REGIONAL PERFORMANCE TEST
FALL TRITICALE 1989

DESCRIPTION OF VARIETIES TESTED

OAC DECADE - GUELPH SELECTION FROM CROSS MaA//274/320/3/LINE 17680. HIGH YIELDING, SHORT VARIETY WITH GOOD WINTER SURVIVAL AND GOOD RESISTANCE TO STEM RUST, LEAF RUST AND POWDERY MILDEW. LISCENCED IN 1984; TESTED AS GWT-3.

OAC TRILLIUM - GUELPH SELECTION FROM THE TOPCROSS GC4-441. HIGH YIELDING, INTERMEDIATE HEIGHT LINE WITH GOOD LODGING RESISTANCE, GOOD WINTER SURVIVAL, AND GOOD TEST WEIGHT. HAS GOOD RESISTANCE TO STEM RUST, LEAF RUST, POWDERY MILDEW, AND BYDV. LISCENCED IN 1989; TESTED AS GWT-8.

ONTARIO REGIONAL PERFORMANCE TEST
FALL TRITICALE 1989

DESCRIPTION OF VARIETIES TESTED
YIELD SUMMARIES 1984-1989
INDIVIDUAL TRIAL SUMMARIES 1989

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
HT - HEIGHT (CM)
HD - HEADING
MIL - MILDEW
SRS - STEM RUST

ONTARIO REGIONAL PERFORMANCE TEST
FALL TRITICALE 1989

MEAN YIELDS 1984-89 (6 YRS.)

CULTIVAR	YEAR	AREA 1 T/HA	AREA 1 RANK	AREA 11 T/HA	AREA 11 RANK	AREA 111 T/HA	AREA 111 RANK	PROV. T/HA	PROV. RANK
OAC DECADE	1984	3.65	2	4.52	2	4.38	2	4.18	2
	1985	6.77	2	5.97	2	7.60	1	6.78	2
	1986	3.90	2	4.50	2	4.50	2	4.30	2
	1987	3.57	2	NO DATA		5.48	2	4.53	2
	1988	3.02	2	3.20	2	3.94	2	3.31	2
	1989	2.64	2	4.62	2	3.57	2	3.80	2
6 YEAR MEAN		3.93	2	4.56*	2	4.91	2	4.48	2
OAC TRILLIUM	1984	4.46	1	5.63	1	5.43	1	5.17	1
	1985	6.85	1	7.21	1	7.60	1	7.22	1
	1986	4.60	1	5.20	1	6.30	1	5.37	1
	1987	5.14	1	NO DATA		5.51	1	5.33	1
	1988	3.06	1	3.74	1	4.35	1	3.72	1
	1989	2.96	1	5.54	1	4.01	1	4.41	1
6 YEAR MEAN		4.51	1	5.46*	1	5.53	1	5.20	1

* 5 YEAR MEAN

DATA WERE OBTAINED FROM THE FOLLOWING LOCATIONS :

1. AREA 1. 1984 RIDGETOWN AND DELHI.
1985-1989 RIDGETOWN.

2. AREA 11. 1984 BEETON, ELORA, WOODSTOCK, AND MIDHURST.
1985 ELORA AND LISTOWEL.
1986 WOODSTOCK AND LISTOWEL.
1987 NO DATA AVAILABLE.
1988 ELORA, NAIRN, LISTOWEL.
1989 ELORA AND LISTOWEL.

3. AREA 111. 1984 OTTAWA AND KEMPTVILLE.
1985 KEMPTVILLE.
1986 KEMPTVILLE.
1987 KEMPTVILLE.
1988 OTTAWA.
1989 OTTAWA AND KEMPTVILLE.

ONTARIO REGIONAL PERFORMANCE TEST
FALL TRITICALE 1989

RIDGETOWN

KEY #	CULTIVAR	YLD T/HA	TSTW K/HL	KW MG	SUR %	LOG 1-9	HT CM	HD *	MIL 0-9	SRS 0-9
1	OAC DECADE	2.64	53.3	.	.	5.0	122	156	.	.
2	OAC TRILLIUM	2.96	56.2	.	.	7.0	134	156	.	.
	MEAN	2.80	54.8	.	.	6.0	128	156	.	.

ELORA

KEY #	CULTIVAR	YLD T/HA	TSTW K/HL	KW MG	SUR %	LOG 1-9	HT CM	HD *	MIL 0-9	SRS 0-9
1	OAC DECADE	4.72	.	.	.	0.0	111	158	.	0.0
2	OAC TRILLIUM	5.91	.	.	.	0.3	123	159	.	2.0
	MEAN	5.22	.	.	.	0.2	117	159	.	1.0

LISTOWEL

KEY #	CULTIVAR	YLD T/HA	TSTW K/HL	KW MG	SUR %	LOG 1-9	HT CM	HD *	MIL 0-9	SRS 0-9
1	OAC DECADE	4.51	62.2	28	95	.	102	160	.	0.5
2	OAC TRILLIUM	5.16	70.8	36	91	.	121	160	.	1.3
	MEAN	4.84	66.5	32	93	.	112	160	.	0.9

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

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OTTAWA

KEY #	CULTIVAR	YLD T/HA	TSTW K/HL	KW MG	SUR %	LOG 1-9	HT CM	HD *	MIL 0-9	SRS 0-9
1	OAC DECADE	3.50	64.3	.	59	.	87	.	.	.
2	OAC TRILLIUM	3.73	67.1	.	59	.	105	.	.	.
	MEAN	3.62	65.7	.	59	.	96	.	.	.

KEMPTVILLE

KEY #	CULTIVAR	YLD T/HA	TSTW K/HL	KW MG	SUR %	LOG 1-9	HT CM	HD *	MIL 0-9	SRS 0-9
1	OAC DECADE	3.64	69.3	45	41	6.0	103	164	.	.
2	OAC TRILLIUM	4.29	73.5	55	46	6.0	106	164	.	.
	MEAN	3.97	71.4	50	44	6.0	105	164	.	.

PROVINCE

KEY #	CULTIVAR	YLD T/HA	TSTW K/HL	KW MG	SUR %	LOG 1-9	HT CM	HD *	MIL 0-9	SRS 0-9
1	OAC DECADE	3.80	62.3	37	65	3.7	105	160	.	0.3
2	OAC TRILLIUM	4.41	66.9	46	65	4.4	118	160	.	1.7
	MEAN	4.11	64.6	42	65	4.1	112	160	.	1.0

1. * DAYS FROM JAN.1
2. A HIGH SCORE IS UNDESIRABLE IN LODGING AND DISEASE RATINGS.
3. PROVINCIAL YIELD AVERAGES WERE BASED ON DATA FROM RIDGETOWN, ELORA, LISTOWEL, OTTAWA, AND KEMPTVILLE.

CO-OPERATORS AND LOCATIONS OF REGIONAL TESTS, 1989

Testing area	County or District	Co-operators	Crops				
			Oats	Barley	Winter Wheat	Winter Barley	Winter Triticale
I	Kent I	RN = Ridgetown C.A.T. Ridgetown, Ont.	x	x	R&W	x*	x
	Kent II	MH = W.G. Thompson and Sons Ltd., Morpeth, Ont.			W	x	
	Lambton	ID = Ridgetown C.A.T., Ont. (Inwood)	x*	x*	W		
	Essex I	HW = Harrow Research Station, Agriculture Canada			R		
	Essex II	WE = Woodslee Soil Substation, Agriculture Canada			W		
II	Oxford	WK = Crop Science Dept. OAC, Woodstock Res. Sta. Woodstock, Ontario	x	x	R+W	x	
	Huron	W.G. Thompson & Sons Ltd., Winthrop, Ontario	x	x			
	Wellington I	EA = Crop Science Dept., OAC, Elora			R+W	x	x
	Wellington III	HN = C & M Seed Sales Inc., Palmerston, Ontario			R		
	Middlesex I	NN = W.G. Thompson & Sons Ltd., Nairn, Ont.	x	x	R+W	x	
	Middlesex II	LN = W. Laidlaw, R.R. #7, London, Ontario			W		
	Perth	LL = King Agro, Listowel, Ontario			R	x	x
	Manitoulin Island	G. Gilpen, Spring Bay, Manitoulin Island	x*	x*			
	Hastings	Ag. Canada, Smithfield Exp. Farm, Trenton, Ont.	x**	x**			
	Victoria	N. Moore, Pontypool, Ont.	x**	x**			

CO-OPERATORS AND LOCATIONS OF REGIONAL TESTS, 1989 (cont'd)

Testing area	County or District	Co-operators	Crops			
			Oats	Barley	Winter Wheat	Winter Triticale
III	Stormont, Dundas & Glengarry	Kemptville C.A.T., Winchester, Ontario	x*	x*		
	Grenville	KE = Kemptville C.A.T., Kemptville, Ontario	x*	x*	R+W	x
	Carleton	O1 = Agriculture Canada, P.R.C., Ottawa, Ontario	x	x	R+W	x
	Renfrew	K. Dick, R.R. #1, Douglas, Ontario	x*	x*	R+W	
	Lanark	C. Proc. Pakenham, Ontario	x	x		
	Prescott & Rusell	Alfred College of Agriculture & Food Tech.,Alfred, Ont.	x	x*		
IV	Wellington I	EA = Crop Science Dept., O.A.C., Elora Research Station	x	x		
	Wellington II	D. Ghent, R.R. #6, Mount Forest, Ontario	x**	x**		
	Perth	LL = King Agro, Listowel, Ontario	x*	x*		
V	Temiskaming	New Liskeard C.A.T., New Liskeard, Ont.	x	x		
	Thunder Bay	Agriculture Canada, Exp. Farm, Thunder Bay, Ont.	x*	x*		
	Nipissing-District	New Liskeard C.A.T., New Liskeard, Ont.	x	x		
	Rainy River District	New Liskeard C.A.T., New Liskeard, Ont.	x*	x		
	Algoma	L. Hillstrom, Bruce Mills, Ont.	x*	x*		
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