

ONTARIO FORAGE CROP INVESTIGATIONS



1999 REPORT ON FIELD TRIALS OF VARIETIES AND MIXTURES

- Huron Park
- Guelph
- Kemptville
- New Liskeard
- Thunder Bay
- Kapuskasing

1999 REPORT ON FORAGE CROPS TRIALS

ONTARIO FORAGE CROP COMMITTEE

Compiled by: Donna Hancock

**Mr. Laurier Guillemette
Variety Sub-Committee Chair
Ontario Forage Crop Committee
Agriculture and Agri-Food Canada
Experimental Farm
Box 160
Kapusking, Ontario
P5N 2Y3**

Conducted co-operatively by:

**University of Guelph
Ontario Ministry of Agriculture, Food and Rural Affairs
Agriculture and Agri-Food Canada.**

This is the 1998 Ontario Forage Crop Investigations Report. The information contained here was published as submitted by the crop coordinators. Names and addresses of each crop coordinator are provided to facilitate further inquiries if such a need arises.

***Not For Publication:* This is a progress report of co-operative investigations containing data, the interpretation of which may be modified with additional experimentation. Therefore, publication of any data or statements herein should not be made without prior written approval of the organization and personnel concerned.**

ONTARIO FORAGE CROP COMMITTEE VARIETY SUB-COMMITTEE

EXECUTIVE and COORDINATORS

Mr. Laurier Guillemette
Chair

Mr. Jim Johnston
Secretary

Dr. Steve Bowley
Alfalfa, Grass, Quality, Data
Coordinator

Mr. John Madill
Miscellaneous legume Coordinator

ORGANIZATION

Agriculture and Agri-Food Canada,
Kapuskasing
Phone: (705) 335-6148
Fax: (705) 337-6000

New Liskeard Agricultural Research Station,
University of Guelph
Phone: (705) 647-8525 Ext. 223
Fax: (705) 647-9220
Email: jimjohn@onlink.net

Crop Science Dept., University of Guelph
Phone: (519) 824-4120 Ext. 8704
Fax: (519)-826-0401
Email: sbowley@plant.uoguelph.ca

Kemptville College, University of Guelph
Phone: (613) 258-8336 Ext. 444
Fax: (613) 258-8384
Email: jemadill@magi.com

Testing Location

Kapuskasing	(705) 335-6148
Thunder Bay	(807) 475-8180
New Liskeard	(705) 647-8525 x223
Kemptville	(613) 258-8336 x444
Elora (Guelph)	(519) 824-4120 x8704
Huron Research Stn	
HRS	(519) 235-4075
RCAT	(519) 674-1632

Name of Cooperators

Mr. L. Guillemette
Mr. G. Scheifele
Mr. J. Johnston
Mr. J. Madill
Dr. S.R. Bowley

Mr. C. Gillard

Additional copies of this report is obtainable from the Secretary (Mr. Jim Johnston).

CONTENTS

INTRODUCTION	
Coordinators, names, addresses	2
ALFALFA	
Yield data	4
Persistence Data	38
RED CLOVER	
Yield data	45
TREFOIL	
Yield data	51
WHITE CLOVER	
Yield data	60
BROMEGRASS	
Hay Regime	61
Frequent harvest regime	70
ORCHARDGRASS	
Yield data	75
REED CANARYGRASS	
Yield data	86
TALL FESCUE	
Yield data	93
TIMOTHY	
Early (Richmond) harvest regime	98
Late (Climax) harvest regime	109
ANNUAL RYEGRASS	
Yield data	118
ANNUAL FORAGES	
Yield data	122
HEADING DATES	
Grasses & Legumes at Elora	124
GRAZING TRIALS	125

ONTARIO
 Thunder Bay
 Alfalfa Reg A
 Expt. 7247
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
1001	SARANAC	4532	2835	7379	6004	13374
1074	ARROW	3659	2717	6390	4597	11028
1331	DK127	4760	3400	8180	5689	13874
1343	PS94-02	4337	3124	7456	5795	13268
1344	PS94-03	4199	3142	7361	4617	11978
1345	PS94-04	3831	3012	6882	4997	11883
1346	PS94-05	4021	2988	7017	5045	12056
1354	STERLING	3610	2845	6467	4814	11301
1355	ULTRASTAR	4457	3440	7893	6023	13912
1356	ABACUS	4149	3050	7188	4935	12132
1357	HAYMAKER_II	4022	3332	7344	5517	12881
1358	FQ301	4393	3240	7621	5542	13161
1359	CW 2043	3991	3201	7170	5136	12298
1364	YAM410	4599	3222	7804	5879	13693
1365	RUSHMORE	3986	3159	7208	5848	13053
1378	B44	3987	2917	6884	5136	12022
1379	CIBA 2888	4049	3228	7248	5435	12650
1386	9326	4584	3470	8048	5354	13397
1400	YAL47	4459	3484	7945	5502	13473
1404	93-136	4563	3309	7862	5856	13715
9002	120	3982	3073	7031	4827	11864
9053	CENTURION	4227	2844	7053	5792	12760
900	Mean	4200	3138	7338	5379	12717
901	CV	8.3	8.6	7.1	8.8	6.8
905	MCV	9.8	10.1	8.4	10.3	8.1
902	LSD	410.4	317.9	613.0	556.2	1027.3
906	LSR	35.7	41.4	34.2	39.0	35.6
907	Pr>F(Trts)	0.0002	0.0015	0.0001	0.0000	0.0000
908	R_square	66.5	66.4	72.0	77.7	76.7

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
Elora
Alfalfa Trial A
Expt. 2724
Seeded 1996

Code	Cultivar	1999 (kg/ha)			Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2	Cut 3				
1001	SARANAC	6924	3772	2102	12813	11282	9933	34230
1074	ARROW	7319	3651	1928	12922	10866	9094	32645
1285	FORERUNNER	7318	3710	2183	13220	11120	9093	33134
1408	MARINER	7280	4079	2151	13523	11439	9521	34372
1410	CW-3433	7665	3993	2317	14045	11705	9695	35440
1411	LEGEND GOLD	7928	4465	2267	14662	11104	9552	35660
1412	CW-4403	7544	4106	2421	14061	11003	9683	34260
1413	SPRINT	7808	4077	2303	14107	11856	9391	35317
1414	PS9601	7953	3691	2005	13726	11292	9173	34041
1415	PS9602	7939	3824	2073	13802	11101	9199	34227
1416	PS9603	7076	3919	2122	13110	10998	8955	33169
1417	PS9604	7348	4004	2302	13692	10846	9209	33662
1418	PS9605	7172	3765	2295	13346	11125	9371	34067
1419	93W03PM1	7462	4193	2235	13842	11873	9736	35309
1420	93-39	6726	3713	2133	12603	10635	8595	32106
1421	COLUMBIA2000	7544	3810	2078	13474	10798	8897	33206
1422	FORECAST1000	7204	4110	2257	13456	11238	9469	34182
1423	FORECAST3000	8044	4124	2200	14386	10964	9375	34788
1424	92-28	7915	3888	2182	13948	11163	8822	33855
9053	CENTURION	6469	3722	2022	12091	11264	9365	32958
900	Mean	7432	3931	2179	13541	11184	9306	34032
901	CV	8.0	6.6	6.7	5.9	5.2	4.7	3.6
905	MCV	9.5	7.8	8.0	7.0	6.2	5.6	4.3
902	LSD	703.7	308.3	175.1	944.6	696.6	520.0	1477.6
906	LSR	44.7	37.9	35.5	36.7	56.3	38.9	41.6
907	Pr>F(Trts)	0.0140	0.0028	0.0024	0.0046	0.2530	0.0085	0.0051
908	R_square	75.4	83.5	84.3	85.4	58.3	69.5	82.5

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial A
 Expt. 9601
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
1001	SARANAC	6687	4050	10695	12960	9669	33205
1074	ARROW	6882	3853	10743	12973	9892	33618
1285	FORERUNNER	6731	3918	10700	13764	9626	34218
1408	MARINER	6223	4257	10382	13945	9628	34128
1410	CW-3433	7004	4219	11194	13121	10118	34567
1411	CW-4335	6763	3930	10770	13267	10470	34352
1412	CW-4403	6544	4205	10592	13302	9814	33739
1413	CW-4429	6965	4002	11164	13085	9951	34122
1414	PS9601	7086	3836	10902	13146	9553	33709
1415	PS9602	6817	4001	10868	12466	9929	33412
1416	PS9603	7245	4058	11447	13214	10426	35279
1417	PS9604	6010	4168	10133	12777	10031	32744
1418	PS9605	6633	4179	10749	12753	10014	33402
1419	93W03PM1	7075	4417	11449	12415	10140	34071
1420	93-39	7070	4045	11035	13130	9905	34394
1421	COLUMBIA2000	7616	3973	11584	13520	10058	35144
1422	FORECAST1000	6451	4209	10638	13147	10158	33518
1423	FORECAST3000	6339	4049	10353	13305	9114	32658
1424	92-28	7253	3758	11066	12821	9529	33309
9053	CENTURION	6001	4019	10076	13600	10178	33866
900	Mean	6770	4057	10827	13136	9910	33873
901	CV	12.7	5.4	8.1	4.8	5.8	3.5
905	MCV	15.1	6.4	9.7	5.8	6.9	4.2
902	LSD	1023.3	258.8	1045.2	757.3	682.1	1425.5
906	LSR	63.4	39.3	69.3	49.5	50.3	54.4
907	Pr>F(Trts)	0.6041	0.0141	0.6074	0.2198	0.2551	0.2300
908	R_square	29.1	69.3	28.2	42.5	45.8	40.8

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Thunder Bay
 Alfalfa Reg A
 Expt. 7257
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	4840	2680	7534
1074	ARROW	5032	3037	8054
1285	FORERUNNER	4744	2974	7703
1408	MARINER	5030	3228	8274
1410	CW-3433	4800	3109	7909
1411	LEGEND GOLD	5043	3246	8290
1412	CW-4403	5162	3346	8516
1413	SPRINT	4982	3135	8114
1414	PS9601	4794	3189	7972
1415	PS9602	5097	3369	8476
1416	PS9603	4977	3307	8313
1417	PS9604	4689	3244	7909
1418	PS9605	4652	3246	7926
1419	93W03PM1	5193	3347	8553
1420	93-39	4536	3140	7675
1421	COLUMBIA2000	5050	3174	8199
1422	FORECAST1000	4709	3069	7760
1423	FORECAST3000	4714	3045	7778
1424	92-28	4685	3163	7842
9053	CENTURION	4555	2920	7455
900	Mean	4864	3148	8013
901	CV	6.0	5.6	5.4
905	MCV	7.2	6.6	6.4
902	LSD	349.6	209.3	516.1
906	LSR	53.2	30.4	47.0
907	Pr>F(Trts)	0.0393	0.0002	0.0153
908	R_square	74.1	69.1	72.6

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted

ONTARIO
Elora
Alfalfa Trial B
Expt. 2725
Seeded 1996

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2					
1001	SARANAC	6469	3239	1914	11571	11838	9380	32827
1074	ARROW	6818	3327	1777	12009	10218	8991	30931
1285	FORERUNNER	6557	3113	1734	11399	10190	8640	30416
1391	DEPEND+EV	6495	3177	1790	11464	10589	8658	30728
1392	AMERIGRAZE40	7404	3480	2017	12915	10836	8309	32136
1393	A9201	6872	2985	1640	11489	10913	8880	31366
1394	A9203	7081	3458	1917	12492	11350	8778	32737
1409	ZG9346	6509	3258	1731	11560	10584	8716	30683
1425	A9303	6939	3403	1862	12186	11500	9218	32825
1426	A9305	6682	3433	1904	11988	10568	8295	30631
1427	MS93-1ML	7109	2991	1699	11754	10365	9377	31356
1428	MS96-06	6892	3370	2050	12312	11250	9223	32812
1429	MS96-07	6653	3326	2021	12048	11132	9349	32613
1430	ZG9431	6500	3142	1653	11286	10865	8702	30935
1431	94GG	5664	2617	1533	9765	9979	8298	28050
1432	A2693	7233	3472	2117	12877	11516	9017	33584
1433	A2993	7310	3495	1808	12629	11284	9310	33193
1442	A2793	6284	2757	1814	10841	9755	8938	29454
1443	A2893	6320	2865	1661	10803	10472	8424	29845
9053	CENTURION	6572	3440	1833	11798	10393	8602	30763
900	Mean	6718	3217	1824	11759	10780	8855	31394
901	CV	6.5	9.8	8.3	6.9	4.6	4.5	3.9
905	MCV	9.1	13.6	11.5	9.6	6.4	6.2	5.4
902	LSD	608.9	436.8	209.8	1124.2	686.1	547.8	1699.0
906	LSR	35.0	49.7	35.9	35.7	32.9	50.5	30.7
907	Pr>F(Trts)	0.0081	0.0572	0.0099	0.0135	0.0003	0.0072	0.0003
908	R_square	88.1	79.8	83.4	87.2	74.8	67.0	82.7

RCBD arrangement, 3 blocks (123)
Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial B
 Expt. 9602
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
1001	SARANAC	5913	3347	9283	13949	11148	34463
1074	ARROW	6065	3370	9433	14750	10556	34592
1285	FORERUNNER	6179	3260	9418	14455	10678	34211
1391	DEPEND+EV	6437	3329	9703	14174	9955	33555
1392	AMERIGRAZE40	6356	3464	9803	15854	10229	35863
1393	A9201	5568	3254	8857	15165	10326	34351
1394	A9203	7203	3163	10378	14373	10856	35468
1409	ZG9346	7113	3333	10498	14343	10891	35882
1425	A9303	6574	3384	9974	15511	10501	36078
1426	A9305	6234	3262	9472	14388	10311	34089
1427	MS93-1ML	6784	3121	9933	15075	11374	36442
1428	MS96-06	7440	3459	10834	14213	10330	35587
1429	MS96-07	6263	3430	9714	14774	10739	35594
1430	ZG9431	6567	3363	9922	14859	10105	34864
1431	94GG	6267	2813	9077	13414	10484	33135
1432	A2693	6817	3540	10334	14961	11083	36281
1433	A2993	7351	3450	10805	15256	10755	36948
9053	CENTURION	6790	3507	10330	14788	11298	36283
900	Mean	6551	3325	9876	14683	10645	35205
901	CV	12.3	5.0	8.3	4.8	5.4	3.3
905	MCV	14.7	5.9	9.9	5.7	6.4	3.9
902	LSD	961.7	196.2	979.5	835.5	686.1	1364.6
906	LSR	51.4	27.0	49.5	34.2	48.3	35.8
907	Pr>F(Trts)	0.1032	0.0001	0.0416	0.0042	0.0303	0.0003
908	R_square	39.5	60.4	44.0	54.7	60.3	61.0

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kapuskasing
 Registration B
 Expt. 6331
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	2337	3079	5371
1074	ARROW	2728	2488	5176
1285	FORERUNNER	2384	2956	5367
1391	DEPEND+EV	2947	3613	6514
1392	AMERIGRAZE40	2454	3414	5888
1393	A9201	2123	3141	5313
1394	A9203	2495	2919	5460
1409	ZG9346	2686	3068	5726
1425	A9303	2404	3078	5474
1426	A9305	2459	3009	5484
1427	MS93-1ML	2431	3053	5504
1428	MS96-06	2633	3088	5692
1429	MS96-07	2167	3159	5294
1430	ZG9431	2105	2875	4993
1431	94GG	2143	2850	5092
1432	A2693	2505	4077	6504
1433	A2993	1709	3657	5348
9053	CENTURION	2569	2954	5558
900	Mean	2404	3138	5542
901	CV	13.8	10.8	9.7
905	MCV	19.1	15.0	13.5
902	LSD	458.2	471.4	746.2
906	LSR	37.0	29.7	49.1
907	Pr>F(Trts)	0.0273	0.0021	0.1161
908	R_square	71.8	77.7	79.9

RCBD arrangement, 3 blocks {234}

Nearest-neighbour covariance adjusted.

ONTARIO
 Thunder Bay
 Alfalfa Reg B
 Expt. 7258
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
1001	SARANAC	4600	3008	7651	7058	14671
1074	ARROW	4798	2944	7743	7099	14806
1285	FORERUNNER	4700	3114	7814	7091	14915
1391	DEPEND+EV	4805	3082	7926	7234	15170
1392	AMERIGRAZE40	5000	2974	8011	6879	14839
1393	A9201	4770	3128	7852	7040	14900
1394	A9203	4731	3071	7789	6972	14760
1409	ZG9346	4946	3146	8090	7203	15270
1425	A9303	4601	3072	7705	6959	14650
1426	A9305	4765	3006	7782	6855	14641
1427	MS93-1ML	4317	2814	7131	6323	13482
1428	MS96-06	4586	3141	7714	6988	14724
1429	MS96-07	4780	3234	8017	7126	15102
1430	ZG9431	4898	3242	8133	6955	15135
1431	94GG	4527	2819	7326	6262	13598
1432	A2693	5381	3418	8775	7494	16317
1433	A2993	4639	3206	7802	6542	14366
9053	CENTURION	4639	3061	7700	6873	14572
900	Mean	4749	3082	7831	6942	14773
901	CV	5.1	4.6	3.7	4.3	3.6
905	MCV	6.0	5.5	4.3	5.2	4.2
902	LSD	286.3	168.3	340.5	358.2	625.2
906	LSR	26.9	27.9	20.7	29.1	22.0
907	Pr>F(Trts)	0.0003	0.0002	0.0000	0.0001	0.0000
908	R_square	70.8	84.5	84.7	74.6	79.7

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
Elora
Alfalfa Trial C
Expt. 2726
Seeded 1996

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2					
1001	SARANAC	8240	3571	2056	13876	12360	10627	36891
1074	ARROW	8525	3226	1787	13510	11458	10199	35253
1285	FORERUNNER	8246	3195	1944	13435	11095	10185	34785
1378	B44	9076	3315	1886	14305	11473	10070	35713
1379	CIBA 2888	8683	3444	1939	14124	11258	10220	35747
1381	3T44	9464	3807	2157	15398	11936	10119	37775
1383	MS95-06	8408	3516	2053	13954	11657	10397	35888
1386	9326	8238	3560	2150	13866	11656	10102	35468
1387	WINTERKING	8337	3350	2052	13713	11453	10126	35297
1388	GOLD PLUS	8883	3586	2166	14694	11508	10112	36375
1389	DK142	9461	3727	2156	15280	12090	10156	37305
1390	CW-3347	8709	3622	2188	14518	11520	10051	36073
1395	PS95-01	8397	3395	1884	13693	11493	10258	35275
1396	PS95-02	8629	3452	1970	14038	11054	10232	35242
1397	PS95-03	8880	3703	2060	14571	11797	10169	36581
1398	CASCADIA ML	8319	3296	1897	13531	11346	10178	34949
1399	PS95-05	8915	3554	2051	14556	11658	9991	36577
1400	YAL47	8823	3649	2317	14780	11580	9736	36043
1404	93-136	8269	3481	2167	13974	11775	9892	35605
9053	CENTURION	8531	3332	1891	13771	11600	10889	36222
900	Mean	8652	3489	2039	14179	11588	10186	35953
901	CV	8.6	7.1	6.2	6.4	2.9	3.8	3.3
905	MCV	10.3	8.5	7.4	7.6	3.5	4.5	4.0
902	LSD	890.0	295.1	151.4	1075.2	406.0	463.1	1430.1
906	LSR	72.6	48.2	28.6	54.8	31.1	40.2	47.8
907	Pr>F(Trts)	0.4819	0.0700	0.0000	0.1353	0.0004	0.1017	0.0861
908	R_square	90.3	93.3	93.3	94.3	92.9	87.7	95.6

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
New Liskeard
Alfalfa Trial C
Expt. 9603
Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
1001	SARANAC	6261	4019	10210	13883	9474	33821
1074	ARROW	7273	3870	11263	14606	9522	34852
1285	FORERUNNER	6645	3897	10476	14844	9510	34590
1378	B44	6391	3625	10022	14316	9837	33892
1379	CIBA 2888	6352	3935	10437	14188	10535	34928
1381	3T44	6706	4108	10760	14648	10093	35712
1383	MS95-06	6387	3961	10421	14218	10355	34775
1386	9326	6543	4050	10587	14428	9626	34483
1387	WINTERKING	6804	4127	10863	14173	9761	34851
1388	GOLD PLUS	7341	4070	11510	14495	9238	35526
1389	DK142	7107	4132	11160	14186	10363	35919
1390	CW-3347	5785	3937	9724	14714	9431	34207
1395	PS95-01	6448	3747	10034	14567	10210	35115
1396	PS95-02	6615	3880	10507	14550	9791	34808
1397	PS95-03	6400	4026	10446	14373	9768	34790
1398	CASCADIA ML	6810	3713	10631	14429	10424	35334
1399	PS95-05	6419	4041	10545	14007	9657	34186
1400	YAL47	7343	3987	11308	14357	9636	35241
1404	93-136	6355	4073	10199	14586	9617	34365
9053	CENTURION	6667	3754	10501	13441	10596	34659
900	Mean	6632	3948	10580	14350	9872	34803
901	CV	12.6	5.7	8.4	5.1	5.6	3.4
905	MCV	15.1	6.8	10.0	6.0	6.7	4.0
902	LSD	998.8	266.5	1054.4	864.1	658.8	1394.8
906	LSR	64.1	52.5	59.0	61.6	48.5	66.5
907	Pr>F(Trts)	0.6004	0.0897	0.4127	0.7798	0.0145	0.5530
908	R_square	34.3	69.3	40.7	33.7	77.3	73.0

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
 Thunder Bay
 Alfalfa Reg C
 Expt. 7259
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
1001	SARANAC	5214	3148	8382	6653	15037
1074	ARROW	4946	3129	8076	6504	14576
1285	FORERUNNER	5091	3490	8573	6795	15370
1378	B44	5083	3269	8313	6109	14449
1379	CIBA 2888	5221	3492	8715	6327	15029
1381	3T44	5371	3671	9055	6542	15576
1383	MS95-06	4799	3298	8104	5721	13817
1386	9326	5122	3596	8680	6224	14926
1387	WINTERKING	5212	3453	8640	6295	14934
1388	GOLD PLUS	5266	3484	8753	6570	15335
1389	DK142	5365	3449	8819	6457	15288
1390	CW-3347	5396	3481	8890	6573	15458
1395	PS95-01	4939	3398	8346	6598	14923
1396	PS95-02	5211	3583	8782	6415	15192
1397	PS95-03	5129	3629	8784	6113	14887
1398	CASCADIA ML	4847	3417	8254	6020	14299
1399	PS95-05	4672	3512	8171	6254	14402
1400	YAL47	5281	3634	8927	6937	15888
1404	93-136	5096	3673	8808	6911	15703
9053	CENTURION	5178	3283	8454	6669	15125
900	Mean	5122	3454	8576	6434	15011
901	CV	4.2	6.1	4.0	5.6	3.8
905	MCV	4.9	7.3	4.8	6.6	4.6
902	LSD	253.2	251.3	409.5	426.4	687.4
906	LSR	35.0	46.3	41.8	35.1	33.2
907	Pr>F(Trts)	0.0003	0.0100	0.0013	0.0012	0.0006
908	R_square	74.0	83.6	84.5	67.3	71.4

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
Elora
Alfalfa Trial D
Expt. 2727
Seeded 1996

Code	Cultivar	1999 (kg/ha)			Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2	Cut 3				
1001	SARANAC	7678	3957	1944	13638	12905	9960	36326
1074	ARROW	8637	3721	1744	14095	11567	9220	34912
1098	MAGNUM III	8568	4354	2151	15076	12440	9994	37208
1248	JAVELIN	8352	4118	1868	14308	11509	9630	35503
1375	ABT 205	7919	3923	1787	13723	12299	10195	36038
1376	ABT 405	8055	4094	1942	14122	12453	9787	36327
1377	SUPERCUTS	8912	4236	1921	14951	12169	9601	36906
1380	C-3220	8199	4021	1869	14081	11821	10201	36080
1382	ALPHA 2001	8081	3941	1964	14044	12070	9635	35663
1384	MS95-07	8729	3862	1962	14556	12755	10276	37494
1385	NY9012	8456	4050	2130	14579	12444	9640	36710
1402	STAMPEDE	8187	4358	2119	14581	12048	9844	36400
1403	92-31	8766	4396	2181	15314	12560	9936	37818
1405	GH766QP	7690	3792	1934	13405	11635	9431	34603
1406	PSC 10222	7825	3784	1751	13432	12017	9616	35018
1434	53V08	7985	4429	2219	14660	12355	10195	37380
1435	YAL 55	8695	4962	2338	15954	12824	10218	39237
1436	5396	7812	4315	2194	14335	12955	10101	37577
1437	WL326 GZ	8274	4218	1982	14498	10765	9786	34943
9053	CENTURION	8212	4073	1833	14117	12148	10099	36433
900	Mean	8252	4130	1992	14373	12187	9868	36429
901	CV	7.1	6.1	5.1	4.9	8.7	5.3	4.9
905	MCV	8.4	7.3	6.1	5.8	10.4	6.3	5.9
902	LSD	694.8	300.3	122.0	832.5	1269.1	617.2	2140.4
906	LSR	56.3	24.2	20.6	32.7	58.0	58.4	46.2
907	Pr>F(Trts)	0.0768	0.0000	0.0000	0.0005	0.4524	0.2188	0.0708
908	R_square	75.3	84.7	87.0	86.7	41.7	62.8	62.0

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial D
 Expt. 9604
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
1001	SARANAC	5828	3794	9579	15097	10414	35442
1074	ARROW	5884	3518	9522	15481	11308	35942
1098	MAGNUM III	6604	3870	10507	15076	10671	35773
1248	JAVELIN	5571	3722	9314	14295	10393	34257
1375	ABT_205	6270	3706	9892	15035	11227	36121
1376	ABT_405	5983	3782	9694	14876	10052	34873
1377	SUPERCUTS	6373	3767	10171	15155	10599	36310
1380	C-3220	5978	3629	9685	15044	10901	35506
1382	ALPHA 2001	5746	3533	9295	14500	10724	34196
1384	MS95-07	6401	3849	10283	14814	10768	36164
1385	NY9012	5844	3765	9561	14123	10474	34300
1402	STAMPEDE	5646	3672	9341	15119	10581	35447
1403	92-31	5558	3845	9499	15012	10548	35080
1405	GH766QP	5878	3723	9582	15287	10425	35065
1406	PSC 10222	6166	3776	9905	14907	10657	35581
1434	53V08	6830	3840	10655	14778	10626	35957
1435	YAL 55	6355	3853	10232	14097	10350	34626
1436	5396	5776	3885	9624	14081	10437	33841
1437	WL326_GZ	5547	3719	9208	14245	10166	33383
9053	CENTURION	5603	3767	9305	14626	11342	35300
900	Mean	5992	3751	9743	14782	10633	35158
901	CV	15.4	3.8	9.4	4.2	3.9	3.2
905	MCV	18.3	4.6	11.2	5.0	4.7	3.8
902	LSD	1099.5	171.1	1092.4	732.7	495.0	1331.5
906	LSR	85.7	46.6	75.5	52.3	38.4	45.5
907	Pr>F(Trts)	0.8588	0.0235	0.6569	0.0344	0.0021	0.0155
908	R_square	25.0	63.6	33.2	50.2	74.0	57.1

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Thunder Bay
 Alfalfa Reg D
 Expt. 7260
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
1001	SARANAC	5724	3204	8914	6144	15017
1074	ARROW	5217	2943	8159	6734	14912
1098	MAGNUM III	5465	3190	8656	6968	15602
1248	JAVELIN	5207	2969	8172	6698	14854
1375	ABT_205	5245	2932	8171	6281	14467
1376	ABT_405	5493	2711	8215	6092	14299
1377	SUPERCUTS	5524	3040	8599	6853	15520
1380	C-3220	5397	3067	8442	6862	15268
1382	ALPHA_2001	5302	3171	8484	6743	15250
1384	MS95-07	5129	2926	8064	6248	14312
1385	NY9012	5481	3162	8648	6330	14975
1402	STAMPEDE	5379	3208	8592	7406	16015
1403	92-31	5453	3042	8476	6469	14923
1405	GH766QP	5248	2978	8232	6909	15137
1406	PSC 10222	5477	3098	8596	6631	15255
1434	53V08	5778	3259	9021	6709	15680
1435	YAL 55	5559	3339	8893	7163	16067
1436	5396	5236	3127	8377	6440	14853
1437	WL326_GZ	5343	3123	8432	6517	14925
9053	CENTURION	5529	3127	8659	6500	15166
900	Mean	5409	3081	8490	6635	15125
901	CV	6.0	5.3	5.0	6.1	4.5
905	MCV	7.1	6.3	6.0	7.3	5.4
902	LSD	383.5	193.7	510.3	481.7	817.0
906	LSR	59.1	30.9	53.4	36.7	46.2
907	Pr>F(Trts)	0.3567	0.0006	0.1010	0.0018	0.0233
908	R_square	68.1	92.1	84.8	70.0	79.2

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
Elora
Alfalfa Trial A
Expt. 2741
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
1001	SARANAC	7291	3833	2623	13872	10311	24124
1074	ARROW	6936	3875	2652	13614	9430	22885
1285	FORERUNNER	6985	3972	2726	13568	9609	23085
1410	CW-3433	7715	4218	2955	14761	10276	24993
1411	LEGEND GOLD	7143	4281	2923	14448	10090	24638
1412	CW-4403	7858	4403	2923	15052	10680	25812
1413	SPRINT	7562	4129	2806	14628	9436	24050
1414	PS9601	7274	4304	2875	14406	10268	24637
1416	PS9603	7477	4266	2984	14710	10088	24773
1418	PS9605	7399	4255	2940	14528	9881	24362
1419	93W03PM1	7131	4428	2976	14635	10092	24779
1420	93-39	7558	3905	2788	14350	9575	23875
1421	COLUMBIA2000	8227	4194	2949	15372	10160	25658
1422	FORECAST1000	7511	4049	2659	14128	9751	23855
1423	FORECAST3000	7067	4269	2992	14180	9784	23883
1427	MS93-1ML	7133	3748	2551	13445	9319	22779
1429	MS96-07	7652	4311	2980	14934	10061	25041
1431	94GG	6674	3312	2286	12317	8304	20639
1459	CW5407	7288	4387	2960	14679	9797	24581
1460	9429	7253	4318	2996	14551	9899	24479
1463	ARREST	7629	3608	2272	13494	8303	21783
9053	CENTURION	7311	4042	2821	14147	9797	24018
900	Mean	7367	4096	2802	14264	9769	24033
901	CV	10.8	6.6	7.5	5.6	4.6	4.1
905	MCV	12.8	7.8	8.9	6.7	5.5	4.8
902	LSD	941.7	317.5	249.1	951.3	534.2	1161.3
906	LSR	60.6	28.5	34.4	31.1	22.5	22.4
907	Pr>F(Trts)	0.7985	0.0000	0.0000	0.0011	0.0000	0.0000
908	R_square	61.3	83.9	90.4	68.7	71.8	76.0

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
New Liskeard
Alfalfa Trial A
Expt. 9701
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
1001	SARANAC	6512	4287	10877	14818	25766
1074	ARROW	6536	4230	10696	15004	25634
1285	FORERUNNER	8283	4532	12759	15611	28743
1410	CW-3433	6615	3928	10418	15188	25349
1411	CW-4335	6973	4572	11571	15216	26654
1412	CW-4403	5929	4291	10324	14161	24741
1413	CW-4429	6145	4086	10250	14800	24916
1414	PS9601	6819	4411	11190	16043	26970
1416	PS9603	7455	4559	12123	15863	28154
1418	PS9605	6843	4590	11384	14598	26089
1419	93W03PM1	6249	4584	10875	13696	24760
1420	93-39	6322	4017	10409	13747	24144
1421	COLUMBIA2000	6505	4205	10667	15220	25745
1422	FORECAST1000	6098	4246	10199	15196	25523
1423	FORECAST3000	7472	4372	11857	15440	27195
1427	MS93-1ML	7330	4177	11566	18447	29853
1429	MS96-07	6609	4237	10858	15399	26551
1431	94GG	6711	3892	10638	14600	25216
1459	CW5407	6373	4675	10876	14417	25150
1460	CW5426	6525	4636	11228	15067	26451
1463	ARREST	6821	3853	10708	13907	24568
1468	DK140	6702	4104	10815	17154	27707
9053	CENTURION	6495	4647	11167	15692	26858
900	Mean	6710	4310	11020	15186	26206
901	CV	11.6	8.1	7.5	4.9	4.3
905	MCV	15.9	11.1	10.3	6.7	6.0
902	LSD	1070.2	478.2	1134.8	1021.8	1562.1
906	LSR	45.5	58.2	44.3	21.5	27.4
907	Pr>F(Trts)	0.1923	0.0890	0.0634	0.0000	0.0000
908	R_square	52.4	67.3	57.9	77.5	73.8

RCBD arrangement, 3 blocks {134}
Nearest-neighbour covariance adjusted.

ONTARIO
Huron Park
Alfalfa Reg A
Expt. 1187
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
1001	SARANAC	6937	3997	3597	14528	10083	24650
1074	ARROW	6557	3640	3310	13514	8898	22446
1285	FORERUNNER	7269	4171	3466	14900	10227	25064
1410	CW-3433	6592	3908	3674	14220	9457	23546
1411	LEGEND GOLD	6793	3985	3231	13981	9608	23670
1412	CW-4403	6659	4511	3860	14966	9748	24714
1413	SPRINT	6575	4172	3644	14355	9116	23458
1414	PS9601	6799	4029	3590	14398	9197	23618
1416	PS9603	6944	4099	3587	14696	10176	24842
1418	PS9605	6190	4117	3437	13740	8669	22348
1419	93W03PM1	6769	3956	3478	14208	9977	24230
1420	93-39	6019	4073	3623	13677	8409	22120
1421	COLUMBIA2000	7415	4212	3723	15423	10600	25986
1422	FORECAST1000	6898	3799	3467	14182	9557	23761
1423	FORECAST3000	6792	3670	3459	13913	8845	22788
1427	MS93-1ML	7021	3910	3170	14026	9825	23886
1429	MS96-07	7057	4356	3633	15118	9910	24831
1431	94GG	6321	3166	2930	12391	8411	20861
1459	CW5407	6703	4089	3324	14131	9702	23946
1460	9429	6690	4236	3955	14856	9178	24087
1463	ARREST	5252	3593	3432	12220	8126	20385
9053	CENTURION	6816	3985	3653	14539	9722	24185
900	Mean	6685	3985	3511	14181	9429	23610
901	CV	6.9	9.8	8.7	6.3	7.8	6.2
905	MCV	8.2	11.6	10.3	7.4	9.2	7.3
902	LSD	546.4	461.0	360.0	1052.1	870.9	1731.2
906	LSR	25.3	34.3	35.1	32.8	35.2	30.9
907	Pr>F(Trts)	0.0001	0.0201	0.0126	0.0012	0.0003	0.0003
908	R_square	88.1	79.6	66.8	84.3	70.7	81.7

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
Elora
Alfalfa Trial B
Expt. 2742
Seeded 1997

Code	Cultivar	1999 (kg/ha)			Tot99	Tot98	2yrTot
		Cut 1	Cut 2	Cut 3			
1001	SARANAC	7132	4249	3240	14519	10670	25108
1074	ARROW	6652	4359	3375	14375	9737	24141
1285	FORERUNNER	6974	4249	3218	14572	10120	24679
1408	MARINER	6698	4681	3483	14944	10343	25555
1409	ZG9346	6633	4200	3143	13885	9526	23642
1415	PS9602	6451	4458	3379	14453	10681	25126
1417	PS9604	6671	4430	3322	14581	10403	24683
1425	A9303	7291	4289	3222	14800	9737	24386
1428	MS96-06	7442	4393	3314	15100	10247	25267
1434	53V08	7104	4588	3365	15030	10612	25469
1436	5396	7244	4532	3454	15182	11050	26345
1442	A2793	7333	4032	3131	14598	8760	23405
1443	A2893	7470	4186	3129	14796	8723	23344
1444	SAFEGUARD	7065	4252	3149	14345	9472	23929
1446	AVENGER	7050	4527	3429	15067	10061	25107
1448	PICKSD8925MF	6864	4506	3297	14753	10643	25304
1450	W110	6962	4608	3453	15065	10688	25796
1452	A9304	6412	4587	3434	14185	11157	25631
1454	ZG9643C	6582	4227	3207	14023	9648	23521
1456	ZN9543C	6975	4366	3332	14729	9832	24777
1458	DK143	6782	4481	3560	14913	10524	25616
1461	5347LH	7202	4129	3060	14264	9703	23850
1465	MULTIPLIER_I	6341	4288	3109	13650	9213	22644
1466	A3294	7004	4738	3530	15255	10594	25816
9053	CENTURION	6572	4148	3276	13935	10196	24219
900	Mean	6916	4380	3304	14601	10094	24694
901	CV	11.3	4.6	4.7	5.7	4.6	4.3
905	MCV	13.3	5.4	5.6	6.7	5.4	5.0
902	LSD	919.9	237.7	183.6	981.2	548.2	1241.0
906	LSR	81.5	33.7	36.7	61.1	22.5	33.5
907	Pr>F(Trts)	0.8384	0.0001	0.0001	0.3771	0.0000	0.0001
908	R_square	35.3	70.2	62.1	40.8	80.9	58.0

RCBD arrangement, 4 blocks (1234)
Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial B
 Expt. 9702
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
1001	SARANAC	7141	2826	10002	15448	25601
1074	ARROW	7210	3476	10627	15260	25682
1285	FORERUNNER	7172	3492	10751	15949	26653
1408	MARINER	7154	3701	10806	15583	26424
1409	ZG9346	7272	3489	10764	15270	26020
1415	PS9602	7468	3519	10937	13682	24766
1417	PS9604	7465	3366	10786	15129	25795
1425	A9303	7938	3520	11448	15547	26954
1428	MS96-06	7007	3233	10262	14628	24898
1434	53V08	7218	3569	10779	14476	25504
1436	5396	7727	3561	11264	15052	26552
1444	SAFEGUARD	7549	3386	10941	14763	25672
1446	AVENGER	6615	3656	10194	15131	25329
1448	PICKSD8925MF	7435	3445	10951	15286	26262
1450	W110	7532	3450	11089	15059	25942
1452	A9304	7393	3545	10955	16134	27138
1454	ZG9643C	7565	3556	11107	15059	26013
1456	ZN9543C	8253	3486	11753	14567	26136
1458	DK143	7188	3695	10810	14927	26047
1461	5347LH	7443	3433	10883	16448	27269
1465	TMF_MULTIPLI	7720	3452	11126	15244	26183
1466	A3294	7308	3584	10956	15823	26814
9053	CENTURION	7850	3702	11573	15631	27206
900	Mean	7418	3484	10903	15222	26124
901	CV	8.5	7.8	6.8	4.8	3.4
905	MCV	10.0	9.2	8.0	5.7	4.1
902	LSD	742.8	321.3	875.8	860.2	1064.7
906	LSR	45.3	36.7	50.0	31.1	42.5
907	Pr>F(Trts)	0.3260	0.0540	0.3363	0.0012	0.0065
908	R_square	46.4	95.4	78.9	57.7	77.8

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
Huron Park
Alfalfa Reg B
Expt. 1188
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
1001	SARANAC	8894	3531	3427	15925	10158	26077
1074	ARROW	8756	3073	3110	14948	9078	24022
1285	FORERUNNER	8959	3450	2956	15382	9526	24961
1408	MARINER	8336	3087	3088	14467	9040	23529
1409	ZG9346	8295	2888	2879	13990	8853	22856
1415	PS9602	8871	3285	3231	15313	9568	24858
1417	PS9604	8718	3932	3079	15648	9136	24744
1425	A9303	9083	3636	3285	15990	9262	25230
1428	MS96-06	8857	3510	3129	15613	8925	24546
1434	53V08	8183	3618	3186	14905	8988	23900
1436	5396	8048	3275	3060	14471	9427	23886
1444	SAFEGUARD	7694	3159	2769	13492	7894	21415
1446	AVENGER	8993	3244	3191	15452	9650	25106
1448	PICKSD8925MF	8781	3390	2985	15256	9471	24722
1450	W110	8863	3273	3188	15247	9390	24637
1452	A9304	9484	3495	3056	16106	9695	25784
1454	ZG9643C	8782	2832	2608	14148	8789	22964
1456	ZN9543C	8617	3168	2734	14552	8676	23211
1458	DK143	8927	3845	3459	16305	9242	25540
1461	5347LH	7954	2859	2884	13870	9231	23088
1465	MULTIPLIER_I	9260	3298	2663	15100	8910	24033
9053	CENTURION	8791	3257	3316	15355	10107	25442
900	Mean	8689	3323	3058	15070	9228	24298
901	CV	7.3	14.1	10.8	7.2	6.4	5.9
905	MCV	8.6	16.6	12.7	8.5	7.5	6.9
902	LSD	746.1	552.0	388.7	1276.9	694.8	1682.2
906	LSR	41.7	50.2	45.7	45.4	30.7	36.1
907	Pr>F(Trts)	0.0294	0.1115	0.0239	0.0252	0.0013	0.0040
908	R_square	85.4	81.0	54.2	84.1	86.8	88.1

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
Elora
Alfalfa Trial C
Expt. 2743
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
1001	SARANAC	7219	4497	2527	14264	10164	24281
1074	ARROW	7901	4440	2567	14845	9442	24446
1098	MAGNUM III	8412	4734	2860	15973	10172	26033
1248	JAVELIN	7596	4547	2574	14627	9906	24663
1285	FORERUNNER	8915	4706	2539	16232	9927	26164
1424	92-28	8476	4713	2689	16046	10118	26045
1426	A9305	7852	4615	2666	14972	9714	24751
1430	ZG9431	7559	4607	2458	14598	9346	24004
1432	A2693	7813	4878	2814	15587	10549	26072
1433	A2993	9116	4840	2859	16648	9859	26626
1435	YAL 55	7311	5090	2968	15253	10284	25451
1437	WL326 GZ	8321	4654	2666	15626	10357	25901
1445	TRUENORTH	8359	4825	2782	15873	9869	25744
1447	MILLENNIUM	8045	4791	2805	15908	10162	25691
1449	SPUR	8127	4526	2658	15393	9087	24487
1451	A9118	7885	4572	2599	15131	10126	25276
1453	ZB9546	7764	4869	2675	15412	9611	24949
1455	ZG9644C	7923	4675	2535	14910	8603	23594
1457	AC VIVA	8058	4449	2619	15149	9415	24719
1462	NS3317	7837	4577	2649	15016	9579	24639
1464	TMF GENERATI	7881	4511	2641	15057	10041	25187
1467	A3494	8416	4647	2480	15765	9411	25307
9053	CENTURION	7530	4533	2661	14622	10218	24837
900	Mean	8014	4665	2665	15344	9824	25168
901	CV	8.0	5.0	5.6	5.0	4.6	3.8
905	MCV	9.4	5.9	6.6	5.9	5.5	4.5
902	LSD	752.8	277.0	176.1	911.1	538.7	1134.7
906	LSR	39.7	42.6	34.5	38.2	27.7	37.4
907	Pr>F(Trts)	0.0122	0.0262	0.0003	0.0033	0.0000	0.0014
908	R_square	66.8	90.1	92.1	87.3	63.3	84.1

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial C
 Expt. 9703
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot98	2yrTot
		Cut 1	Tot99		
1001	SARANAC	6418	6418	14381	20661
1074	ARROW	6666	6666	14373	21238
1098	MAGNUM III	7302	7302	14389	21556
1248	JAVELIN	6570	6570	14876	21526
1285	FORERUNNER	7044	7044	14363	21324
1424	92-28	6854	6854	15065	21822
1426	A9305	7610	7610	14578	22406
1430	ZG9431	6980	6980	14183	21072
1432	A2693	6548	6548	14039	20723
1433	A2993	6791	6791	14415	21364
1435	YAL 55	7019	7019	14449	21589
1437	WL326 GZ	6744	6744	14294	21305
1445	TRUENORTH	7019	7019	14727	21558
1447	MILLENNIUM	7168	7168	14083	20988
1449	SPUR	6692	6692	14017	20673
1451	A9118	7475	7475	15115	22622
1453	ZB9546	6304	6304	15297	21484
1455	ZG9644C	6687	6687	14307	21036
1457	AC VIVA	7018	7018	14922	21868
1462	NS3317	6630	6630	14065	20702
1464	TMF GENERATI	6972	6972	14771	21665
1467	A3494	7430	7430	15225	22564
9053	CENTURION	6974	6974	15498	22600
900	Mean	6909	6909	14584	21493
901	CV	7.7	7.7	4.0	3.6
905	MCV	9.1	9.1	4.7	4.2
902	LSD	628.3	628.3	687.9	902.5
906	LSR	48.1	48.1	46.4	46.0
907	Pr>F(Trts)	0.0968	0.0968	0.0135	0.0036
908	R_square	46.8	46.8	71.1	61.2

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Elora
 Alfalfa Trial A
 Expt. 2751
 Seeded 1998

Code	Cultivar	1999 (kg/ha)			Tot99
		Cut 1	Cut 2	Cut 3	
1001	SARANAC	5858	3688	2363	11928
1074	ARROW	5707	3521	2397	11608
1298	5312	5851	3504	2315	11657
1459	CW5407	5328	3386	2331	11047
1460	9429	5438	3565	2342	11297
1463	ARREST	5210	3221	2251	10682
1474	GENEVA	5698	3963	2609	12309
1475	NS98-3	5615	3725	2417	11810
1478	CW5435	5639	3605	2469	11694
1479	CW6304	6037	3719	2462	12250
1480	FQ314	5964	3781	2543	12305
1481	FQ315	5948	3656	2465	12063
1482	CW5440	5875	3819	2601	12287
1487	ABT 227LH	5209	3478	2276	11000
1489	WL232HQ	5657	3594	2459	11658
1490	BARALFA	5809	3783	2437	12018
1491	A9421	5462	3684	2472	11574
1492	QS-75	5348	3325	1991	10660
1493	TMF 421	5908	3573	2264	11777
9053	CENTURION	5727	3574	2511	11798
900	Mean	5664	3608	2399	11671
901	CV	4.7	4.4	4.4	3.9
905	MCV	5.6	5.3	5.2	4.6
902	LSD	318.7	189.7	125.5	536.6
906	LSR	38.5	25.5	20.3	32.5
907	Pr>F(Trts)	0.0001	0.0000	0.0000	0.0000
908	R_square	96.9	82.3	90.9	94.9

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial A
 Expt. 9801
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	6168	5481	11597
1074	ARROW	6848	5500	12356
1298	5312	6090	5680	11703
1459	CW5407	6059	5241	11265
1460	CW5426	6298	5549	11867
1463	ARREST	6073	4934	11022
1474	GENEVA	5701	5415	11130
1475	NS98-3	6341	5518	11776
1478	CW5435	6011	5473	11468
1479	CW6304	6196	5526	11665
1480	FQ314	6148	5641	11784
1481	CW5302	6083	5466	11536
1482	CW5440	6023	5605	11630
1487	ABT 227LH	6606	5528	12117
1489	WL232HQ	5746	5351	11222
1490	BARALFA	5894	5315	11211
1491	A9421	6440	5412	11945
1492	QS-75	5846	5520	11422
1493	TMF 421	6182	5239	11337
9053	CENTURION	6447	5634	12176
900	Mean	6160	5451	11611
901	CV	8.1	5.3	5.6
905	MCV	9.7	6.3	6.7
902	LSD	595.4	341.8	778.3
906	LSR	51.9	45.8	58.3
907	Pr>F(Trts)	0.2582	0.1490	0.2632
908	R_square	44.5	58.4	52.2

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kemptville
 Alfalfa Trial A
 Expt. 3128
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99
		Cut 1	Cut 2		
1001	SARANAC	5840	3614	3035	12426
1074	ARROW	5828	3805	3020	12586
1298	5312	6286	3800	2999	13184
1459	CW5407	5283	3793	2951	12061
1460	9429	5645	4107	3022	12939
1463	ARREST	5726	3712	2618	12163
1474	GENEVA	5424	3682	3022	12084
1475	NS98-3	5988	3770	3076	12577
1478	CW5435	5515	3959	2949	12341
1479	CW6304	6197	3871	3079	13186
1480	FQ314	6471	3912	3182	13468
1481	FQ315	5935	3898	3083	12889
1482	CW5440	6513	3519	3181	13298
1487	ABT 227LH	5745	3456	2647	11939
1489	WL232HQ	5853	4017	2977	12958
1490	BARALFA	5911	3898	2931	12674
1491	A9421	6325	3599	3181	13182
1492	QS-75	5830	3785	2793	12360
1493	TMF 421	6259	3743	3055	13005
9053	CENTURION	5900	3927	3037	12858
900	Mean	5924	3793	2992	12709
901	CV	8.9	7.8	5.9	5.4
905	MCV	10.7	9.2	7.0	6.4
902	LSD	631.2	350.9	210.2	815.1
906	LSR	51.3	54.0	37.3	53.3
907	Pr>F(Trts)	0.0928	0.2570	0.0008	0.0523
908	R_square	69.6	68.3	79.9	80.9

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kapuskasing
 Alfalfa Trial A
 Expt. 6338
 Seeded 1998

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
NS98-3	1475	5115	4571	9686
CW5302	1481	5146	4291	9437
SARANAC	1001	5045	4321	9366
CENTURION	9053	5001	4338	9339
CW6304	1479	4808	4270	9078
5312	1298	4909	4159	9068
CW5435	1478	4881	4171	9052
CW5440	1482	4924	4123	9047
FQ 313	1480	4918	4094	9012
CW5426	1460	4914	4076	8990
CW5407	1459	4855	4071	8926
TMF 421	1493	4884	3981	8865
BARALFA	1490	4983	3876	8859
GENEVA	1474	4726	4107	8833
QS-75	1492	4505	4308	8813
WL232HQ	1489	4701	4049	8750
ARREST	1463	4452	4131	8583
ARROW	1074	4421	4155	8576
A9421	1491	4695	3856	8551
ABT 227LH	1487	4226	3951	8177
MEAN		4805	4145	8950
C.V. %		7.65	6.45	5.83
F		ns	ns	ns
L.S.D.5%		520	378	739

RBCD arrangement, 4 blocks {1234}

HARVEST DATES : 06/24/99 08/09/99

ONTARIO
Huron Research St
Alfalfa Registration A
Expt. 5032
Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	7131	3503	10716
1074	ARROW	7268	2754	10102
1298	5312	8101	3358	11478
1459	CW5407	6215	3056	9354
1460	9429	7326	3593	10880
1463	ARREST	6482	2835	9271
1474	GENEVA	7542	3451	10845
1475	NS98-3	6851	2745	9631
1478	CW5435	7437	2944	10369
1479	CW6304	7645	3036	10640
1480	FQ314	7850	3499	11327
1481	FQ315	7012	2707	9743
1482	CW5440	7562	2983	10628
1487	ABT 227LH	7018	2544	9543
1489	WL232HQ	7024	2987	9952
1490	BARALFA	7609	3797	11344
1491	A9421	7644	2991	10678
1492	QS-75	7006	2774	9832
1493	TMF 421	8236	2935	11165
9053	CENTURION	7332	2875	10161
900	Mean	7315	3068	10383
901	CV	10.4	15.8	9.9
905	MCV	12.4	18.8	11.8
902	LSD	904.8	575.8	1220.3
906	LSR	44.8	46.0	55.3
907	Pr>F(Trts)	0.0655	0.0241	0.0517
908	R_square	70.0	59.9	72.1

RCBD arrangement, 4 blocks {1234}
Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial B
 Expt. 9802
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Tot99
1001	SARANAC	5473	5042	10470
1074	ARROW	6137	5311	11452
1298	5312	5945	5261	11244
1444	SAFEGUARD	5537	5218	10812
1446	AVENGER	6207	5267	11429
1448	PICKSD8925MF	5696	4931	10633
1450	W110	5985	5253	11195
1452	A9304	6519	4950	11485
1454	ZG9643C	5706	5206	10946
1456	ZN9543C	5388	4908	10283
1458	DK143	5883	5243	11099
1461	5347LH	5914	5271	11208
1465	TMF MULTIPLI	5284	5060	10270
1468	DK140	6035	5065	11127
1470	TRAILBLAZER	5522	5102	10638
1471	ENHANCER	5665	5234	10962
1472	BPR 374	5933	5384	11335
1476	A9423	6244	5327	11565
1483	ABI 9142	5468	5278	10728
1486	SF9102	5649	4877	10503
1495	W215	6285	5860	12128
1496	Y53H63	5824	4908	10711
9041	ONEIDA VR	5602	4654	10282
9053	CENTURION	6411	5161	11574
900	Mean	5846	5157	11003
901	CV	8.2	6.6	5.4
905	MCV	9.6	7.7	6.3
902	LSD	563.7	399.5	698.6
906	LSR	45.6	33.1	37.6
907	Pr>F(Trts)	0.0164	0.0211	0.0011
908	R_square	53.7	59.5	63.1

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kemptville
 Alfalfa Trial B
 Expt. 3129
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99
		Cut 1	Cut 2		
1001	SARANAC	5066	4489	3008	12647
1074	ARROW	5648	4753	3073	13495
1298	5312	5574	4682	3050	13317
1444	SAFEGUARD	5090	4162	2824	12157
1446	AVENGER	4986	3924	2870	11757
1448	PICKSD8925MF	5265	4248	2937	12332
1450	W110	5061	4426	3092	12636
1452	A9304	5696	5069	3184	13953
1454	ZG9643C	5132	4163	2648	11734
1456	ZN9543C	5163	3928	2780	11929
1458	DK143	5294	4518	3077	12769
1461	5347LH	4714	4394	2816	11926
1465	MULTIPLIER_I	4938	4536	3016	12387
1468	DK140	5430	4492	2932	12930
1470	TRAILBLAZER	5236	4002	2677	11987
1471	ENHANCER	5611	4022	3046	12568
1472	BPR 374	5570	4397	2940	12858
1476	A9423	5125	4780	3025	13031
1483	ABI 9142	5235	4606	3088	12994
1486	SF9102	4793	4508	2911	12190
1495	GH757	5794	5069	3189	13862
1496	Y53H63	5199	4060	2575	11983
9041	ONEIDA VR	5078	4282	2918	12312
9053	CENTURION	5327	4648	3211	13316
900	Mean	5251	4423	2954	12628
901	CV	8.0	8.5	6.8	4.9
905	MCV	9.4	10.1	8.1	5.8
902	LSD	493.7	446.4	238.6	726.3
906	LSR	45.7	39.0	37.5	32.7
907	Pr>F(Trts)	0.0308	0.0004	0.0010	0.0000
908	R_square	61.8	77.3	66.9	79.1

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Thunder Bay
 Alfalfa Reg B 98
 Expt. 7283
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	5900	3754	9688
1074	ARROW	6526	3607	10093
1298	5312	5852	3587	9400
1444	SAFEGUARD	5927	3544	9563
1446	AVENGER	5877	3732	9408
1448	PICKSD8925MF	6094	3726	9849
1450	W110	5689	3731	9369
1452	A9304	6433	3587	10067
1454	ZG9643C	6345	3675	9953
1456	ZN9543C	6025	3551	9630
1458	DK143	5786	3782	9509
1461	5347LH	6331	3644	10074
1465	MULTIPLIER_I	6033	3576	9580
1468	DK140	5888	3907	9817
1470	TRAILBLAZER	6745	3376	10310
1471	ENHANCER	6357	3851	10135
1472	BPR 374	6078	3716	9667
1476	A9423	6255	3674	9846
1483	ABI 9142	6580	3666	10357
1486	SF9102	6659	3753	10516
1495	GH757	6425	3747	10109
1496	Y53H63	5730	3455	9246
9041	ONEIDA VR	6077	3715	9798
9053	CENTURION	6177	3721	9883
900	Mean	6158	3670	9828
901	CV	7.6	4.2	4.9
905	MCV	9.0	5.0	5.8
902	LSD	554.0	182.6	570.9
906	LSR	52.5	34.4	45.0
907	Pr>F(Trts)	0.0902	0.0044	0.0426
908	R_square	42.6	73.7	51.2

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Elora
 Registration Trial C
 Expt. 2753
 Seeded 1998

Code	Cultivar	1999 (kg/ha)			Tot99
		Cut 1	Cut 2	Cut 3	
1001	SARANAC	6836	3818	2012	12739
1073	SURPASS	6923	3673	1923	12458
1074	ARROW	7186	3747	1928	12837
1096	HORIZON	6456	3726	1948	12163
1103	STARMASTER	6757	3684	1968	12380
1112	A871	6649	3960	2028	12627
1298	5312	7197	3740	1922	12804
1445	TRUENORTH	7072	3986	2103	13167
1447	MILLENNIUM	6827	4084	2123	13051
1449	SPUR	6856	3808	1945	12556
1451	A9118	6758	3963	2036	12783
1453	ZB9546	6496	3973	2034	12571
1455	ZG9644C	6892	3749	1949	12568
1457	AC VIVA	6899	3857	1954	12742
1462	NS3317	6577	3873	1999	12504
1464	TMF GENERATI	6538	3702	1950	12180
1469	DK121HG	6507	3306	1838	11636
1473	DS9672	6719	3845	2125	12700
1477	A9503	6774	3521	1880	12180
1484	EMPEROR	6804	3873	1986	12623
1485	YIELDER	6375	3577	1945	11833
1488	C231	6990	3899	2053	12902
1494	53Q60	7057	4011	2081	13184
9006	OAC MINTO	6339	3496	1820	11675
9053	CENTURION	6913	4023	2065	13047
900	Mean	6776	3796	1985	12556
901	CV	4.0	4.6	4.8	3.2
905	MCV	4.8	5.4	5.6	3.8
902	LSD	324.0	206.2	111.6	475.5
906	LSR	37.8	26.5	36.5	30.7
907	Pr>F(Trts)	0.0002	0.0000	0.0003	0.0000
908	R_square	93.6	85.6	94.0	95.2

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Trial C
 Expt. 9803
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	5711	5124	10836
1073	SURPASS	5838	4866	10653
1074	ARROW	5691	5177	10937
1096	HORIZON	5643	5118	10789
1103	STARMASTER	5915	5058	10977
1112	A871	5945	5110	11051
1298	5312	6456	5205	11677
1445	TRUENORTH	6158	5103	11252
1447	MILLENNIUM	5829	5067	10917
1449	SPUR	6071	5298	11319
1451	A9118	5992	4891	10861
1453	ZB9546	5603	5194	10791
1455	ZG9644C	5637	4979	10567
1457	AC_VIVA	6117	5346	11466
1462	NS3317	6001	4836	10820
1464	TMF_GENERATI	6026	5174	11212
1469	DK121HG	6018	4835	10861
1473	DS9672	5458	4899	10402
1477	A9503	5624	5228	10845
1484	ZN_9541	5831	4990	10838
1485	ZM_9537	5292	4679	9979
1488	C231	6117	4983	11127
1494	53Q60	6053	5185	11279
9006	OAC_MINTO	6314	4999	11265
9053	CENTURION	5993	5192	11149
900	Mean	5893	5061	10955
901	CV	7.4	4.1	4.8
905	MCV	8.7	4.9	5.6
902	LSD	514.1	248.1	617.4
906	LSR	44.1	37.2	36.4
907	Pr>F(Trts)	0.1233	0.0028	0.0320
908	R_square	48.7	63.0	55.8

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kemptville
 Alfalfa Trial C
 Expt. 3130
 Seeded 1998

Code	Cultivar	1999 (kg/ha)			Tot99
		Cut 1	Cut 2	Cut 3	
1001	SARANAC	4474	3835	3257	11607
1073	SURPASS	4807	3852	3121	11759
1074	ARROW	4890	4153	3352	12511
1096	HORIZON	4996	3892	3367	12257
1103	STARMASER	4642	3854	3144	11669
1112	A871	4784	3791	3144	11606
1298	5312	4877	3893	3380	12177
1445	TRUENORTH	4871	4030	3348	12182
1447	MILLENNIUM	4829	4001	3196	11993
1449	SPUR	4646	3917	3131	11781
1451	A9118	5002	4043	3272	12328
1453	ZB9546	4612	3772	3086	11414
1455	ZG9644C	4738	3938	3101	11888
1457	AC_VIVA	4966	3572	3131	11705
1462	NS3317	5150	3938	3280	12391
1464	TMF_GENERATI	4525	3862	3184	11530
1469	DK121HG	4567	3419	2752	10789
1473	DS9672	4897	3538	3114	11488
1477	A9503	5184	4344	3419	12938
1484	EMPEROR	4644	3943	3222	11789
1485	YIELDER	4245	3636	2911	10671
1488	C231	4942	4220	3357	12501
1494	53Q60	4761	3791	3257	11798
9006	OAC_MINTO	4685	3681	2957	11285
9053	CENTURION	5130	4025	3369	12596
900	Mean	4795	3877	3194	11866
901	CV	8.1	8.7	5.3	5.3
905	MCV	9.5	10.3	6.3	6.2
902	LSD	457.4	399.7	200.8	740.6
906	LSR	48.7	43.2	30.1	32.7
907	Pr>F(Trts)	0.2090	0.1682	0.0000	0.0011
908	R_square	53.0	49.7	65.6	63.7

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Thunder Bay
 Alfalfa Reg C 98
 Expt. 7284
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
1001	SARANAC	6473	3911	10357
1073	SURPASS	6918	3642	10532
1074	ARROW	6973	3720	10762
1096	HORIZON	6950	3793	10681
1103	STARMASER	6714	3844	10556
1112	A871	6077	3698	9768
1298	5312	6866	3752	10544
1445	TRUENORTH	6874	3677	10494
1447	MILLENNIUM	6148	3893	10040
1449	SPUR	6494	3720	10301
1451	A9118	6684	3660	10323
1453	ZB9546	6071	3831	9913
1455	ZG9644C	6168	3787	9903
1457	AC_VIVA	6589	3702	10251
1462	NS3317	6889	3613	10544
1464	TMF GENERATI	6560	3647	10262
1469	DK121HG	7450	3593	11118
1473	DS9672	6125	3699	9748
1477	A9503	7249	3728	11069
1484	EMPEROR	6462	3767	10176
1485	YIELDER	6448	3523	9952
1488	C231	6929	3767	10698
1494	53Q60	6541	3816	10355
9006	OAC_MINTO	6850	3526	10461
9053	CENTURION	6560	3784	10347
900	Mean	6643	3724	10366
901	CV	6.5	3.5	4.4
905	MCV	7.7	4.1	5.2
902	LSD	511.2	153.5	543.1
906	LSR	37.1	39.5	39.6
907	Pr>F(Trts)	0.0015	0.0037	0.0051
908	R_square	52.8	71.1	56.9

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Alfalfa Persistence Trial
 Expt. 5018
 Seeded 1994

Code	Cultivar	1999 (kg/ha)		
		Cut1	Cut 2	Total
1001	SARANAC	5881	4055	9993
1039	EXCALIBUR	5939	4491	10352
1110	ECHO	5897	3759	9645
1153	INCENTIVE	5918	4524	10484
1182	20-20	6022	4377	10349
1185	630	6928	4614	11541
1186	MAJESTIC	5928	4313	10268
1188	MULTI-PLIER	6486	4666	11110
1191	5246	5909	4245	10248
1192	WL 333	6683	4901	11562
1195	LEGEND_2	5676	4529	10108
1196	ENCORE	6620	4082	10840
1198	ALFALEAF	6554	4810	11372
1211	CLASS	5136	4517	9816
1212	TRIDENT II	5929	4442	10159
1250	VIKING_1	6437	4521	11012
1280	GALA	5414	4254	9697
1292	ALFAGRAZE	6078	4700	10644
1298	5312	7095	5187	12225
1330	EVOLUTION	6128	4881	10992
1342	PS94-01	6313	4621	10856
1345	PS94-04	6859	3813	10680
1354	STERLING	5690	4007	9754
1365	RUSHMORE	6734	4118	10857
1372	A9010	6413	4431	10814
1373	A9107	5541	4348	9875
9002	120	6732	3992	10891
9072	IMPACT	7305	4666	11992
900	Mean	6235	4424	10660
901	CV	9.2	9.9	8.1
907	Pr>F(Trts)	0.1923	0.4582	0.4994
908	R_square	64	76	64

Systematic control arrangement.

ONTARIO
 Elora
 Alfalfa Persistence Trial
 Expt. 5021
 Seeded 1995

Code	Cultivar	1999 (kg/ha)			Total
		Cut1	Cut 2	Cut 3	
1001	SARANAC	6230	4372	2544	13145
1039	EXCALIBUR	5314	4129	2506	11723
1129	2980	4784	4000	2417	10949
1228	PICKSD3030	5844	4327	2391	12519
1237	DK133	5610	3794	2575	11863
1246	MULTICHOICE	5748	4105	2254	12032
1248	JAVELIN	5551	4393	2388	13200
1272	CHOICE	5768	4659	2351	12521
1276	FS444	5702	4632	2231	12619
1298	5312	5388	3620	2307	11363
900	Mean	5593	4203	2396	12193
901	CV	8.4	7.5	6	6.4
907	Pr>F(Trts)	0.4388	0.1418	0.3911	0.3787
908	R_square	92	88	94	92

Systematic control arrangement.

ONTARIO
 Thunder Bay
 Alfalfa Persistence Trial
 Expt. 5025
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Total
1001	SARANAC	4852	3125	7958
1039	EXCALIBUR	4058	2656	6766
1129	2980	3518	2604	6125
1228	PICKSD3030	4060	2697	6733
1237	DK133	4431	2960	7478
1246	MULTICHOICE	4000	2853	6810
1248	JAVELIN	4433	3170	7640
1272	CHOICE	4117	2861	7010
1276	FS444	4367	3002	7318
1298	5312	4509	3078	7515
900	Mean	4235	2900	7135
901	CV	7.7	5.6	5.1
907	Pr>F(Trts)	0.1419	0.1022	0.0324
908	R_square	85	87	91

Systematic control arrangement.

ONTARIO
 New Liskeard
 Alfalfa Persistence Trial
 Expt. 5024
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Total
1001	SARANAC	6714	5326	12260
1039	EXCALIBUR	6284	4962	11194
1129	2980	7178	5463	12903
1228	PICKSD3030	5807	5272	10663
1237	DK133	6035	5191	11070
1246	MULTICHOICE	6464	5727	12114
1248	JAVELIN	6311	4782	11061
1272	CHOICE	7409	4342	11447
1276	FS444	6383	4954	11333
1298	5312	6276	5334	11880
900	Mean	6525	5135	11636
901	CV	6.6	8	5.4
907	Pr>F(Trts)	0.2603	0.475	0.3549
908	R_square	74	76	71

Systematic control arrangement.

ONTARIO
 Elora
 Alfalfa Persistence Trial
 Expt. 5026
 Seeded 1996

Code	Cultivar	1999 (kg/ha)			
		Cut 1	Cut 2	Cut 3	Total
1001	SARANAC	5641	3851	2305	11805
1039	EXCALIBUR	5331	3929	2188	11514
1074	ARROW	5834	3841	2202	11899
1129	2980	5217	3505	2156	10731
1228	PICKSD3030	5777	3997	2083	11796
1232	GUARDSMAN	5310	3741	2266	11292
1237	DK133	5504	3658	2333	11486
1246	MULTICHOICE	5453	3696	2171	11299
1248	JAVELIN	5888	4114	2340	12226
1271	QUATTRO_HR	5638	3976	2304	11928
1272	CHOICE	5710	3874	2288	11935
1273	FS450	5815	3825	2192	11951
1275	TARTAN	6143	4139	2601	12799
1276	FS444	5416	3749	2163	11341
1285	FORERUNNER	5717	3921	2241	11852
1296	PROLEAF	5475	4035	2332	11715
1297	5454	5778	4202	2296	12385
1298	5312	6192	4148	2384	12770
1425	A9303	5423	3874	2201	11487
1426	A9305	5437	3887	2201	11561
9053	CENTURION	5584	3876	2300	11843
900	Mean	5636	3895	2263	11794
901	CV	6.5	4.8	5.4	4
907	Pr>F(Trts)	0.6168		0.1708	0.1769
908	R_square	71	83	97	91

Systematic control arrangement.

ONTARIO
 Thunder Bay
 Alfalfa Persistence Trial
 Expt. 5027
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Total
1001	SARANAC	5028	3250	8276
1039	EXCALIBUR	5018	3192	8194
1074	ARROW	5153	3237	8347
1129	2980	4571	2985	7564
1228	PICKSD3030	5351	3255	8563
1232	GUARDSMAN	5493	3549	8976
1237	DK133	5360	3432	8794
1246	MULTICHOICE	4876	3097	7899
1248	JAVELIN	4684	3374	8101
1271	QUATTRO_HR	4980	3125	8035
1272	CHOICE	5173	3474	8707
1273	FS450	4974	3499	8462
1275	TARTAN	5334	3437	8828
1276	FS444	5280	3455	8780
1285	FORERUNNER	5112	3342	8495
1296	PROLEAF	5345	3560	9072
1297	5454	5054	3257	8317
1298	5312	5763	3441	9182
1425	A9303	5378	3653	9086
1426	A9305	5258	3390	8654
9053	CENTURION	5512	3431	8911
900	Mean	5175	3344	8519
901	CV	5.1	7.2	5.3
907	Pr>F(Trts)	0.0487	0.6383	0.1336
908	R_square	87	66	82

Systematic control arrangement.

ONTARIO
 New Liskeard
 Alfalfa Persistence Trial
 Expt. 9606
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Total
1001	SARANAC	6875	3645	10876
1039	EXCALIBUR	6609	3649	10158
1074	ARROW	6237	3227	9427
1129	2980	6021	3328	9341
1232	GUARDSMAN	7233	3408	10672
1237	DK133	6322	3690	10178
1246	MULTICHOICE	6276	3359	9859
1248	JAVELIN	6168	3481	9541
1271	QUATTRO_HR	6839	3636	10213
1272	CHOICE	5872	3562	9396
1273	FS450	6248	3355	9645
1275	TARTAN	7783	3590	11201
1276	FS444	6466	3738	10257
1285	FORERUNNER	6335	3473	9800
1296	PROLEAF	5266	3513	8741
1297	5454	6028	3693	9654
1298	5312	6155	3722	9803
1425	A9303	6291	3313	9663
1426	A9305	5822	3768	9664
9053	CENTURION	6792	3527	10288
900	Mean	6381	3520	9902
901	CV	12.4	6.5	7.9
907	Pr>F(Trts)	0.5912	0.4971	0.4817
908	R_square	62	51	61

Systematic control arrangement.

ONTARIO
 Thunder Bay
 Red Clover 96
 Expt. 7273
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
4017	FLOREX	2491	1322	3813
4034	PERSIST	2563	1152	3716
4036	ATLAS	2272	1615	3887
4055	WALTER	2483	1479	3962
4057	RAM	2681	1747	4428
4059	CONCORDE	2930	1736	4665
4079	AC_ENDURE	2341	1977	4318
900	Mean	2537	1575	4113
901	CV	7.3	10.0	5.9
905	MCV	9.0	12.3	7.3
902	LSD	227.4	193.6	299.2
906	LSR	34.6	23.5	31.5
907	Pr>F(Trts)	0.0021	0.0000	0.0002
908	R_square	65.9	85.4	77.7

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Red Clover
 Expt. 9610
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
4017	FLOREX	3582	4424	8105	12276	8262	29381
4034	PERSIST	3572	3985	7637	11934	9838	29704
4036	ATLAS	2666	3705	6381	10973	9784	27387
4055	WALTER	3202	3316	6464	12211	9842	27887
4057	RAM	3150	4582	7679	11244	8700	27516
4059	CONCORDE	3088	4026	7127	11160	8782	26486
4079	AC_ENDURE	1778	2100	3782	11610	9326	24757
900	Mean	3005	3734	6739	11630	9219	27588
901	CV	12.1	14.5	13.0	4.2	11.5	4.5
905	MCV	17.9	21.5	19.2	6.3	17.0	6.6
902	LSD	537.8	802.3	1294.1	729.6	1564.7	1820.2
906	LSR	29.8	32.3	29.9	56.0	99.1	36.8
907	Pr>F(Trts)	0.0024	0.0055	0.0028	0.1993	0.5569	0.0187
908	R_square	84.5	86.8	85.6	82.6	60.1	77.8

RCBD arrangement, 3 blocks {234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 New Liskeard
 Red Clover 97
 Expt. 9712
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
4017	FLOREX	5105	4728	9834	13894	23728
4034	PERSIST	5216	5007	10224	14117	24341
4036	ATLAS	4888	4653	9541	14286	23827
4055	WALTER	5041	4678	9719	14170	23889
4057	RAM	4794	5394	10188	14228	24416
4059	CONCORDE	4660	4970	9630	14444	24074
4074	PRIMA	4099	4222	8322	13819	22141
4079	AC_ENDURE	3970	3648	7618	14153	21771
4080	TEMPUS	3589	3097	6686	13979	20665
4081	RC8702	4419	4899	9318	14643	23961
900	Mean	4578	4530	9108	14173	23281
901	CV	8.4	8.1	6.3	5.7	3.9
905	MCV	10.2	9.7	7.5	6.8	4.7
902	LSD	465.2	439.5	687.2	970.1	1090.5
906	LSR	28.6	19.1	19.4	117.7	29.1
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.9344	0.0000
908	R_square	75.5	84.0	86.4	23.1	76.5

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Red Clover
 Expt. 2762
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Tot99
4017	FLOREX	4788	2451	7239
4036	ATLAS	4863	2847	7710
4055	WALTER	4800	2788	7588
4057	RAM	5468	3154	8622
4059	CONCORDE	6017	3499	9515
4074	PRIMA	5775	3277	9053
4080	TEMPUS	5038	2798	7836
4081	RC8702	5003	3428	8431
4082	AC CHRISTIE	4073	2532	6605
10218	RC1494-04	5216	2931	8147
10219	RC1495-01	4801	2718	7519
10220	RC1495-02	5496	3145	8641
900	Mean	5112	2964	8076
901	CV	10.2	9.9	9.3
905	MCV	12.3	11.9	11.2
902	LSD	627.8	352.8	905.1
906	LSR	32.3	33.7	31.1
907	Pr>F(Trts)	0.0010	0.0001	0.0003
908	R_square	67.6	74.5	69.5

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 Red Clover 98
 Expt. 7280
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
4017	FLOREX	4227	1198	5425
4036	ATLAS	4170	1563	5733
4055	WALTER	4111	1473	5584
4057	RAM	4061	1855	5916
4059	CONCORDE	3874	1406	5280
4074	PRIMA	4227	1361	5588
4080	TEMPUS	5301	1879	7180
4081	RC8702	3957	1711	5669
4082	AC_CHRISTIE	3921	1554	5475
900	Mean	4205	1556	5761
901	CV	11.9	10.7	10.3
905	MCV	14.4	13.0	12.4
902	LSD	604.8	202.3	715.5
906	LSR	42.4	29.7	37.7
907	Pr>F(Trts)	0.0185	0.0001	0.0068
908	R_square	50.6	76.7	55.4

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kemptville
 Red Clover 98
 Expt. 3133
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
4017	FLOREX	3627	1482	5054
4036	ATLAS	3611	1739	5297
4055	WALTER	3642	1232	4859
4057	RAM	3294	1507	4761
4059	CONCORDE	3435	1500	4903
4074	PRIMA	4011	1650	5754
4080	TEMPUS	4870	1825	6695
4081	RC8702	3085	1452	4548
4082	AC_CHRISTIE	3292	1213	4596
900	Mean	3652	1511	5163
901	CV	7.6	15.8	8.3
905	MCV	9.3	19.2	10.0
902	LSD	338.6	290.6	517.8
906	LSR	19.0	47.5	24.1
907	Pr>F(Trts)	0.0000	0.0371	0.0000
908	R_square	86.7	77.3	85.5

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kapuskasing
 Trefoil & Timothy Trial
 Expt. 6578
 Seeded 1995

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
EMPIRE	7003	3014	2476	5490
BULL	7034	2805	2640	5445
DAWN	7008	2785	2535	5320
01-1984-2	7039	2411	2747	5158
01-1984-1	7038	2492	2510	5002
RC4SYN2	7031	2469	2420	4889
LEO	7001	2442	2231	4673
MEAN		2631	2508	5140
C.V. %		11.6	8.75	6.78
F		ns	ns	*
L.S.D.5%		454	326	518

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/23/99 08/13/99

ONTARIO
 Thunder Bay
 Trefoil+timothy 95
 Expt. 7252
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
7001	LEO	3015	2954	5969	3539	9508
7003	EMPIRE	3736	3238	6974	4128	11102
7008	DAWN	3868	3286	7154	4750	11905
7031	OAC BRIGHT	3169	3071	6240	4150	10390
7034	BULL	3114	3010	6125	3843	9968
7038	WELLINGTON	2875	3181	6057	4000	10056
7039	EXACT	3085	3149	6234	4165	10400
900	Mean	3266	3127	6393	4082	10476
901	CV	9.0	6.7	7.3	10.2	7.9
905	MCV	11.0	8.2	8.9	12.5	9.7
902	LSD	358.8	257.2	570.4	510.7	1011.9
906	LSR	36.1	77.4	48.1	42.2	42.2
907	Pr>F(Trts)	0.0008	0.2947	0.0092	0.0273	0.0137
908	R_square	70.7	41.7	60.1	57.2	57.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Trefoil + Timothy
 Expt. 9611
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
7001	LEO	5517	5648	11166	15155	12464	38785
7003	EMPIRE	5715	7140	12854	13899	11875	38628
7028	FERGUS	5228	5736	10964	16190	11816	38970
7034	BULL	5330	5456	10786	16050	12585	39420
7038	WELLINGTON	5394	5535	10929	16046	12545	39520
7039	EXACT	5121	5411	10532	16847	12720	40099
900	Mean	5384	5821	11205	15698	12334	39237
901	CV	7.9	11.3	7.4	4.2	5.6	2.4
905	MCV	9.8	13.9	9.1	5.2	7.0	2.9
902	LSD	528.4	811.9	1021.2	810.6	857.6	1155.8
906	LSR	89.0	47.0	44.0	27.5	94.9	78.6
907	Pr>F(Trts)	0.4600	0.0163	0.0151	0.0003	0.3327	0.2856
908	R_square	48.2	63.0	67.8	78.0	41.3	66.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 Trefoil+timothy
 Expt. 7270
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
7001	LEO	3637	2777	6414	3361	9776
7003	EMPIRE	4295	3367	7661	4300	11961
7028	FERGUS	4144	3015	7159	4597	11756
7034	BULL	3923	3203	7126	3898	11024
7038	WELLINGTON	3569	2909	6478	3866	10345
7039	EXACT	4115	2915	7030	3936	10966
900	Mean	3947	3031	6978	3993	10971
901	CV	8.8	6.7	5.8	7.7	5.6
905	MCV	10.9	8.2	7.2	9.6	7.0
902	LSD	431.4	250.0	501.7	381.5	766.6
906	LSR	59.4	42.4	40.2	30.9	35.1
907	Pr>F(Trts)	0.0542	0.0095	0.0053	0.0011	0.0014
908	R_square	57.6	66.6	71.8	80.8	78.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Trefoil + Timothy
 Expt. 9711
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
7001	LEO	6185	2935	9119	12889	22008
7003	EMPIRE	6543	3026	9569	12782	22351
7028	FERGUS	5769	2757	8526	12845	21371
7031	OAC BRIGHT	6301	2368	8669	14192	22861
7034	BULL	5942	2345	8287	14355	22642
900	Mean	6148	2686	8834	13412	22247
901	CV	7.6	25.1	11.6	3.4	5.0
905	MCV	9.6	31.6	14.6	4.2	6.4
902	LSD	587.8	849.9	1288.1	566.8	1414.4
906	LSR	75.9	124.7	100.5	36.0	94.9
907	Pr>F(Trts)	0.2166	0.5060	0.4467	0.0004	0.4070
908	R_square	41.2	23.2	26.0	84.9	42.5

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Trefoil Timothy Mix
 Expt. 2761
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Tot99
7001	LEO	5332	2808	8432
7003	EMPIRE	5142	1991	7153
7031	OAC_BRIGHT	6618	3256	9744
7034	BULL	5915	3027	9027
7038	WELLINGTON	6287	3272	9359
7041	AC_LANGILLE	5874	3046	8853
900	Mean	5862	2900	8761
901	CV	11.6	8.1	8.4
905	MCV	14.5	10.2	10.5
902	LSD	850.0	295.9	921.9
906	LSR	57.6	23.1	35.6
907	Pr>F(Trts)	0.0925	0.0001	0.0078
908	R_square	64.0	89.9	76.1

RCBD arrangement, 4 blocks {1234}
 Nearest-neighbour covariance adjusted.

ONTARIO
 Kemptville
 Trefoil Timothy 98
 Expt. 3135
 Seeded 1998

Code	Cultivar	1999 (kg/ha)			Tot99
		Cut 1	Cut 2	Cut 3	
7001	LEO	4018	3081	1408	8507
7003	EMPIRE	3897	3132	1041	8070
7031	OAC BRIGHT	4271	3625	1461	9356
7034	BULL	3832	2996	1313	8141
7038	WELLINGTON	4190	3122	1436	8747
7041	AC LANGILLE	3940	3435	1359	8734
900	Mean	4024	3232	1336	8593
901	CV	6.7	10.5	7.6	6.0
905	MCV	8.3	13.0	9.4	7.4
902	LSD	333.1	420.0	126.0	639.1
906	LSR	76.0	66.8	30.0	49.7
907	Pr>F(Trts)	0.2083	0.1270	0.0004	0.0315
908	R_square	72.5	57.7	83.4	77.4

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Trefoil & Timothy Trial
 Expt. 6583
 Seeded 1998

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
BULL	7034	4088	3231	7319
WELLINGTON	7038	4065	3234	7299
LEO	7001	4031	3258	7289
OAC BRIGHT	7031	3928	3008	6936
LANGILLE	7041	3909	2831	6740
EMPIRE	7003	3861	2591	6452
MEAN		3980	3026	7006
C.V. %		4.63	5.52	3.23
F		ns	**	**
L.S.D.5%		277	251	342

RCBD arrangement , 4 blocks {1234}

HARVEST DATES : 06/23/99 08/06/99

ONTARIO
 Thunder Bay
 Trefoil+timothy 98
 Expt. 7282
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
7001	LEO	5469	3642	9112
7003	EMPIRE	5802	3453	9256
7031	OAC_BRIGHT	4903	3378	8281
7034	BULL	5363	3455	8817
7038	WELLINGTON	5097	3522	8619
7041	AC_LANGILLE	5199	3703	8902
900	Mean	5306	3525	8831
901	CV	9.4	8.5	7.5
905	MCV	11.6	10.5	9.2
902	LSD	615.3	371.4	816.1
906	LSR	68.4	114.5	83.8
907	Pr>F(Trts)	0.2190	0.6432	0.3879
908	R_square	37.6	25.9	30.4

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 White clover +orchard 98
 Expt. 7281
 Seeded 1998

Code	Cultivar	1999 (kg/ha)			Tot99
		Cut 1	Cut 2	Cut 3	
8007	CAL LADINO	4038	1669	1593	7300
8008	PICK LADINO	4401	1583	1358	7342
8010	CANOPY	4461	1582	1647	7690
8012	OSCEOLA	4139	1875	1749	7763
8013	SHASTA	4397	1801	1468	7667
8014	ALICE	4467	1942	1497	7906
8023	ADVANTAGE	4466	1952	1871	8288
8022	OTAVNYZ	4356	1859	1639	7854
900	Mean	4341	1783	1603	7726
901	CV	4.1	5.4	10.5	3.4
905	MCV	4.9	6.6	12.8	4.1
902	LSD	214.2	118.2	205.0	318.6
906	LSR	50.0	32.0	40.0	32.2
907	Pr>F(Trts)	0.0135	0.0000	0.0089	0.0008
908	R_square	67.4	89.0	70.1	84.7

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Bromegrass Trial
 Expt. 9505
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
2001	BAYLOR	6397	2680	9077	8987	6471	24535
2002	SARATOGA	6854	3987	10840	10308	7132	28281
2027	BEACON	6685	3338	10023	9846	6510	26379
2039	BRAVO	6436	3634	10070	10207	8618	28894
2051	RADISSON	7042	4047	11088	10128	7243	28459
2053	GRASSLANDS_G	5373	3834	9207	6752	4710	20670
2054	PADDOCK	6939	3202	10141	10081	8606	28829
2055	COTTONWOOD	5400	2202	7602	7896	5404	20901
900	Mean	6391	3365	9756	9276	6837	25869
901	CV	9.4	12.8	8.8	9.2	10.1	7.5
905	MCV	11.5	15.6	10.7	11.2	12.3	9.2
902	LSD	733.1	524.2	1042.5	1038.0	841.6	2373.2
906	LSR	43.9	28.4	29.9	29.2	21.5	28.9
907	Pr>F(Trts)	0.0024	0.0000	0.0003	0.0000	0.0000	0.0000
908	R_square	63.0	79.3	72.7	77.0	86.5	82.3

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Bromegrass Reg Trial
 Expt. 2728
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
2001	BAYLOR	7415	2667	10082	8489	4551	23122
2002	SARATOGA	7843	3159	11002	9359	5531	25892
2027	BEACON	8429	2557	10987	8328	4619	23933
2039	BRAVO	7561	2890	10451	9146	5672	25270
2051	RADISSON	7266	2581	9847	8452	4852	23151
2056	LEIF	6175	2191	8367	6793	4704	19863
900	Mean	7448	2674	10122	8428	4988	23539
901	CV	9.4	12.1	5.7	6.2	10.1	4.1
905	MCV	13.9	17.8	8.5	9.2	15.0	6.0
902	LSD	1033.2	477.0	857.3	773.7	747.0	1424.0
906	LSR	45.8	49.3	32.5	30.1	66.6	23.6
907	Pr>F(Trts)	0.0462	0.0602	0.0024	0.0021	0.0780	0.0003
908	R_square	64.4	63.5	82.2	83.1	63.1	88.1

RCBD arrangement, 3 blocks {124}

ONTARIO
 New Liskeard
 Bromegrass Registration Trial
 Expt. 9613
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
2001	BAYLOR	6161	3403	9564	5163	11346	26072
2002	SARATOGA	5677	4162	9839	5454	12008	27301
2027	BEACON	6297	3924	10221	5201	11149	26571
2039	BRAVO	6421	3755	10176	5779	11220	27175
2051	RADISSON	5811	4311	10121	6236	11569	27926
2056	LEIF	5956	4031	9986	5857	10838	26681
900	Mean	6054	3931	9985	5615	11355	26954
901	CV	8.6	18.2	10.2	7.1	4.0	5.3
905	MCV	10.7	22.6	12.6	8.9	5.0	6.5
902	LSD	645.8	886.8	1261.8	497.4	562.3	1761.0
906	LSR	86.8	97.7	191.9	46.4	48.1	95.0
907	Pr>F(Trts)	0.3444	0.5625	0.9378	0.0123	0.0400	0.5450
908	R_square	36.5	24.1	16.3	65.2	64.2	24.3

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Brome Trial
 Expt. 6180
 Seeded 1996

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut1	Cut 2	
SARATOGA	2002	3000	3011	6011
BRAVO	2039	3013	2880	5893
LEIF	2056	2619	2659	5278
BEACON	2027	2616	2604	5220
RADISSON	2051	2519	2636	5155
BAYLOR	2001	2449	2337	4786
MEAN		2703	2688	5391
C.V. %		11.3	11.3	9.88
F		ns	ns	*
L.S.D.5%		459	458	803

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/14/99 08/09/99

ONTARIO
 Thunder Bay
 Bromegrass Trial
 Expt. 7262
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
2001	BAYLOR	4276	1283	5559	3673	9232
2002	SARATOGA	3995	1293	5288	3462	8751
2027	BEACON	4058	1475	5532	3332	8864
2039	BRAVO	3922	1763	5685	3445	9130
2056	LEIF	3700	1267	4967	3198	8165
900	Mean	3658	1298	4956	3432	8388
901	CV	6.7	23.6	7.9	9.4	6.6
905	MCV	10.0	35.0	11.7	13.9	9.7
902	LSD	364.8	454.0	578.6	477.6	817.4
906	LSR	16.0	43.0	19.4	100.5	26.8
907	Pr>F(Trts)	0.0000	0.0346	0.0000	0.6198	0.0005
908	R_square	94.5	67.2	92.7	32.2	86.7

RCBD arrangement, 3 blocks {124}

ONTARIO
New Liskeard
Brome grass Registration Trial
Expt. 9704
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
2001	BAYLOR	7587	5774	13361	10056	23417
2002	SARATOGA	8354	6221	14575	9536	24111
2027	BEACON	6928	6692	13620	9907	23527
2039	BRAVO	8005	6305	14309	8965	23275
2051	RADISSON	7161	6366	13527	10459	23986
2056	LEIF	6884	5507	12391	8858	21249
900	Mean	7486	6144	13631	9630	23261
901	CV	16.9	6.8	10.8	6.2	6.9
905	MCV	21.0	8.4	13.4	7.7	8.6
902	LSD	1571.4	517.5	1822.6	744.2	2000.9
906	LSR	106.8	43.7	83.4	46.5	69.9
907	Pr>F(Trts)	0.5057	0.0134	0.4011	0.0114	0.2056
908	R_square	26.5	79.6	42.5	61.8	44.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
Thunder Bay
Bromegrass Registration Trial
Expt. 7274
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
2001	BAYLOR	4710	2057	6767	8114	14881
2002	SARATOGA	4341	2005	6346	8228	14574
2027	BEACON	4693	1789	6482	8449	14931
2039	BRAVO	4552	1945	6497	8244	14741
2051	RADISSON	4429	1692	6121	8068	14189
2056	LEIF	3690	1298	4988	7586	12574
900	Mean	4402	1798	6200	8115	14315
901	CV	8.7	17.5	10.6	10.5	10.2
905	MCV	10.7	21.7	13.2	13.1	12.6
902	LSD	472.5	390.7	815.6	1059.9	1803.6
906	LSR	46.3	51.5	45.9	122.8	76.5
907	Pr>F(Trts)	0.0179	0.0379	0.0229	0.7989	0.2450
908	R_square	63.2	60.9	59.6	51.3	48.0

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Bromegrass Registration Trial
 Expt. 9804
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
2001	BAYLOR	6021	6073	12093
2002	SARATOGA	6454	6087	12541
2039	BRAVO	6285	5815	12100
2051	RADISSON	6182	6411	12593
2056	LEIF	5769	5429	11198
2058	BW7	5149	6315	11464
900	Mean	5977	6022	11998
901	CV	8.1	9.8	6.3
905	MCV	10.0	12.2	7.8
902	LSD	599.5	733.5	933.0
906	LSR	45.9	74.7	66.9
907	Pr>F(Trts)	0.0212	0.2604	0.1025
908	R_square	74.0	56.9	44.5

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Bromegrass Trial
 Expt. 6183
 Seeded 1998

Cultivar	Code	1999 (kg/ha) Cut 1	Cut 2	TOTAL
SARATOGA	2002	5500	3838	9338
BRAVO	2039	5252	3849	9101
LEIF	2056	4839	3689	8528
BAYLOR	2001	4245	3308	7553
RADISSON	2051	4654	2699	7353
MEAN		4897	3476	8373
C.V. %		11.1	9.27	6.17
F		*	**	**
L.S.D.5%		837	496	796

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/14/99 08/09/99

ONTARIO
 Elora
 Meadow Bromegrass Trial
 Expt. 2745
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Cut 4	Tot99	Tot98	2yrTot
		Cut 1	Cut 2					
2001	BAYLOR	7767	1076	1323	659	10824	7991	18815
2002	SARATOGA	7679	1165	1520	658	11022	8703	19725
2027	BEACON	7813	1119	1605	540	11077	7060	18137
2039	BRAVO	8065	1261	1668	663	11658	9606	21264
2051	RADISSON	7570	967	1479	387	10403	6931	17334
2054	PADDOCK	8711	905	1920	1071	12607	10067	22674
2055	COTTONWOOD	7987	1070	1437	603	11097	8340	19437
2056	LEIF	7008	999	1583	525	10116	8855	18971
2057	FLEET	8311	815	1709	1003	11839	9725	21564
900	Mean	7879	1042	1583	679	11183	8587	19769
901	CV	11.6	16.8	12.6	12.8	10.8	12.9	9.7
905	MCV	16.6	24.0	17.9	18.3	15.4	18.4	13.8
902	LSD	1307.5	250.0	283.3	124.2	1720.2	1577.1	2721.1
906	LSR	76.8	56.1	47.4	18.2	69.0	50.3	51.0
907	Pr>F(Trts)	0.5982	0.1474	0.0754	0.0000	0.3656	0.0261	0.0576
908	R_square	31.2	60.6	55.6	91.0	39.5	61.6	55.6

RCBD arrangement, 3 blocks {234}

ONTARIO
 New Liskeard
 Meadow Bromegrass Trial
 Expt. 9706
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
2001	BAYLOR	6993	2475	1135	10603	13358	23961
2002	SARATOGA	6124	2811	1024	9959	13588	23547
2027	BEACON	6615	2454	883	9953	13328	23281
2039	BRAVO	6679	2899	963	10541	14052	24593
2051	RADISSON	6468	2872	937	10277	14197	24474
2054	PADDOCK	6940	3548	2101	12589	12755	25344
2055	COTTONWOOD	5991	3306	1105	10402	12021	22423
2056	LEIF	6595	2478	807	9879	11603	21482
2057	FLEET	6727	3243	2066	12036	11522	23558
900	Mean	6570	2898	1225	10693	12936	23629
901	CV	13.9	15.4	14.6	8.9	10.9	8.3
905	MCV	16.9	18.6	17.7	10.7	13.2	10.0
902	LSD	1108.7	538.5	217.0	1148.2	1709.3	2366.0
906	LSR	110.6	49.2	16.8	42.4	63.9	61.3
907	Pr>F(Trts)	0.8188	0.0129	0.0000	0.0033	0.0810	0.2366
908	R_square	19.5	72.4	92.3	71.0	42.3	42.2

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 Meadow Bromegrass Trial
 Expt. 7275
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
2001	BAYLOR	1589	913	2204	4705	7799	12504
2002	SARATOGA	1552	825	2554	4931	7978	12909
2027	BEACON	1610	774	2676	5060	7756	12816
2039	BRAVO	1396	1108	2037	4542	8717	13259
2051	RADISSON	1169	1594	1707	4470	8279	12748
2054	PADDOCK	1511	1987	1908	5406	8895	14301
2055	COTTONWOOD	1516	693	2267	4476	7429	11905
2056	LEIF	874	1780	1150	3804	7667	11471
2057	FLEET	1641	1821	1882	5344	9473	14816
900	Mean	1429	1277	2043	4749	8221	12970
901	CV	9.5	10.3	8.1	5.8	7.1	5.1
905	MCV	11.4	12.5	9.8	7.1	8.6	6.1
902	LSD	163.6	159.4	199.3	336.1	704.6	797.3
906	LSR	21.3	12.3	13.1	21.0	34.5	23.8
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.0000	0.0006	0.0000
908	R_square	82.9	95.3	91.5	81.9	66.4	78.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Meadow Bromegrass Trial
 Expt. 9805
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99
		Cut 1	Cut 2		
2001	BAYLOR	4356	3148	2059	9563
2002	SARATOGA	5601	3194	1917	10713
2039	BRAVO	5213	3128	1571	9912
2051	RADISSON	4969	3062	1410	9441
2054	PADDOCK	4750	3004	2720	10473
2055	COTTONWOOD	4398	3090	1612	9100
2056	LEIF	5451	2962	1171	9584
2057	FLEET	5202	2827	2961	10990
2058	BW7	2496	1526	964	4986
900	Mean	4715	2882	1821	9418
901	CV	11.0	5.8	22.2	7.2
905	MCV	13.3	7.0	26.8	8.7
902	LSD	627.7	201.5	488.8	820.7
906	LSR	20.2	12.1	24.5	13.7
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.0000
908	R_square	86.7	93.9	79.8	91.2

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Meadow Bromegrass Trial
 Expt. 6184
 Seeded 1998

Cultivar	Code	1999 (kg/ha)			TOTAL
		Cut 1	Cut 2	Cut 3	
FLEET	2057	2753	1805	2208	6766
BAYLOR	2001	3028	1575	1719	6322
BRAVO	2039	2816	1575	1853	6244
SARATOGA	2002	2864	1488	1880	6232
PADDOCK	2054	2510	1718	1975	6203
LEIF	2056	2864	1547	1723	6134
RADISSON	2051	2729	1581	1734	6044
COTTONWOOD	2055	2341	1650	1749	5740
MEAN		2738	1617	1855	6210
C.V. %		11.2	10.1	9.0	7.3
F		ns	ns	**	ns
L.S.D.5%		450	241	246	668

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/07/99 07/09/99 08/25/99

ONTARIO
New Liskeard
Orchardgrass Registration Trial
Expt. 9506
Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
3001	JUNO	3987	2530	6517	7238	9582	23337
3003	KAY	5127	2687	7814	6698	8556	23068
3009	NAPIER	4673	2778	7452	8137	10373	25962
3066	RAPIDO	3941	2931	6872	6640	9909	23421
3069	RANCHO	4322	2701	7023	6681	9802	23505
3072	DS7	4685	2385	7070	6618	9897	23585
3074	JAY	4280	2921	7201	7007	9495	23703
3075	BENCHMARK	3537	2768	6306	6234	9717	22257
3076	MOBITE	2945	2534	5479	5947	9176	20603
3078	AC_SPLENDOR	4512	2571	7083	7465	9147	23696
3079	OKAY	4709	2344	7053	7297	9602	23951
3091	ARTIC	4530	2374	6904	6839	8677	22420
900	Mean	4271	2627	6898	6900	9494	23292
901	CV	16.0	14.9	11.9	9.4	11.4	7.5
905	MCV	19.2	17.8	14.3	11.3	13.7	9.0
902	LSD	820.0	468.4	983.9	776.4	1299.0	2092.0
906	LSR	37.6	79.9	42.1	35.5	71.5	39.0
907	Pr>F(Trts)	0.0070	0.4031	0.0510	0.0044	0.5137	0.0545
908	R_square	56.5	31.1	50.2	55.1	31.5	47.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Orchardgrass Trial
 Expt.6155
 Seeded 1995

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
JUNO	3001	1438	1907	3345
OKAY	3079	1899	1471	3370
AC SPLENDOR	3078	1745	1741	3486
DS-7	3072	1175	1721	2896
KAY	3003	1933	1372	3305
BENCHMARK	3075	1070	1421	2491
ARTIC	3091	1718	1790	3508
MOBITE	3076	839	1555	2394
RAPIDO	3066	934	1587	2521
JAY	3074	1356	1385	2741
NAPIER	3009	1001	1260	2261
RANCHO	3069	916	1257	2173
MEAN		1335	1539	287
C.V. %		12.0	13.3	9.55
F		**	**	**
L.S.D.5%		231	295	395

RCBD arrangement , 4 blocks {1234}

HARVEST DATES : 06/14/99 08/16/99

ONTARIO
 Elora
 Orchardgrass Reg Trial
 Expt. 2729
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2					
3001	JUNO	6497	909	1419	8825	9278	4575	22679
3003	KAY	6811	990	1445	9247	8928	4360	22535
3009	NAPIER	7357	906	1477	9740	9550	4526	23816
3027	HALLMARK	7337	1281	1527	10145	11849	6309	28303
3066	RAPIDO	7130	915	1681	9727	9524	6024	25275
3072	DS7	6719	948	1602	9268	9405	5106	23779
3074	JAY	6053	1033	1351	8437	7946	2347	18730
3075	BENCHMARK	7219	1263	1552	10034	10643	4858	25535
3076	MOBITE	6174	940	1299	8414	7761	5202	21377
3078	AC SPLENDOR	6173	1038	1494	8705	8172	4120	20997
3079	OKAY	7557	913	1558	10028	9430	5730	25188
3093	BAR_H_DGL_05	8076	1072	1621	10769	9875	5757	26401
3094	OG9201	6936	1250	1592	9779	10280	2329	22388
3095	PS9001	7136	1297	1593	10027	10590	6323	26940
3096	OG9401	6398	881	1607	8885	8485	3566	20936
900	Mean	6905	1042	1521	9469	9448	4742	23658
901	CV	10.8	11.7	12.0	9.3	6.7	28.8	7.1
905	MCV	15.0	16.3	16.6	12.9	9.4	40.1	9.8
902	LSD	1038.9	169.4	253.2	1225.2	885.3	1899.7	2327.5
906	LSR	51.4	40.6	66.3	52.0	21.7	47.6	24.3
907	Pr>F(Trts)	0.0937	0.0002	0.4572	0.0705	0.0000	0.0160	0.0000
908	R_square	47.6	71.7	51.2	49.8	82.4	56.4	78.7

RCBD arrangement, 3 blocks {123}

ONTARIO
 New Liskeard
 Orchardgrass Reg Trial
 Expt. 8509
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
3001	JUNO	4334	2612	6946	8100	8090	23135
3003	KAY	5422	3277	8699	9107	8119	25925
3009	NAPIER	4816	3101	7917	9090	8677	25685
3027	HALLMARK	3193	3488	6681	8740	8476	23897
3066	RAPIDO	3468	3147	6614	8030	7935	22579
3072	DS7	4953	3461	8414	9684	8221	26319
3074	JAY	5261	2999	8259	8663	7803	24725
3075	BENCHMARK	3768	3461	7230	8155	7919	23304
3076	MOBITE	3482	3201	6683	7727	6961	21372
3078	AC_SPLENDOR	5322	3769	9091	8697	7810	25598
3079	OKAY	5340	3003	8343	8693	7802	24838
3093	BAR_H_DGL_05	3927	3109	7036	7755	7365	22156
3094	OG9201	4540	3288	7828	8555	8980	25363
3095	PS9001	3784	3075	6858	8265	8792	23915
3096	OG9401	5483	3316	8799	8185	7659	24643
900	Mean	4473	3220	7693	8496	8041	24230
901	CV	9.1	15.6	7.3	6.8	10.1	5.2
905	MCV	10.9	18.6	8.7	8.2	12.0	6.2
902	LSD	485.7	598.9	667.1	692.6	965.6	1495.0
906	LSR	21.2	51.8	26.9	35.4	47.8	30.2
907	Pr>F(Trts)	0.0000	0.3402	0.0000	0.0009	0.0797	0.0000
908	R_square	85.7	30.5	78.8	55.1	41.8	67.9

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Orchardgrass Registration Trial
 Expt. 2746
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99	Tot98	2yrTot
		Cut 1	Cut 2				
3001	JUNO	7777	1359	1596	10732	10327	21060
3003	KAY	8264	1471	1611	11347	13479	24827
3009	NAPIER	8089	1430	1767	11286	10466	21752
3066	RAPIDO	9018	1421	1833	12272	11511	23782
3072	DS7	8987	1446	1725	12158	11235	23393
3074	JAY	6634	1621	1597	9851	9868	19719
3075	BENCHMARK	9595	1742	1977	13313	11612	24925
3078	AC_SPLENDOR	7329	1654	1406	10389	10109	20498
3079	OKAY	9069	1474	1483	12027	11227	23254
3093	BAR_H_DGL_05	9984	1450	1509	12943	10451	23394
3094	OG9201	8563	1863	1672	12098	9539	21637
3095	PS9001	8997	1853	1660	12510	11650	24160
3096	OG9401	5962	1566	1429	8958	8486	17443
900	Mean	8328	1565	1636	11530	10766	22296
901	CV	8.3	5.5	9.0	6.4	8.0	6.6
905	MCV	9.9	6.5	10.8	7.6	9.6	7.9
902	LSD	825.2	102.5	176.8	879.7	1036.0	1758.5
906	LSR	20.5	20.3	31.0	20.2	20.7	23.5
907	Pr>F(Trts)	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
908	R_square	79.6	87.2	73.5	80.3	74.5	76.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Orchardgrass Registration Trial
 Expt. 9705
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
3001	JUNO	8764	3569	12333	9123	21456
3003	KAY	9807	3982	13789	10703	24493
3009	NAPIER	9500	3937	13437	10680	24117
3066	RAPIDO	7626	4126	11752	9293	21045
3072	DS7	8806	4888	13694	9792	23486
3074	JAY	8311	4126	12437	10309	22746
3075	BENCHMARK	8360	3708	12069	9185	21254
3078	AC_SPLENDOR	9722	4130	13853	11307	25159
3079	OKAY	10422	4239	14662	10590	25252
3093	BAR_H_DGL_05	6697	3657	10355	9105	19460
3094	OG9201	9104	3991	13096	10082	23177
3095	PS9001	9004	3698	12702	9921	22623
3096	OG9401	10103	4348	14450	10251	24702
900	Mean	8941	4031	12971	10026	22998
901	CV	13.1	10.1	10.5	9.2	8.1
905	MCV	18.3	14.1	14.6	12.9	11.3
902	LSD	1636.3	569.5	1896.9	1289.4	2607.4
906	LSR	43.9	43.2	44.0	58.6	45.0
907	Pr>F(Trts)	0.0375	0.0450	0.0378	0.1181	0.0168
908	R_square	55.5	62.5	56.6	48.6	59.8

RCBD arrangement, 3 blocks {234}

ONTARIO
 Thunder Bay
 Orchardgrass
 Expt. 7279
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
3001	JUNO	3076	2733	5809	7516	13326
3003	KAY	4016	2887	6902	7484	14386
3009	NAPIER	3197	2867	6064	7520	13585
3066	RAPIDO	2892	2952	5844	7101	12945
3072	DS7	3290	3263	6553	7365	13918
3074	JAY	4254	2558	6811	6958	13769
3075	BENCHMARK	2943	3027	5970	7118	13088
3078	AC_SPLENDOR	3477	2954	6431	7097	13528
3079	OKAY	3744	2765	6509	7816	14325
3093	BAR_H_DGL_05	2863	2556	5418	7112	12530
3094	OG9201	3086	3105	6191	7072	13263
3095	PS9001	3112	3193	6305	7548	13852
3096	OG9401	3993	2448	6441	6636	13077
900	Mean	3380	2870	6250	7257	13507
901	CV	8.0	10.1	7.2	7.2	6.0
905	MCV	9.6	12.1	8.7	8.6	7.3
902	LSD	325.9	346.7	543.1	624.8	980.3
906	LSR	23.4	42.5	36.6	53.0	52.8
907	Pr>F(Trts)	0.0000	0.0051	0.0019	0.1805	0.0936
908	R_square	81.8	54.3	61.7	53.2	43.7

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Early Orchard 98
 Expt. 9806
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
3001	JUNO	5894	5637	11531
3009	NAPIER	5197	5489	10686
3066	RAPIDO	5585	5864	11449
3072	DS7	5249	5244	10493
3075	BENCHMARK	4480	5848	10328
3093	BAR_H_DGL_05	4656	4776	9432
3094	OG9201	5534	6479	12013
3097	OG9501	5199	4981	10180
3101	PROFILE	4785	5304	10089
900	Mean	5175	5514	10689
901	CV	8.6	11.4	8.4
905	MCV	10.4	13.8	10.2
902	LSD	536.4	761.6	1087.6
906	LSR	37.9	44.7	42.1
907	Pr>F(Trts)	0.0023	0.0291	0.0103
908	R_square	76.3	49.0	61.7

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Early Orchardgrass Trial
 Expt. 6156
 Seeded 1998

Cultivar	Code	1999 (kg/ha)		Cut3	TOTAL
		Cut 1	Cut 2		
OG9201	3094	3704	3317	2416	9437
OG9501	3097	3614	3123	2554	9291
NAPIER	3009	3599	3140	2543	9282
RAPIDO	3066	3303	3372	2312	8987
PROFILE	3101	2868	3323	2399	8590
BARHDGL05	3093	3062	3134	2384	8580
BENCHMARK	3075	2730	3200	2612	8542
DS7	3072	3000	2972	2523	8495
JUNO	3001	3148	3049	2123	8320
MEAN		3225	3181	2430	8836
C.V. %		11.3	6.92	7.45	5.02
F		**	ns	*	**
L.S.D.5%		533	321	264	647

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/14/99 08/05/99 09/21/99

ONTARIO
 New Liskeard
 Late Orchardgrass Trial
 Expt. 9807
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Tot99
3003	KAY	5524	6278	11803
3074	JAY	5359	5663	11022
3078	AC_SPLENDOR	4863	5768	10630
3079	OKAY	5904	5500	11404
3086	HAYMATE	5512	5750	11262
3096	OG9401	5195	6606	11801
3098	OG9502	5806	6748	12554
3100	WARRIOR	6192	5744	11936
3103	OG9204	5482	6419	11901
900	Mean	5538	6053	11590
901	CV	7.0	10.7	7.5
905	MCV	10.0	15.2	10.7
902	LSD	551.5	921.4	1238.2
906	LSR	41.5	73.8	64.4
907	Pr>F(Trts)	0.0254	0.2241	0.3095
908	R_square	69.2	46.4	48.7

RCBD arrangement, 3 blocks {123}

ONTARIO
 Kapuskasing
 Late Orchardgrass Trial
 Expt. 6157
 Seeded 1998

Cultivar	Code	1999 (kg/ha)		Cut 3	TOTAL
		Cut 1	Cut 2		
SPLENDOR	3078	3347	2388	1455	7362
OG9502	3098	2948	3077	2065	8090
HAYMATE	3086	2790	2594	2124	7508
OG9204	3103	3301	2684	2007	7992
KAY	3003	3140	2680	1649	7469
JAY	3074	2693	2699	1673	7065
OKAY	3079	3089	2412	1549	7050
OG9401	3096	2506	2381	1638	6525
WARRIOR	3100	1968	2388	1659	6015
MEAN		2864	2608	1758	7230
C.V. %		12.6	10.9	14.8	10.3
F		**	ns	*	ns
L.S.D.5%		627	492	451	1292

RCBD arrangement, 3 blocks {123}

HARVEST DATES : 06/14/99 08/03/99 09/21/99

ONTARIO
 New Liskeard
 Reed Canarygrass
 Expt. 9507
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
5011	VANTAGE	6127	4267	10393	13508	11160	35061
5013	PALATON	6001	4221	10223	13184	10918	34324
5016	VENTURE	5220	4253	9474	12568	11064	33106
5018	LARA	5455	3702	9157	12802	11084	33043
900	Mean	5131	3700	8830	11899	10426	31155
901	CV	6.0	10.0	5.8	8.1	8.7	6.2
905	MCV	7.6	12.6	7.3	10.2	11.0	7.9
902	LSD	390.6	466.5	644.8	1212.1	1148.7	2449.8
906	LSR	11.9	21.1	11.8	20.0	35.3	16.5
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.0000	0.0011	0.0000
908	R_square	96.2	90.2	96.4	90.4	78.6	93.2

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Reed Canarygrass Trial
 Expt. 6067
 Seeded 1995

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
LARA	5018	3635	1119	4754
VANTAGE	5011	3275	1375	4650
PALATON	5013	3138	1177	4315
VENTURE	5016	3076	1210	4286
Mean		3131	1112	4244
C.V. %		5.57	15.2	5.55
F		**	NS	NS
L.S.D.5%		292	296	400

RBCD arrangement, 4 blocks {1234}

HARVEST DATES : 06/23/99 09/15/99

ONTARIO
 Thunder Bay
 Reed Canarygrass
 Expt. 7255
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5011	VANTAGE	3287	2992	6279	1549	7828
5013	PALATON	3282	2443	5724	1343	7067
5016	VENTURE	3065	2738	5803	1286	7089
5018	LARA	2977	2708	5685	1266	6951
5019	EMPHASIS	1576	1360	2936	681	3617
900	Mean	2837	2448	5285	1225	6510
901	CV	9.0	8.4	6.7	14.6	7.7
905	MCV	11.4	10.6	8.5	18.3	9.7
902	LSD	323.1	260.4	447.7	224.7	634.3
906	LSR	18.9	16.0	13.4	25.9	15.1
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.0003	0.0000
908	R_square	91.9	93.2	95.2	83.2	93.7

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Reed Canarygrass
 Expt. 9607
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
5011	VANTAGE	7053	4463	11516
5013	PALATON	5909	3775	9684
5016	VENTURE	5661	3808	9469
5023	ASRCG-96	6368	4221	10589
5024	VASR8401	5958	3602	9560
900	Mean	6133	3939	10072
901	CV	7.3	9.1	6.0
905	MCV	9.2	11.4	7.6
902	LSD	563.4	449.3	767.6
906	LSR	40.5	52.2	37.5
907	Pr>F(Trts)	0.0131	0.0396	0.0037
908	R_square	66.4	55.1	72.6

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 Reed Canarygrass Trial
 Expt. 7266
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5011	VANTAGE	4350	2310	6661	4203	10863
5013	PALATON	4869	1776	6645	3858	10503
5016	VENTURE	4976	1980	6956	4190	11146
5023	ASRCG-96	5122	2020	7142	4346	11488
5024	VASR8401	3512	2411	5923	1766	7690
900	Mean	4566	2099	6665	3673	10338
901	CV	9.0	14.5	6.9	7.2	5.8
905	MCV	11.4	18.2	8.7	9.1	7.3
902	LSD	518.8	382.4	578.1	334.9	753.2
906	LSR	32.2	60.2	47.4	13.0	19.8
907	Pr>F(Trts)	0.0009	0.0681	0.0255	0.0000	0.0000
908	R_square	83.6	66.0	80.7	96.2	92.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Reed Canarygrass Trial
 Expt. 9707
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5011	VANTAGE	8018	6528	14546	9352	23897
5013	PALATON	7326	6588	13914	9266	23179
5016	VENTURE	7833	6706	14539	9107	23647
5023	ASRCG-96	8817	6339	15156	8969	24125
5024	VASR8401	6752	4501	11253	4658	15911
900	Mean	7749	6132	13881	8270	22152
901	CV	12.2	9.8	9.2	3.6	6.4
905	MCV	15.3	12.4	11.6	4.6	8.1
902	LSD	1186.7	758.6	1612.6	377.5	1789.4
906	LSR	57.5	34.4	41.3	8.0	21.8
907	Pr>F(Trts)	0.0815	0.0012	0.0082	0.0000	0.0000
908	R_square	60.9	80.7	74.0	98.5	90.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
Thunder Bay
Reed Canarygrass 97
Expt. 7276
Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5011	VANTAGE	4280	3014	7294	4538	11832
5013	PALATON	4611	3052	7663	4407	12070
5016	VENTURE	4297	2792	7088	4587	11676
5023	ASRCG-96	4695	3061	7756	4607	12364
5024	VASR8401	2759	2767	5525	1986	7511
900	Mean	4128	2937	7065	4025	11090
901	CV	4.5	9.8	5.5	5.4	4.9
905	MCV	5.7	12.3	6.9	6.7	6.2
902	LSD	235.5	361.0	490.3	271.3	683.8
906	LSR	12.2	122.4	22.0	10.4	14.1
907	Pr>F(Trts)	0.0000	0.4303	0.0000	0.0000	0.0000
908	R_square	96.1	36.1	88.0	97.6	95.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Tall Fescue
 Expt. 9608
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
5519	FESTORINA	5820	4001	9821	12365	10432	32619
5523	COURTENAY	6613	4684	11297	15325	10792	37414
5526	KOKANEE	5883	4909	10792	12973	11453	35218
5527	MONTEBELLO	6073	4929	11002	13208	11992	36202
900	Mean	5488	4168	9655	13314	10533	33502
901	CV	7.4	14.8	8.2	7.8	12.8	5.0
905	MCV	9.3	18.7	10.3	9.8	16.2	6.3
902	LSD	508.7	778.9	997.4	1307.3	1701.5	2109.8
906	LSR	14.3	29.8	16.8	44.2	42.6	18.6
907	Pr>F(Trts)	0.0000	0.0003	0.0000	0.0128	0.0117	0.0000
908	R_square	94.2	81.7	93.0	65.3	68.8	91.3

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Tall Fescue Registration
 Expt. 2748
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5025	FUEGO	7594	3471	11064	12280	23344
5026	TF8805	9523	2934	12457	13162	25620
5519	FESTORINA	8744	3535	12279	13555	25835
5523	COURTENAY	7626	3612	11238	13898	25136
5526	KOKANEE	7329	4152	11482	13900	25382
5527	MONTEBELLO	7496	3708	11204	13933	25137
900	Mean	8052	3569	11621	13455	25076
901	CV	7.9	9.7	7.5	7.9	6.2
905	MCV	9.8	12.1	9.4	9.8	7.7
902	LSD	788.3	430.7	1087.0	1315.4	1934.0
906	LSR	35.9	35.4	78.0	79.5	77.6
907	Pr>F(Trts)	0.0010	0.0062	0.1620	0.2502	0.3135
908	R_square	80.4	68.4	66.3	61.5	67.9

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Tall Fescue 1997
 Expt. 9708
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5025	FUEGO	6135	5465	11600	4582	16182
5026	TF8805	8650	5389	14039	6384	20423
5519	FESTORINA	6767	5228	11995	5314	17309
5523	COURTENAY	7609	5823	13433	6044	19476
5526	KOKANEE	7679	6274	13954	6525	20479
5527	MONTEBELLO	7587	5803	13390	6699	20090
900	Mean	7405	5664	13069	5925	18993
901	CV	10.4	8.0	7.3	6.5	5.7
905	MCV	12.9	9.9	9.1	8.0	7.1
902	LSD	951.9	563.4	1185.0	474.8	1352.7
906	LSR	37.8	53.9	48.6	22.4	31.5
907	Pr>F(Trts)	0.0067	0.0558	0.0096	0.0000	0.0002
908	R_square	70.8	70.0	73.9	86.1	82.9

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 Tall Fescue 97
 Expt. 7277
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
5025	FUEGO	2918	3667	6585	6731	13316
5026	TF8805	4022	3198	7220	7825	15045
5519	FESTORINA	3411	3032	6443	7140	13582
5523	COURTENAY	4196	3939	8135	7386	15521
5526	KOKANEE	3430	3985	7415	7333	14748
5527	MONTEBELLO	3442	3796	7238	7751	14989
900	Mean	3570	3603	7173	7361	14533
901	CV	9.0	10.8	7.6	9.1	6.5
905	MCV	11.2	13.4	9.4	11.3	8.0
902	LSD	400.1	483.9	675.2	834.4	1166.9
906	LSR	31.3	50.8	39.9	76.3	52.9
907	Pr>F(Trts)	0.0007	0.0145	0.0067	0.2675	0.0270
908	R_square	81.2	66.1	76.4	71.7	80.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Tall Fescue Trial
 Expt. 9808
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		
		Cut 1	Cut 2	Tot99
5025	FUEGO	5400	6834	12234
5026	TF8805	6372	6518	12891
5519	FESTORINA	5693	6450	12142
5523	COURTENAY	5611	6732	12343
5526	KOKANEE	5459	6180	11639
5527	MONTEBELLO	5615	6837	12452
900	Mean	5692	6592	12284
901	CV	7.3	5.9	5.0
905	MCV	9.1	7.3	6.2
902	LSD	515.6	479.5	765.3
906	LSR	53.0	73.0	61.2
907	Pr>F(Trts)	0.0531	0.1764	0.1815
908	R_square	70.6	56.9	67.3

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Tall Fescue Trial
 Expt. 6214
 Seeded 1998

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
COURTENAY	5523	6190	3057	9247
KOKANEE	5526	5368	3792	9160
MONTEBELLO	5527	5424	2993	8417
FESTORINA	5519	5129	2889	8018
TF 8805	5026	5353	2540	7893
FUEGO	5025	3732	2959	6691
MEAN		5199	3038	8238
C.V. %		7.71	8.24	5.54
F		**	**	**
L.S.D.5%		604	377	688

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/14/99 08/03/99

ONTARIO
 Kapuskasing
 Timothy Trial
 Expt. 6132
 Seeded 1993

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
TIMFOR	6040	5019	2426	7445
SF8307A	6128	4825	2199	7024
TM8601	6123	4311	2374	6685
SF8601	6129	4282	2382	6664
PXTF-06	6127	4245	2396	6641
PXTI-08	6131	4399	2238	6637
HT31	6124	4289	2284	6573
JONATAN	6133	4749	1819	6568
SF8605	6130	3991	2376	6367
T 120	6121	4396	1964	6360
PXTI-04	6125	4225	2086	6311
PXTI-11	6132	4166	2052	6218
RVP03	6122	4056	2033	6089
CLIMAX	6002	3764	2069	5833
PXTI-20	6126	3669	1836	5505
Mean		4292	2169	6461
C.V. %		8.97	13.3	9.57
F		**	**	*
L.S.D.5%		550	413	882

RCBD arrangement, 3 blocks {123}

HARVEST DATES : 06/22/99 08/25/99

ONTARIO
 Kapuskasing
 Early Timothy Trial
 Expt. 6136
 Seeded 1995

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
TORO	6030	5343	2669	8012
RICHMOND	6050	5340	2383	7723
CHAMP	6005	4967	2372	7339
SF8601	6129	4551	2643	7194
GLENMOR	6074	4841	2321	7162
TIMFOR	6040	4873	2137	7010
TM 8901	6134	5134	1870	7004
SF8307A	6128	5192	1838	7030
TM8601	6123	4841	2234	7075
BASHO	6009	4859	1733	6592
SF8605	6130	4689	1753	6442
NIKE	6087	4701	1633	6334
MEAN		4944	2132	707
C.V.		10.9	14.8	10.4
F		ns	**	ns
L.S.D.5%		779	454	1057

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/17/99 08/17/99

ONTARIO
 Thunder Bay
 Early Timothy 95
 Expt. 7253
 Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot98	2yrTot
		Cut 1	Tot99		
6005	CHAMP	3912	3912	3471	7384
6009	BASHO	4088	4088	3515	7603
6030	TORO	4056	4056	3867	7923
6040	TIMFOR	3813	3813	3736	7550
6050	RICHMOND	4319	4319	3923	8242
6074	GLENMORE	3307	3307	2903	6210
6087	NIKE	4066	4066	3474	7540
6123	COLT	4099	4099	3598	7697
6128	AC_REGAL	3711	3711	3346	7056
6129	SF8601	3621	3621	3230	6851
6130	SF8605	3369	3369	3268	6638
6134	TM_8901	4331	4331	3789	8120
900	Mean	3891	3891	3510	7401
901	CV	5.8	5.8	6.2	5.0
905	MCV	7.0	7.0	7.4	6.1
902	LSD	272.1	272.1	259.2	447.8
906	LSR	26.6	26.6	25.4	22.0
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.0000
908	R_square	77.0	77.0	79.7	81.8

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Early Timothy Trial
 Expt. 2732
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
6005	CHAMP	6729	2077	8806	8303	4557	21665
6009	BASHO	6577	2082	8659	8789	4844	22292
6030	TORO	6775	2699	9474	8775	4726	22974
6040	TIMFOR	6535	2027	8562	8409	5016	21986
6050	RICHMOND	7580	2416	9996	9885	5421	25302
6074	GLENMORE	5593	1626	7218	7229	3894	18341
6087	NIKE	6228	1949	8177	7900	4223	20301
6123	COLT	6701	2327	9028	8562	4980	22570
6128	AC REGAL	5786	1909	7695	8669	4703	21068
6130	SF8605	5851	2076	7927	7369	4268	19564
6134	TM 8901	6389	2100	8490	9033	4614	22136
6137	TITAN	7063	1828	8891	8983	4148	22022
900	Mean	6484	2093	8577	8492	4616	21685
901	CV	10.9	8.0	8.9	12.4	13.8	9.7
905	MCV	13.0	9.6	10.6	14.9	16.6	11.7
902	LSD	844.8	201.7	913.4	1261.9	766.1	2532.9
906	LSR	42.5	18.8	32.9	47.5	50.2	36.4
907	Pr>F(Trts)	0.0180	0.0000	0.0010	0.0683	0.0917	0.0110
908	R_square	50.3	83.7	62.6	56.8	66.9	61.6

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Early Timothy
 Expt. 6140
 Seeded 1996

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
RICHMOND	6050	4752	3923	8675
TORO	6030	4580	3753	8333
COLT	6123	4278	3857	8135
NIKE	6087	4638	3675	8313
LISCHKA	6137	4132	3647	7779
BASHO	6009	4356	3483	7839
TM8901	6134	4526	3230	7756
TIMFOR	6040	3804	3853	7657
SF8307A	6128	4055	3589	7644
CHAMP	6005	3929	3294	7223
SF8605	6130	3915	3581	7496
GLENMOR	6074	3695	3296	6991
MEAN		4222	3599	782
C.V. %		7.85	9.71	8.05
F		**	ns	ns
L.S.D.5%		561	592	1066

RBCD arrangement, 3 blocks {124}

HARVEST DATES : 06/17/99 08/18/99

ONTARIO
 Thunder Bay
 Early Timothy Trial
 Expt. 7264
 Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot98	2yrTot
		Cut 1	Tot99		
6005	CHAMP	4000	4000	3277	7277
6009	BASHO	4523	4523	3405	7928
6030	TORO	4753	4753	3531	8284
6040	TIMFOR	4693	4693	3529	8222
6050	RICHMOND	4975	4975	3264	8239
6074	GLENMORE	3397	3397	2947	6343
6087	NIKE	4231	4231	3461	7692
6123	COLT	4465	4465	3376	7841
6128	AC REGAL	4217	4217	3430	7648
6130	SF8605	4386	4386	3476	7862
6134	TM 8901	4780	4780	3187	7967
6137	TITAN	4736	4736	3382	8117
900	Mean	4430	4430	3355	7785
901	CV	7.8	7.8	7.1	6.6
905	MCV	9.3	9.3	8.5	8.0
902	LSD	413.9	413.9	286.5	619.8
906	LSR	26.2	26.2	49.0	31.9
907	Pr>F(Trts)	0.0000	0.0000	0.0679	0.0005
908	R_square	67.7	67.7	51.5	61.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Early Timothy Registration
 Expt. 2749
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
6005	CHAMP	7607	2710	10318	11408	21726
6009	BASHO	8602	2870	11473	11121	22594
6030	TORO	8001	3190	11191	10591	21782
6040	TIMFOR	7493	2478	9970	10024	19994
6050	RICHMOND	8518	3496	12014	11086	23100
6074	GLENMORE	6634	1827	8461	9359	17820
6087	NIKE	7689	2327	10016	10493	20509
6123	COLT	7983	2843	10825	11195	22020
6134	TM 8901	8212	2970	11183	11525	22708
6137	TITAN	8022	2291	10313	12080	22393
900	Mean	7876	2700	10576	10888	21465
901	CV	6.7	11.8	7.1	5.6	5.7
905	MCV	8.1	14.3	8.6	6.8	6.9
902	LSD	636.8	385.2	908.3	740.3	1473.4
906	LSR	32.4	23.1	25.6	27.2	27.9
907	Pr>F(Trts)	0.0010	0.0000	0.0000	0.0001	0.0000
908	R_square	62.1	79.6	71.5	69.8	70.1

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Early Timothy Trial
 Expt. 9709
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
6005	CHAMP	6468	3160	9629	7343	16972
6009	BASHO	6242	3403	9644	7337	16981
6030	TORO	6226	3846	10071	7931	18002
6040	TIMFOR	6794	2992	9786	7863	17649
6050	RICHMOND	6502	3657	10160	7762	17922
6074	GLENMORE	5847	2417	8265	6691	14956
6087	NIKE	6886	3234	10120	7445	17565
6123	COLT	5728	3367	9095	6830	15925
6134	TM_8901	5870	3517	9387	7546	16934
6137	TITAN	5787	2908	8695	5472	14167
900	Mean	6235	3250	9485	7222	16707
901	CV	5.4	17.0	7.5	7.4	6.4
905	MCV	6.5	20.4	9.0	8.9	7.7
902	LSD	405.2	664.5	857.3	644.7	1285.4
906	LSR	35.0	46.5	45.2	26.2	33.5
907	Pr>F(Trts)	0.0001	0.0537	0.0097	0.0000	0.0002
908	R_square	87.8	50.2	61.8	72.9	68.4

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Early Timothy Trial
 Expt. 6143
 Seeded 1997

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
RICHMOND	6050	4802	3098	7900
TORO	6030	4391	3244	7635
TIMFOR	6040	4289	3063	7352
LISCHKA	6137	4357	2895	7252
NIKE	6087	4380	2814	7194
CHAMP	6005	4348	2816	7164
TM 8901	6134	4297	2679	6976
COLT	6123	4101	2719	6820
BASHO	6009	3973	2295	6268
GLENMOR	6074	3635	2504	6139
MEAN		4257	2813	7070
C.V. %		5.60	13.6	7.04
F		**	ns	**
L.S.D.5%		346	553	722

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/17/99 08/16/99

ONTARIO
 Thunder Bay
 Early Timothy
 Expt. 7285
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
6005	CHAMP	5417	1771	7188
6009	BASHO	5902	1412	7314
6030	TORO	5982	1389	7371
6040	TIMFOR	5915	1521	7436
6050	RICHMOND	6076	1432	7508
6074	GLENMORE	5196	1562	6758
6123	COLT	5638	1349	6987
6137	TITAN	5789	1402	7190
6140	TM9501	6118	1664	7782
6141	SW TT9151	6032	1235	7266
6142	SW TT2509	5980	1141	7121
6143	T-79	5843	1268	7111
6144	PS_45-214	6093	1280	7373
900	Mean	5845	1417	7262
901	CV	4.7	12.4	4.0
905	MCV	5.6	14.9	4.8
902	LSD	328.0	211.2	350.0
906	LSR	35.6	33.5	34.2
907	Pr>F(Trts)	0.0005	0.0006	0.0051
908	R_square	70.9	67.9	72.2

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Late Timothy Trial
 Expt. 6137
 Seeded 1995

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
WINMOR	6075	5639	3102	8741
ITASCA	6026	5792	2940	8732
ARGUS	6095	5452	2426	7878
NORMAX	6066	5151	2676	7827
CLIMAX	6002	5297	2432	7729
TM 8902	6136	5236	2297	7533
JONATHAN	6133	5257	2010	7267
T120	6121	5210	2028	7238
81009	6093	4833	2308	7141
SV8505	6116	5226	1797	7023
TIA	6135	5110	1883	6993
ALEXANDER	6086	4842	2065	6907
MARIPOSA	6081	4970	1928	6898
CAROLA	6097	5018	1589	6607
RVP03	6122	4576	1984	6560
HT-31	6124	4471	1521	5992
MEAN		5130	2187	7317
C.V. %		8.23	16.4	9.21
F		**	**	**
L.S.D.5%		602	510	960

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/22/99 08/25/99

ONTARIO
Thunder Bay
Late Timothy Trial
Expt. 7256
Seeded 1995

Code	Cultivar	1999 (kg/ha)		Tot98	2yrTot
		Cut 1	Tot99		
6002	CLIMAX	4236	4236	3467	7703
6026	ITASCA	4550	4550	3592	8142
6066	NORMAX	4252	4252	3616	7867
6075	WINMOR	3540	3540	2977	6517
6081	MARIPOSA	4401	4401	3713	8114
6086	ALEXANDER	4148	4148	3360	7508
6093	81009	3961	3961	3260	7221
6095	ARGUS	3874	3874	3104	6979
6097	CAROLA	4238	4238	3254	7492
6116	SAGUENAY	4294	4294	3326	7620
6121	T120	4148	4148	3207	7355
6122	RVP03	3945	3945	3418	7363
6124	HT_31	3517	3517	3402	6919
6133	JONATHAN	3717	3717	2992	6709
6135	TIA	3916	3916	2798	6714
6136	TM8902	4489	4489	3668	8157
900	Mean	4077	4077	3322	7399
901	CV	6.9	6.9	6.7	5.2
905	MCV	8.2	8.2	8.0	6.2
902	LSD	333.0	333.0	266.9	459.1
906	LSR	32.2	32.2	29.2	28.0
907	Pr>F(Trts)	0.0000	0.0000	0.0000	0.0000
908	R_square	70.7	70.7	66.4	74.0

RCBD arrangement, 4 blocks {1234}

ONTARIO
Elora
Late Timothy Registration
Expt. 2739
Seeded 1996

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	Tot97	3yrTot
		Cut 1	Cut 2				
6002	CLIMAX	7570	1562	9132	8248	4293	21672
6026	ITASCA	6527	1751	8277	7821	4574	20672
6066	NORMAX	6925	2103	9028	8771	5514	23313
6075	WINMOR	7397	1629	9026	8591	4364	21980
6081	MARIPOSA	6513	1930	8443	9293	5386	23121
6086	ALEXANDER	7415	1647	9062	8352	5178	22592
6093	81009	7157	1454	8611	7527	4077	20214
6095	ARGUS	7384	1390	8774	8053	4259	21085
6097	CAROLA	7214	1412	8626	7913	4396	20936
6116	SAGUENAY	7756	1572	9328	8022	4760	22110
6121	T120	7719	1420	9139	8153	4152	21444
6122	RVP03	7802	1888	9689	7950	4228	21867
6124	HT_31	7365	1351	8716	7508	3793	20017
6129	SF8601	7192	1894	9086	7917	4745	21748
6133	JONATHAN	7373	1338	8712	7514	3806	20031
6135	TIA	7139	1534	8673	7597	4540	20810
6136	TM8902	7954	2066	10020	8643	5374	24037
6138	AURORA	8482	2041	10522	9017	5059	24598
6139	VEGA	7272	1046	8318	6770	3830	18918
900	Mean	7376	1633	9010	8087	4544	21640
901	CV	10.8	8.5	9.7	7.6	8.4	6.1
905	MCV	12.8	10.1	11.5	9.0	10.0	7.3
902	LSD	944.6	165.0	1040.2	731.4	452.5	1578.0
906	LSR	48.0	15.6	46.3	29.0	26.3	27.8
907	Pr>F(Trts)	0.1836	0.0000	0.0644	0.0001	0.0000	0.0000
908	R_square	35.6	87.4	42.3	69.0	88.0	74.6

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Late Timothy Trial
 Expt. 6141
 Seeded 1996

Cultivar	Code	1999 (kg/ha)		TOTAL
		Cut 1	Cut 2	
SF8601	6129	4748	4384	9168
CAROLA	6097	5093	4075	9168
NORMAX	6066	4698	4660	9358
AURORA	6138	4670	4907	9577
ALEXANDER	6086	4580	4009	8589
CLIMAX	6002	4188	4242	8430
WINMOR	6075	4049	4132	8181
ARGUS	6095	4306	3782	8088
ITASCA	6026	4855	2929	7784
RVP03	6122	5035	3061	8096
SAQUENAY	6116	4617	3053	7670
TM8902	6136	4975	2096	7071
MARIPOSA	6081	5152	2441	7593
81009	6093	3991	3374	7365
HT31	6124	4239	3082	7321
TIA	6135	4867	2223	7090
T120	6121	4212	2706	6918
VEGA	6139	5181	1334	6515
JONATHAN	6133	4911	1267	6178
MEAN		4653	3250	7903
C.V. %		8.67	19.3	10.3
F		**	**	**
L.S.D.5%		668	1038	1354

RCBD arrangement , 3 blocks {134}

HARVEST DATES : 06/21/99 09/15/99

ONTARIO
 Elora
 Late Timothy Registration
 Expt. 2750
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
6002	CLIMAX	9612	2059	11671	11288	22959
6026	ITASCA	10812	2135	12948	11911	24858
6066	NORMAX	11692	2782	14474	10609	25083
6075	WINMOR	9296	1810	11106	9720	20826
6081	MARIPOSA	10856	2469	13325	11136	24461
6086	ALEXANDER	9363	2020	11383	10455	21838
6095	ARGUS	10174	2208	12382	11376	23758
6097	CAROLA	8946	1926	10873	11090	21963
6116	SAGUENAY	10487	2148	12635	11439	24073
6135	TIA	9678	1708	11386	9606	20992
6136	TM8902	9996	2875	12871	11813	24683
6138	AURORA	11452	2286	13738	12407	26145
6139	VEGA	8665	1456	10121	10453	20574
900	Mean	10079	2145	12224	11023	23247
901	CV	7.9	9.6	7.0	6.8	6.0
905	MCV	11.1	13.4	9.8	9.5	8.4
902	LSD	1114.0	286.9	1193.2	1042.7	1942.2
906	LSR	36.8	20.2	27.4	37.2	34.9
907	Pr>F(Trts)	0.0015	0.0000	0.0001	0.0032	0.0003
908	R_square	76.6	85.8	82.1	69.3	78.8

RCBD arrangement, 3 blocks {124}

ONTARIO
 New Liskeard
 Late Timothy
 Expt. 9710
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
6002	CLIMAX	6465	3819	10284	9070	19355
6026	ITASCA	6279	3678	9957	8788	18745
6066	NORMAX	6671	5058	11729	9001	20730
6075	WINMOR	6402	4198	10600	9196	19796
6081	MARIPOSA	6551	4314	10866	9374	20239
6086	ALEXANDER	6683	3973	10655	9484	20140
6095	ARGUS	6733	3393	10125	9037	19162
6097	CAROLA	5620	4383	10003	9059	19062
6116	SAGUENAY	6460	3775	10236	9418	19654
6135	TIA	5453	3617	9071	8737	17807
6136	TM8902	6585	4665	11249	9998	21248
6138	AURORA	6203	4068	10271	8798	19070
6139	VEGA	6007	2687	8694	9104	17798
900	Mean	6316	3971	10288	9159	19447
901	CV	6.5	9.3	5.3	7.9	4.4
905	MCV	7.8	11.1	6.4	9.5	5.3
902	LSD	491.2	440.9	655.0	865.8	1037.7
906	LSR	38.4	18.6	21.6	68.6	30.1
907	Pr>F(Trts)	0.0008	0.0000	0.0000	0.5410	0.0000
908	R_square	72.5	78.9	77.3	25.4	67.0

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Thunder Bay
 Late Timothy Trial
 Expt. 7278
 Seeded 1997

Code	Cultivar	1999 (kg/ha)		Tot99	Tot98	2yrTot
		Cut 1	Cut 2			
6002	CLIMAX	4599	1767	6366	5512	11878
6026	ITASCA	4959	1423	6382	5501	11883
6066	NORMAX	4662	1811	6473	5796	12269
6075	WINMOR	4183	1498	5681	5493	11175
6081	MARIPOSA	4654	1539	6193	5533	11727
6086	ALEXANDER	4370	1816	6186	5681	11867
6095	ARGUS	4477	1701	6178	5893	12072
6097	CAROLA	4756	1298	6053	5198	11251
6116	SAGUENAY	4451	1268	5719	6063	11782
6135	TIA	4475	829	5304	5098	10402
6136	TM8902	5096	1610	6706	5072	11778
6138	AURORA	4437	1585	6022	5365	11387
6139	VEGA	4386	832	5217	4765	9982
900	Mean	4577	1460	6037	5459	11496
901	CV	5.0	14.9	6.0	7.2	4.6
905	MCV	6.0	17.9	7.2	8.7	5.5
902	LSD	276.4	261.6	435.9	474.4	637.9
906	LSR	30.3	26.5	29.3	36.5	27.9
907	Pr>F(Trts)	0.0001	0.0000	0.0000	0.0025	0.0000
908	R_square	66.5	78.1	69.8	65.5	73.2

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Kapuskasing
 Late Timothy Trial
 Expt. 6145
 Seeded 1998

Cultivar	Code	1999 (kg/ha) Cut 1	Cut 2	TOTAL
ITASCA	6026	6311	4748	11059
NORMAX	6066	5952	5079	11031
AURORA	6138	6516	4505	11021
MARIPOSA	6081	6134	4575	10709
DYNASTY	6102	5972	4716	10688
ALEXANDER	6086	5759	4841	10600
CLIMAX	6002	6189	4398	10587
SAGUENAY	6116	6017	4026	10043
ARGUS	6095	6141	3812	9953
CAROLA	6097	5927	4001	9928
VEGA	6139	6166	2826	8992
MEAN		6099	4321	10419
C.V. %		5.19	7.21	3.69
F		ns	**	**
L.S.D.5%		457	450	555

RCBD arrangement, 4 blocks {1234}

HARVEST DATES : 06/21/99 08/16/99

ONTARIO
 Thunder Bay
 Late Timothy
 Expt. 7286
 Seeded 1998

Code	Cultivar	1999 (kg/ha)		Tot99
		Cut 1	Cut 2	
6002	CLIMAX	5736	1681	7417
6026	ITASCA	5817	1589	7405
6066	NORMAX	5296	2020	7316
6081	MARIPOSA	6271	1561	7832
6086	ALEXANDER	5513	1994	7506
6095	ARGUS	5559	1787	7346
6097	CAROLA	5983	1353	7336
6102	DYNASTY	5571	1593	7164
6138	AURORA	5912	1806	7718
6139	VEGA	5581	1421	7002
900	Mean	5724	1680	7404
901	CV	5.0	12.1	5.5
905	MCV	6.0	14.6	6.6
902	LSD	342.5	245.3	490.1
906	LSR	35.1	36.8	59.0
907	Pr>F(Trts)	0.0029	0.0008	0.2292
908	R_square	57.8	69.1	37.3

RCBD arrangement, 4 blocks {1234}

ONTARIO
 Elora
 Annual ryegrass trial
 Expt. 2764
 Seeded 1999

Code	Cultivar	1999 (kg/ha)		Cut 3	Tot99
		Cut 1	Cut 2		
8501	BARMULTRA_IR	1400	1952	2155	5508
8502	MARIS_LEDGER	1391	1609	2081	5080
8503	MAX_IR	1551	1415	2183	5149
8504	ANDREA_WR	1892	1593	1952	5436
8505	MAGNUM_WR	1699	1854	2305	5858
8506	BARSPECTRA_W	1490	1596	2143	5229
8507	BAREXTRA_IR	1491	1618	1968	5076
8508	SALSROSA_WR	1751	1727	2282	5760
8509	BARTALI_IR	1176	1602	2287	5065
8510	NSCL_30_WR	1636	1753	2529	5917
900	Mean	1548	1672	2189	5408
901	CV	12.0	9.1	12.8	7.4
905	MCV	17.0	12.9	18.2	10.5
902	LSD	262.9	216.4	398.1	567.8
906	LSR	36.7	40.3	69.0	66.6
907	Pr>F(Trts)	0.0090	0.0223	0.3936	0.0814
908	R_square	81.3	85.4	59.1	62.2

RCBD arrangement, 3 blocks {123}

ONTARIO
 Kemptville
 Annual Ryegrass 1999
 Expt. 3140
 Seeded 1999

Code	Cultivar	1999 (kg/ha)		Cut 3	Cut 4	Cut 5	Tot99
		Cut 1	Cut 2				
8501	BARMULTRA IR	2079	1876	2085	982	600	7621
8502	MARIS LEDGER	2311	1825	2178	1028	792	8134
8503	MAX IR	2972	1942	2160	1018	704	8796
8504	ANDREA WR	3271	954	850	192	97	5365
8505	MAGNUM WR	3518	1341	1031	252	413	6555
8506	BARSPECTRA W	3660	1907	2151	850	1188	9756
8507	BAREXTRA IR	2931	1852	1974	1116	703	8577
8508	SALSROSA WR	3326	1999	2051	739	1002	9117
8509	BARTALI IR	2496	1913	2178	1175	667	8429
8510	NSCL_30 WR	3167	2140	2151	659	880	8998
900	Mean	2973	1775	1881	801	705	8135
901	CV	19.8	11.0	8.2	24.3	22.4	9.7
905	MCV	23.8	13.3	9.9	29.2	27.0	11.7
902	LSD	708.8	235.4	185.5	234.3	189.9	951.8
906	LSR	44.8	19.8	14.0	23.8	17.4	21.7
907	Pr>F(Trts)	0.0093	0.0000	0.0000	0.0000	0.0000	0.0000
908	R_square	62.2	82.1	93.5	81.5	85.7	80.6

RCBD arrangement, 4 blocks {1234}

ONTARIO
 New Liskeard
 Annual ryegrass trial
 Seeded 1999

Code	Cultivar	Type	C1	C2	C3	Total
8501	Barmultra	IR	2585	1986	1728	6300
8502	Maris Ledger	IR	2308	1939	1916	6163
8503	Max	IR	2577	2078	1902	6557
8504	Andrea	WR	4361	1006	812	6180
8505	Magnum	WR	3605	1559	1335	6499
8506	Barspectra	WR	2561	1653	1682	5896
8507	Barextra	IR	2290	2133	1713	6136
8508	Sabroso	WR	3039	2066	1837	6942
8509	Bartali	IR	1984	2103	1686	5773
8510	NSCL 30	WR	2582	1898	1701	6180
Mean			2789	1842	1631	6263
CV			12.8	17.5	15.9	7.2

ONTARIO
 Kapuskasing
 Annual Ryegrass Trial
 Seeded 1999

Code	Cultivar	Type	Cut1	Cut2	Cut3	Cut4	TOTAL
8501	Barmultra	IR	452	983	1887	1571	4893
8502	Maris Ledger	IR	452	1145	2073	1681	5352
8503	Max	IR	579	1305	2221	1575	5680
8504	Andrea	WR	919	1215	1678	740	4552
8505	Magnum	WR	882	1259	1983	684	4807
8506	Barspectra	WR	826	1651	2642	1217	6335
8507	Barextra	IR	478	1093	2105	1462	5138
8508	Sabroso	WR	928	1729	2514	1308	6479
8509	Bartali	IR	318	929	1937	1682	4865
8510	NSCL 30	WR	848	1685	2575	1341	6449
Mean			668	1300	2161	1326	5455
CV			18.7	12.5	9.9	12.6	9.3

ONTARIO

Thunder Bay

Annual Ryegrass

Seeded 1999

Code	Entry	Type	Cut 1	Cut 2	Cut 3	Cut 4	TOTAL
8501	Barmultra	IR	881	1734	1019	1124	4758
8502	Maris Ledger	IR	920	1743	1074	1112	4849
8503	Max	IR	1326	1867	1363	1379	5936
8504	Andrea	WR	2386	2229	414	483	5511
8505	Magnum	WR	2377	2064	460	486	5387
8506	Barspectra	WR	2138	2244	1158	1003	6544
8507	Barextra	IR	794	1787	1245	1326	5152
8508	Sabroso	WR	1857	2178	1061	1162	6259
8509	Bartali	IR	812	1714	1140	1250	4915
8510	NSCL 30	WR	1920	2327	1233	1240	6720
Mean			1541	1989	1017	1057	5603
CV			12.12	7.82	15.48	15.65	7.46

OFCC Annual Forage Data 1999

Code	Entry	Thunder Bay	Elora	New Liskeard
		Yield (kg/ha)	Yield (kg/ha)	Yield (kg/ha)
7504	Trapper/Rigodon	3036	6005	7355
7509	Rigodon	3788	5866	8138
7519	RG003	3049	6582	8147
7526	40-10/Assiniboia	2814	5397	6205
7529	BC97-1	3503	5476	7783
7530	Leger	2953	6881	8057
7531	40-10/Sandro	2273	5263	5612
7532	Grande/Assiniboia	3167	5591	8500
	Mean	3072.8	5883	7475
	CV(%)	12.1	5.3	8
	LSD(0.05)	549	380	876

Heading Dates, Elora 1999

Name	Code	Heading Date
Bromegrass		
Baylor	2001	May 31
BW7	2058	June 1
Timothy		
Richmond	6050	June 4
TM9501	6140	June 2
Climax	6002	June 5
Champ	6005	June 8
Dynasty	6102	June 12
SW TT9151	6141	June 10
SW TT2509	6142	June 11
T-79	6143	June 5
PS 45-214	6144	June 4
Orchardgrass		
Juno	3001	May 17
Benchmark	3075	May 19
AC Splendor	3078	May 25
Haymate	3086	May 21
OG9501	3097	May 18
OG9502	3098	May 24
OG9204	3103	May 24
Warrior	3100	May 18
Profile	3101	May 19

Heading corresponds to Stage R2 in which the spikelets are fully emerged but the peduncle is not emerged.

Flowering Dates, Elora 1999

Name	Code	Flowering Date
Trefoil		
AC Langille	7041	June 8
Wellington	7038	June 11
Bull	7034	June 7
OAC Bright	7031	June 8
Empire	7003	June 12
Leo	7001	June 10
Red Clover		
Florex	4017	June 13
RC8702	4081	June 8
Tempus	4080	June 5
CRS-16	4082	May 28
Walter	4055	June 12
Concorde	4059	June 7

OFCC alfalfa grazing trial variety performance summary. Test was seeded in 1996. Trials were rotationally grazed for two years after seeding and during the first growth of the third full production year. Herbage yields and botanical compositions were recorded for the regrowth following the grazing cycle(s) in 1999. The yield of alfalfa in each plot were computed and the data across sites were subjected to a combined analysis of variance.

Code	Entry	1999 Alfalfa yield (kg/ha)				
		Mean of 3 locations	Yield as a % of checks	Individual location means		
				Elora	Kapuskasing	New Liskeard
1074	Arrow	1022		1167	1246	654
9053	Centurion	1369		1677	1653	777
1250	Viking 1	939	79	737	1488	592
1292	Alfagraze	704	*	781	688	643
1375	ABT205	1314	110	1476	1579	887
1402	Stampede	1419	119	1626	1832	798
1430	ZG9431	1324	111	1699	1432	842
1437	WL326GZ	878	*	942	708	984
1438	PSG-1	1410	118	1800	1458	973
1439	PSG-2	1366	114	1229	1940	928
1440	PSG-3	1575	*	1703	1942	1079
1441	PSG-4	1169	98	1375	1352	781
se		175.0		340.1	313.7	280.6

* Significantly different from the mean of the checks (Arrow and Centurion) at a Type I error rate of 0.05 using a contrast of means within the analysis of variance.

Data were analyzed using the Mixed Procedure of the Statistical Analysis System (SAS, Cary NC). Entries and locations were defined as fixed effects and block(location) as random effects in the variance analysis model. A test of residuals confirmed the validity of the assumptions of the variance analysis (errors were random, normal with a mean of zero). There were significant differences among entries but no significant location by entry interaction at a Type I error rate of 5%.

Tests of Fixed Effects				
Source	NDF	DDF	Type III F	Pr > F
Entry	11	106	4.58	0.0001
Locations	24	106	2.28	0.1526
Loc*Entry	2	10	1.41	0.1262