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Donald Jones

STEVE BOWLEY

ONTARIO FORAGE CROP INVESTIGATIONS



1979 REPORT ON FIELD TRIALS OF VARIETIES AND MIXTURES

- Kapuskasing
- Thunder Bay
- Ridgetown
- Kemptville
- New Liskeard
- Guelph
- Ottawa

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Early Alfalfa Varieties

Current Status of Varieties - as of November 9, 1979

Variety	Entered by	Official Status	Station years of data
Anchor	O.F.C.C.	Recommended, Pub. 296	-
Angus	"	" "	-
Apollo	"	" "	-
Banner	"	" "	-
Ceres	"	" "	-
Citation	"	" "	-
Pacer	"	" "	-
Primal	"	" "	-
Saranac	"	" "	-
Thor	"	" "	-
Vista	"	" "	-
K1-10	Nat. N.K.	Dropped, at company request	-
Atlas	OSECO	Support for licence. Deferred (2)	-
NAPB 51	OSECO	Not supported 1979. Testing completed	15
WL 318	OSECO	Not supported 1979. Testing completed	11
Trident	NAPB (PAG)	Supported for licence. Deferred (1)	10
Answer	NAPB (Speare)	Supported for licence. Deferred (1)	10
Syn CT (Classic)	U.C.O.	Supported for licence and recommended in 296	10
CW 4	Cal/West	Not supported 1979. Re-examine in 1980	10
PS 10	Pickseed	Supported for licence. Deferred (1)	10
✓ 531	Pioneer	Supported for licence and recommended in 296	10
P445A	OSECO		3
130	Dekalb		3
Hi-Phy	U.C.O.		0
WL 312	OSECO		0
Epic	OSECO		0
G 7730	NAPB		0
CW 27	Pickseed		0
CW 62	Pickseed		0
77-2	U. of Guelph		0
78-1	U. of Guelph		0
Honeoye	U.C.O.		0
532	Pioneer		0

Early alfalfa. Varieties eligible for consideration.

Variety	Seeded 1975 ¹		Seeded 1976 ²		Seeded 1977 ³		Seeded 1978 ⁴		Grand mean		Station years data available
	Mean yield		Mean yield		Mean yield		Mean yield				
	(kg/ha)		(kg/ha)		(kg/ha)		(kg/ha)				
	1976-77		1977-78		1978-79		1979				
	Cut 1	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total	
WL318	4697	10427			4782	10844			4751	10692	11
Angus	5028	10671			5360	11091			5239	10938	
NAPB 51			4838	10356	4927	10989			4896	10651	15
Angus			5091	10538	5360	11091			5216	10796	
Trident					5106	11458	5444	12197	5208	11680	10
Answer					5126	11030	5852	12401	5344	11442	10
Syn. C.T.					5524	11211	5820	12499	5613	11598	10
CW4					5070	10405	5695	11934	5257	10864	10
PS 10					5213	11445	5752	12524	5374	11768	10
531					5027	11298	5726	12632	5237	11698	10
Angus					5360	11091	5718	12633	5467	11554	

¹Seeded at Kapuskasing and Ridgetown.

²Seeded at Ridgetown, Guelph, Kemptville, and Ottawa.

³Seeded at Guelph, Ridgetown, New Liskeard, Ottawa and Kemptville. 1979 yield results from Guelph and Ridgetown only.

⁴Seeded at Ottawa, Guelph and Kemptville.

Early alfalfa. 1977, 1978 seeding.

Variety	Seeded 1977 ¹ Mean yield 1978, '79 (kg/ha)		Seeded 1978 ² Mean yield 1979 (kg/ha)		Grand mean yield (kg/ha)	
	Cut 1	Total	Cut 1	Total	Cut 1	Total
Angus	5360	11091	5718	12633	5467	11554
531	5027	11298	5726	12632	5237	11698
Trident	5106	11458	5444	12197	5208	11680
Ceres	5096	11391	5788	12637	5304	11765
Answer	5126	11030	5852	12401	5344	11442
Saranac	5424	11557	5604	12639	5478	11881
Banner	5265	11683	5609	12836	5365	11029
Atlas	5129	11150			5129	11150
Thor	5170	11377	5979	13095	5413	11992
Syn C.T.	5524	11211	5820	12499	5613	11998
WL-318	4782	10844			4782	10844
NAPB-51	4927	10989			4927	10989
PS 10	5213	11445	5752	12524	5374	11768
Anchor	5343	11400	5643	12367	5433	11690
Pacer	5418	11355	5681	12156	5497	11395
CW4	5070	10405	5695	11934	5257	10864
S.Q. Syn			6102	13192	6102	13192
Citation			6071	13118	6071	13118
130			5712	12835	5712	12835
Apollo			5862	12509	5862	12509
³ Iroquois			5562	12035	5562	12035
P445A			5813	12628	5813	12628
Vista			5454	12650	5454	12650

¹ Seeded at Ridgetown, Guelph, Ottawa, Kemptville and New Liskeard.
No 1979 yield data from Ottawa, Kemptville and New Liskeard.

² Seeded at Guelph, Ridgetown and Ottawa.

³ No yield data from Guelph.

Expt. 1046. Early alfalfa, Ridgelytown. Seeded 1977.

Variety	Yield (kg/ha)					
	1978		1979			
	Cut 1	Total	Cut 1	Cut 2	Cut 3	Total
Angus	7335	13053	6495	4539	2694	13728
531	6805	13878	6700	4672	3139	14512
Trident	6775	14350	6569	4577	3360	14506
Ceres	6954	14224	6616	4447	3407	14471
Answer (NAPB 63)	6968	13982	6819	4406	3030	14255
Saranac	6911	14056	6496	4607	3102	14205
Banner	7045	14804	5980	4650	3728	14158
Atlas	6895	13540	6702	4297	3112	14117
Thor	6917	13800	6382	4574	3145	14101
Syn. C.T.	7360	13285	6867	4039	2958	13864
WL 318	6677	13459	6257	4505	2986	13748
NAPB 51	6690	12906	6497	4301	2946	13744
PS 10	7047	14021	6082	4457	3199	13738
Anchor	7354	13800	6375	4424	2931	13729
Pacer	6992	13317	6777	4294	2630	13701
CW4	6655	11380	6870	3958	2269	13098
LSD 5%	486	1414	728	278	631	767
Mean	6961	13616	6531	4422	3027	13980
C.V. %	4.88	7.27	7.81	4.40	14.59	3.84

Expt. 2774. Early alfalfa, Guelph. Seeded 1977.

Variety	Yield (kg/ha)					
	1978		1979			
	Cut 1	Total	Cut 1	Cut 2	Cut 3	Total
Angus	4963	10981	5628	4326	2640	12594
531	4157	10510	5168	4973	2640	12781
Trident	4406	10608	5079	5360	2482	12921
Ceres	4336	10610	5020	4821	2672	12513
Answer	5001	10886	4961	4279	2592	11832
Saranac	4927	11205	5301	4827	2730	12858
Banner	4805	10983	5619	4903	2786	13308
Atlas	3870	9858	5455	4994	2711	13160
Thor	4456	10482	5305	4818	2482	12605
Syn. C.T.	5044	10899	5503	4052	2424	11979
WL 318	3645	9768	5074	4776	2415	12265
NAPB 51	4298	10631	4978	5473	2569	13020
PS 10	4373	10633	5395	4820	2700	12915
Anchor	4803	11164	5094	4923	2610	12627
Pacer	4941	11354	5262	4769	2766	12797
CW4	4049	9879	5403	4292	2579	12274
LSD 5%	843	1123	591	789	388	1148
Mean	4505	10653	5265	4775	2612	12653
C.V. %	13.10	7.38	7.85	11.56	10.40	6.35

Expt. 1050. Early alfalfa, Ridgetown. Seeded 1978.

Variety	Yield (kg/ha) 1979			Total
	Cut 1	Cut 2	Cut 3	
S.Q. Syn. 2	7305	4228	3615	15147
Citation	7119	3777	3437	14332
NK-150 (Thor)	7321	4206	3556	15082
130	7234	4164	3645	15043
531	6884	4223	3693	14800
Apollo	7175	3994	3184	14352
Syn. C.T.	6995	3944	3400	14340
Iroquois	7063	3931	3435	14428
Anchor	7157	4251	3279	14686
Answer	7374	4025	3283	14681
Saranac	6875	4111	3654	14639
Angus	6586	4205	3337	14128
PS 10	7692	4072	3285	15048
Ceres	7400	4096	3531	15027
Pacer	7179	4020	3142	14342
Banner	6957	4276	3660	14893
P445A	7179	4286	3321	14786
CW4	6874	3910	3155	13939
Vista	7094	4232	3549	14876
Trident	6820	4334	3303	14457
LSD 5%	601	609	334	882
Mean	7114	4114	3423	14651
C.V. %	5.98	10.46	6.90	4.26

Expt. 2785 Early alfalfa, Guelph. Seeded 1978.

Variety	Yield (kg/ha) 1979			Total
	Cut 1	Cut 2	Cut 3	
Citation	6887	5008	2727	14621
Banner	6373	5465	2618	14457
Vista	5925	5331	2817	14073
Blazer	6442	4875	2693	14011
S.Q. Syn 2	6229	5037	2677	13943
Angus	6523	4867	2448	13838
Thor	6266	4713	2827	13806
Saranac	6297	4846	2642	13785
Ceres	6088	4919	2481	13487
130	5965	4925	2567	13457
Apollo	6345	4586	2496	13427
Classic (Syn CT)	6274	4747	2389	13409
Trident	5970	4802	2521	13293
531	6335	4580	2374	13288
PS 10	5799	4782	2545	13126
Answer	6241	4319	2464	13024
Pacer	5861	4652	2304	12817
CW4	6421	4113	2279	12813
Anchor	5733	4682	2361	12776
LSD 5%	532	564	353	1000
Mean	6209	4802	2538	13550
C.V. %	6.06	8.31	9.84	5.22

Expt. 4020. Early alfalfa, Ottawa. Seeded 1978.

Variety	Yield (kg/ha) 1979			Total
	Cut 1	Cut 2	Cut 3	
Syn. 2	4771	3498	2217	10486
Station (RP 10)	4207	4005	2188	10400
50 (Thor)	4351	3761	2284	10396
	3937	3766	2304	10006
	3960	3437	2409	9807
	4067	3437	2245	9749
E.T.	4192	3409	2146	9747
Indians	4061	3384	2196	9641
338 (Anchor)	4040	3445	2155	9639
Anchor (NAPB 63)	3940	3293	2265	9499
Anchor	3641	3599	2251	9492
Anchor (Angus)	4045	3261	2129	9434
Anchor	3764	3469	2165	9398
Anchor (WL-311)	3875	3210	2312	9397
Anchor	4003	3280	2028	9310
Anchor (Pioneer)	3497	3364	2304	9165
Anchor	3818	3216	2052	9086
Anchor	3790	3052	2205	9051
Anchor	3342	3556	2102	9001
Anchor (NAPB 6)	3543	3172	2127	8842
LSD 5%	575.2	569	274	1418.2
Mean	3442	3431	2204	9077
C.V. %	10.32	11.73	8.80	7.03

Expt. 1061, Early alfalfa. Seeded 1979. 1979 yield.

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Variety	Cut 1	Cut 2	Total
Iroquois	3784	3389	7173
Vista	3450	3581	7031
130	3526	3479	7005
CW62	3453	3531	6984
EPIC (LL5510A)	3712	3257	6969
CW27	3542	3417	6960
Banner (Pioneer)	3339	3505	6843
NK 150 Thor	3520	3321	6841
Saranac	3422	3404	6826
P445A	3492	3223	6715
Ceres (WL-311)	3235	3398	6633
Honeye	3240	3364	6604
H1-Phy	3287	3316	6603
OAC 77-2 Syn. 2	3237	3359	6596
S.Q. Syn. 2	3107	3389	6497
Pacer	3260	3187	6447
Pioneer 532	3134	3306	6440
Citation	3042	3333	6375
Apollo	3334	3011	6345
78-1 Syn. 2	3160	3138	6298
G 7730	3281	2984	6265
R.P. 38	3032	3219	6251
WL 312	2900	3305	6205
O.D. 17 (Angus)	2985	3005	5990
LSD 5%	756	452	998
Mean	3311	3309	6621
C.V. %	16.22	9.71	10.72

Recommended varieties of early alfalfa. Seeded 1974-1978.

Variety	1974 Seeding ¹		1975 Seeding ² Mean yield (kg/ha)				1976 Seeding ³ Mean yield (kg/ha)			
	1975	1976	1976		1977		1977		1978	
	Total	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total
Saranac	9004	12361	4987	10191	4390	10300	5107	11274	5186	10597
Anchor	9014	12941	4981	10234	4815	10665	4840	11075	5057	10278
Thor	8928	12980	5162	10489	4620	10565	5285	11545	5187	10319
Angus	8850	12411	5136	10766	4920	10575	4994	10970	5188	10107
Citation	9299	13171								
Pacer	9269	13027	5326	10677	4830	10600				
Vista			4532	7661	3760	6750	5077	11332	4933	10197
Apollo			4766	7835	3390	6490	4937	11035	5080	10229
Primal	8954	11506	5028	10305	4425	10275				
Ceres	9296	11167	5232	10752	4360	10275				
Banner							5094	11397	5434	10929

¹ Seeded at Guelph, Ottawa, Thunder Bay. 1976 yield data from Guelph only.

² Seeded at Ridgetown, Kapuskasing. Apollo and Vista not seeded at Ridgetown.

³ Seeded at Ridgetown, Guelph, Kemptville and Ottawa.

(cont'd) ...

Recommended varieties of early alfalfa (cont'd)

Variety	1977 Seeding ⁴ Mean yield (kg/ha)				1978 Seeding ⁵ Mean yield (kg/ha)		Grand mean ⁶	
	1978		1979		1979		Cut 1	
	Cut 1	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total
Saranac	5234	10765	5899	13532	5604	12639	5214	11025
Anchor	5187	10689	5735	12953	5643	12367	5160	10927
Thor	4901	10586	5844	13040	5979	13095	5254	11009
Angus	5079	10263	6062	13161	5718	12633	5251	10807
Citra					6071	13118	6071	11489
Pacer	5178	10599	6020	13249	5681	12156	5372	11074
Vista					5454	12650	4976	10652
Apollo					5862	12507	5062	10531
Primal							4727	9941
Ceres	4808	10550	5818	13492	5788	12637	5159	11146
Banner	5040	10503	5800	13733	5609	12836	5320	11644

⁴ Seeded at Ridgetown, Guelph, Leamington, Ottawa, New Liskeard.
1979 yield data from Ridgetown and Guelph only.

⁵ Seeded at Ottawa, Guelph and Ridgetown.

⁶ Cut 1 grand mean does not include cut 1 data from 1975 seedings.

DISEASE RATING FOR PHYTOPHTHORA ROOT ROT

UNRECOMMENDED ALFALFA VARIETIES

<u>Early Alfalfa</u>	<u>% Plants, Resistant to Phytophthora Root Rot*</u>
N.A.P.B. 51	-
WL 318	20%
Trident	65%
Answer	61%
Syn CT	-
CW 4	-
PS 10	-
531	3

<u>Medium Alfalfa</u>	
02018	-
02019	-
02020	-
CW 9	-
WL 220	12
Dekalb 120	-
CW 2	-
524	7
545	25

*Determined in University of Minnesota phytophthora trials.

Plants with little or no injury are classed as resistant.

Medium Alfalfa Varieties

Current Status of Varieties - as of November 9, 1979

Variety	Entered by	Official Status	Station years of data
Iroquois	O.F.C.C.	Recommended, Pub. 296	-
Algonquin	"	" "	-
Magnum	"	" "	-
Pickstar	"	" "	-
520	"	" "	-
Titan	"	" "	-
Valor	"	" "	-
Vernal	"	" "	-
WL 215	"	" "	-
Weevlchek	"	" "	-
02018, Futura	MLM	Licensed, recom. in 296 in 1980. Deferred (1)	
02019, Glory	MLM	Supported for licence. Deferred (2)	
G 747	Funks	Dropped at company request	
02020	MLM	Not supported 1979. Testing completed.	16
CW 9	Pickseed	Not supported 1979. Testing completed.	16
WL 220	OSECO	Not supported 1979. Re-examine 1980	10
Dekalb 120	Dekalb	Supported for licence & recom. in 296	10
CW 2	Cal/West	Not supported 1979. Re-examine 1980	10
524	Pioneer	Supported for licence & recom. in 296	10
545	Pioneer	Not supported 1979. Re-examine 1980	10
74D111	Landis		3
<i>Angels</i> { CW 3	Pickseed		3
CW 68	Pickseed		3
T7801	Thompson		3
K6-11	Nat. N.K.		0
76-1	U. of Guelph		0
<i>Back</i> { CW 69	Pickseed		0

*Back
may not
be accepted.*

Medium alfalfa varieties eligible for consideration.

Variety	1976 Seeding ¹		1977 Seeding ²		1978 Seeding ³		Grand mean		Station years data available
	Mean yield		Mean yield		Mean yield				
	(1977,1978)		(1978,1979)		(1979)				
	Cut 1	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total	
MLM 02020	5145	10575	5171	11820			5157	11120	16
CW9	5191	10545	5250	11543			5217	10982	16
Iroquois	5238	10702	5256	11709			5246	11143	
WL 220			5074	11610	5972	12289	5343	11814	10
Dekalb 120			5551	12139	6278	12577	5769	12270	10
CW2			4966	11369	5445	11898	5110	11528	10
Pioneer 524			5483	12222	5702	12043	5549	12168	10
Pioneer 545			5029	11470	5496	11942	5169	11612	10
Iroquois			5256	11709	5928	12370	5457	11907	

¹ Seeded at Ridgetown, Guelph, Kemptville, Ottawa, Thunder Bay.
No 1978 yield data from Thunder Bay.

² Data from Ridgetown, Guelph, Kemptville, Ottawa and New Liskeard.
No 1979 yield data from Kemptville, Ottawa and New Liskeard.

³ Seeded at Ridgetown, Guelph and Ottawa.

Medium alfalfa. 1977,1978 seedings.

Variety	Seeded 1977 ¹		Seeded 1978 ²		Grand	
	1978,79 Mean yield		1979 Mean yield		mean yield	
	(kg/ha)		(kg/ha)		(kg/ha)	
	Cut 1	Total	Cut 1	Total	Cut 1 ¹	Total
WL 220	5074	11610	5972	12289	5343	11814
G ₇ 747	5261	11723			5261	11723
Dekalb 120	5551	12139	6278	12577	5769	12270
MLM 02019	5328	11999			5328	11999
Pioneer 524	5483	12222	5702	12043	5592	12168
MLM 02020	5171	11820			5171	11820
Vernal	5080	11184	6118	12515	5392	11583
Iroquois	5256	11709	5928	12370	5457	11907
Weevlcheck	5266	11617	6133	12506	5526	11883
Algonquin	4993	11232	6040	12278	5307	11546
Titan	5178	11369	5804	11861	5366	11517
CW2	4966	11369	5445	11898	5110	11528
WL 202	5223	11625			5223	11625
Valor	5347	11744	5868	12205	5504	11883
Pioneer 520	5240	11806	6231	12298	5537	11954
MLM 02018	5168	12028			5168	12028
CW9	5250	11543			5250	11543
WL-215	5191	11209	5860	12015	5392	11451
Pioneer 545	5029	11470	5496	11942	5169	11612
Pickstar (EA21)			5670	11954	5670	11954
T 7801			5879	12266	5879	12266
74 D111			6002	12164	6002	12164
*Angus			5434	11766	5434	11766
CW68			5292	11690	5292	11690
CW3			5400	11487	5400	11487

¹ Seeded at Ridgetown, Guelph, Kemptville, Ottawa and New Liskeard.
1979 yield data from Ridgetown and Guelph only.

² Yield data from Ridgetown, Guelph and Ottawa.

* No yield data from Guelph.

Expt. 2775. Medium alfalfa, Guelph. Seeded 1977.

Variety	Yield (kg/ha)					
	1978		1979			
	Cut 1	Total	Cut 1	Cut 2	Cut 3	Total
Major						
WL 220	5010	11484	5052	4771	2548	12371
G7 747	4828	11414	5268	4854	2788	12911
Dekalb 120	5264	11977	5594	4821	2789	13205
MLM 02019	4961	11508	5612	4795	2975	13382
Pioneer 524	5367	12108	6204	4806	3215	14224
MLM 02020	5120	12027	5133	5390	3014	13537
Vernal	4854	11123	5343	4413	2746	12502
Iroquois	4865	11194	5794	4778	2919	13492
Weevlcheck	5095	11169	5529	4794	2729	13051
Algonquin	5070	11979	5183	4608	2641	12432
Titan	4801	11272	5277	4559	2963	12800
CW2	4595	10772	5506	4790	2928	13224
WL 202	4989	11558	5773	4785	3034	13592
Valor	4616	10938	5837	4770	2979	13586
Pioneer 520	5375	12028	6066	4549	2920	13536
MLM 02018	4926	11778	5207	4927	3092	13226
CW9	4969	10673	5683	4396	2834	12913
WL-215	5322	11213	5274	4436	2709	12419
Pioneer 545	4483	11266	4913	4820	2698	12431
LSD 5%	633	1084	862	548	515	1152
Mean	4974	11446	5487	4740	2870	13096
C.V. %	9.00	6.70	11.10	8.18	12.68	6.22

Expt. 1045. Medium alfalfa, Ridgetown. Seeded 1977.

Variety	Yield (kg/ha)					
	1978		1979			
	Cut 1	Total	Cut 1	Cut 2	Cut 3	Total
WL 220	6614	14826	6238	3949	3791	13979
G7 747	6776	15291	6763	4257	3813	14833
Dekalb 120	7629	16257	6883	4463	3943	15289
MLM 02019	7017	15238	6815	4680	4102	15598
Pioneer 524	7525	16142	6766	4511	4157	15434
MLM 02020	6840	14812	6665	3919	3954	14538
Vernal	6838	14533	6108	4193	3555	13856
Iroquois	6775	14711	6387	4373	3900	14660
Weevlcheck	7345	16030	6538	4275	3864	14678
Algonquin	6259	14531	6514	3899	3512	13925
Titan	6612	14166	6576	3906	3495	13976
CW2	6513	15078	6361	4311	4075	14747
WL 202	6561	14798	6631	4358	3750	14738
Valor	7094	15512	6671	4387	3872	14931
Pioneer 520	6568	15009	6364	4545	3873	14782
MLM 02018	6774	15769	6117	4564	3981	14662
CW9	6852	15397	6604	4537	4010	15150
WL-215	6798	14616	6654	4000	3476	14130
Pioneer 545	6268	14718	6835	4109	3775	14719
LSD 5%	637	1293	595	561	350	772
Mean	6824	15128	6552	4276	3837	14664
C.V. %	6.60	6.04	5.48	7.92	5.50	3.18

Expt. 1051. Medium alfalfa, Ridgetown. Seeded 1978.

Variety	Dry matter yield (kg/ha) 1979			
	Cut 1	Cut 2	Cut 3	Total
WL 220	6828	4157	3174	14159
Weevlcheck	7312	3829	3487	14628
Iroquois	6801	4225	3572	14598
Pioneer 520	6862	4008	3085	13956
Algonquin	6694	3997	3151	13843
Titan	6821	4007	3200	14027
Pickstar	6348	3927	2851	13126
WL-215	6752	3776	3177	13705
Dekalb 120	7114	3948	3244	14306
T 7801	7099	3926	3297	14322
Valor	6948	3727	3161	13836
Vernal	7368	4035	3266	14669
74 D111	7411	4161	3307	14879
Pioneer 545	6611	4075	3121	13807
OD-17 (Angus)	6543	4143	3323	14009
Pioneer 524	6773	4028	3597	14398
CW2	6379	3962	3596	13936
CW68	6676	3955	3432	14063
CW3	6750	4025	3448	14223
LSD 5%	910	493	344	1071
Mean	6937	3995	3289	14221
C.V. %	9.28	8.72	7.40	5.33

Expt. 2786. Medium alfalfa, Guelph. Seeded 1978.

Variety	Dry matter yield (kg/ha) 1979			Total
	Cut 1	Cut 2	Cut 3	
WL 220	6013	4014	2011	12038
Weevlcheck	6253	4061	2114	12429
Iroquois	6086	4031	1975	12092
Pioneer 520	7200	3815	1629	12643
Algonquin	6384	4188	2161	12733
Titan	5812	3320	2195	11327
Pickstar	6135	3928	2488	12551
WL 215	6055	4178	1994	12227
Dekalb 120	7040	3897	2461	13398
T 7801	6074	4303	2137	12514
Valor	6102	4186	2604	12892
Vernal	6397	4175	2422	12994
74 D111	6200	3864	1939	12002
Pioneer 545	5863	4092	2466	12422
Pioneer 524	6231	3857	2226	12313
CW2	5733	4381	2276	12391
CW68	5643	4141	2280	12064
CW3	6091	3881	1944	11916
LSD 5%	695	691	613	1385
Mean	6184	4017	2185	12386
C.V. %	7.9	12.1	19.74	7.87

Expt. 4021. Medium alfalfa, Ottawa. Seeded 1978.

Variety	Dry matter yield (kg/ha) 1979			Total
	Cut 1	Cut 2	Cut 3	
WL 220	5076	3331	2263	10670
Weevlcheck	4835	3333	2292	10461
Iroquois	4897	3276	2247	10420
Pioneer 520	4631	3249	2413	10294
Algonquin	5041	3005	2212	10258
Titan	4779	3276	2176	10231
Pickstar	4528	3395	2262	10186
WL 215	4772	3255	2085	10112
Dekalb 120	4681	3291	2054	10026
T 7801	4463	3308	2190	9961
Valor	4553	3203	2132	9888
Vernal	4589	3129	2164	9883
74 D111	4395	3112	2105	9612
Pioneer 545	4015	3288	2296	9598
OD-17 (Angus)	4325	3033	2165	9523
Pioneer 524	4103	3110	2207	9419
CW2	4222	3013	2132	9367
CW68	3557	3257	2130	8944
CW3	3359	2911	2053	8323
LSD 5%	635	390	243	910
Mean	4464	3199	2188	9851
C.V. %	10.05	8.61	7.86	6.53

Expt. 1060. Medium alfalfa, Ridgetown. Seeded 1979. 1979 yield.

Variety	Cut 1	Cut 2	Total
74 D111	4237	2992	7230
CW69	4079	3126	7205
Titan (RP-25)	4192	2928	7121
WL-215	3927	3065	6993
OD-17 (Angus)	4099	2770	6869
OAC 76-1 Syn. 1	3956	2906	6863
FFR Syn-W (Weevilcheck)	3861	2993	6855
Iroquois	3894	2918	6812
T 7801	3835	2967	6803
Valor	3857	2827	6685
Algonquin	3847	2783	6631
Pickstar (EA-21)	3899	2720	6620
Atra 50	3809	2766	6575
K6-11	3962	2611	6573
CW68	3593	2834	6427
Vernal	3488	2777	6266
CW3	3397	2814	6212
LSD 5%	457	328	567
Mean	3878	2870	6749
C.V. %	8.30	8.04	5.92

Phytophthora Root Rot Resistance of
Unrecommended Alfalfa Varieties

<u>Early Alfalfa</u>	<u>% Plants, Resistant to Phytophthora Root Rot*</u>
N.A.P.B. 51	-
WL 318	20
Trident	65
Answer	61
Syn C.T.	-
CW 4	-
PS 10	-
531	3
 <u>Medium Alfalfa</u>	
02018	-
02019	-
02020	-
CW 9	-
WL 220	12
Dekalb 120	-
CW 2	-
524	7
525	25

* Determined in University of Minnesota phytophthora trials.
Plants with little or no injury are classed as resistant.

RECOMMENDED ALFALFA VARIETIES

<u>Early Alfalfa</u>	<u>% Plants, Resistant to Phytophthora Root Rot*</u>
Anchor	3
Angus	5
Apollo	40
Banner	2
Ceres	2
Citation	2
Pacer	8
Primal	N.A.
Saranac	2
Thor	1
Vista	1
 <u>Medium Alfalfa</u>	
Algonquin	3
Magnum	4
Iroquois	1
Pickstar	4
520	1
Titan	2
Valor	2
Vernal	2
WL 215	4
Weevlchek	2

*Determined in University of Minnesota phytophthora trials.
Plants with little or no injury are classed as resistant.

-N.A., data not available

Birdsfoot Trefoil Varieties

Current Status of Varieties - as of November 9, 1979

<u>Variety</u>	<u>Entered by</u>	<u>Official Status</u>	<u>Station years of data</u>
Leo	O.F.C.C.	Recommended in Pub. 296	-
Empire	O.F.C.C.	" "	-
Viking	O.F.C.C.	" "	-
Maitland	O.F.C.C.	" "	-
Carroll	Pioneer	Support for variety withdrawn	-
KO-4	Nat. N.K.	Not supported 1978. Examine 1980	6
Dawn	NAPB		3
Mirabel	O.F.C.C.		3
NC-83	O.F.C.C.		0
Kentucky Ecotype	O.F.C.C.		0
RC3SP3	U. of Guelph		0

Provincial Trefoil Test. Seeded 1978. 1979 Yield Data.

Varieties	Forage yield (kg/ha)						Mean - 1979	
	Ottawa*		Ridgetown		Thunder Bay*		Cut 1 Total	
	Cut 1	Total	Cut 1	Total	Cut 1	Total	Cut 1	Total
Dawn	6222	6222	5266	8357	4341	4341	5276	6307
Carroll	5957	5957	5023	8404	4366	4366	5115	6242
Mirabel	5673	5673	5154	8290	4524	4524	5117	6162
Viking	5488	5488	5702	8953	4271	4271	5154	6237
Maitland	5284	5284	5772	8991	4685	4685	5247	6320
Leo	5367	5367	5252	8651	4879	4879	5166	6299
Empire	5978	5978	4783	7216	4699	4699	5153	5964
LSD 5%	573	573	665	877	769	769		
Mean	5710	5710	5279	8409	4537	4537	5175.42	6218.71
C.V. %	6.76	6.76	8.48	7.02	11.4	11.4		

* Only Cut 1 data from these locations.

Relative maturity and fall growth ratings of 1978 seeded trefoil varieties at Elora and Ridgetown.

Variety	% Bloom on harvest date		Fall growth rating*
	Ridgetown	Elora	Elora
	79 6 11	79 7 03	78 10 05
Leo	4	5	4.6
Empire	26	10	7.8
Dawn	4	11	5.1
Carroll	3	9	5.1
Mirabel	5	11	5.3
Viking	46	18	6.5
Maitland	50	22	6.3

* 1 = least growth, 9 = most growth on date indicated.

Exp. 1053. Provincial Trefoil Test, Ridgetown. Seeded 1978.

A: TK78.79

	Dry matter yield (kg/ha) 1979		
	Cut 1	Cut 2	Total
Maitland	5772	3219	7010 8991
Viking	5702	3250	7004 8953
Leo	5252	3400	7001 8652
Carroll	5023	3382	7021 8404
Dawn	5266	3091	7008 8357
Mirabel	5154	3136	7027 8290
Empire	4783	2434	7003 7216
LSD 5%	665	493	876
Mean	5279	3130	8408
C.V.	8.48	10.61	7.02

Exp. 4022. Provincial Trefoil Test, Ottawa. Seeded 1978.

A=7078

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Variety	Dry matter yield (kg/ha)	
	Cut 1*	Total
Maitland	5284	7010 5284
Viking	5487	7004 5487
Leo	5367	7001 5367
Carroll	5958	7021 5958
Dawn	6222	7008 6222
Mirabel	5673	7027 5673
Empire	5978	7003 5978
LSD 5%	573	573
Mean	5710	5710
C.V. %	6.76	6.76

* Cut 2 and 3 data omitted because C.V. was too high.

Exp. 7126. Provincial Trefoil Test, Thunder Bay. Seeded 1978.

A5 TTB78

Variety	Cut 1 kg/ha DM	Total
Maitland	4685	7010 4685
Viking	4271	7004 4271
Leo.	4879	7001 4879
Carroll	4364	7021 4364
Dawn	4341	7008 4341
Mirabel	4524	7027 4524
Empire	4699	7003 4699
LSD 5%	769	769
Mean	4537	4537
C.V. %	11.40	11.40

Trefoil Variety Test. Seeded 1979. Seeding Year Yield. Only 1 cut.

Variety	Forage yield (kg/ha)		Mean
	Elora	Kapuskasing	
RC ₃ Syn. 3	7482		
Carroll	7313	3800	5557
Empire	7227	3328	5278
RC ₃ SP ₃	7092		
Viking	7064	2990	5027
Dawn	7008	3509	5259
Maitland	6800	3147	4974
RC ₄ Syn. 2	6757	3421	5089
Leo	6743	3751	5247
N C-83	6730	3384	5057
Mirabel	6554	2911	4733
KO-4	6429	2901	4665
KY-ecotype	6351	3387	4869
LSD 5%	537	747	
Mean	6888	3321	
C.V.	5.43	13.21	

Red Clover Varieties

Current Status of Varieties - as of November 9, 1979

Variety	Entered by	Official Status	Station years of data
Lakeland	O.F.C.C.	Recommended, Pub. 296	-
Ottawa	O.F.C.C.	" "	-
Florex	O.F.C.C.	" "	-
Prosper I	O.F.C.C.	" "	-
Bytown	Ottawa Res. St.	Licenced. Supported for rec. 1974	-
Arlington	OSECO	Licenced. Recom. in 296 in 1980	-
WWR 80	OSECO	Supported for licence. Deferred (3)	-
Redland	OSECO	Not supported 1979. Testing completed	10
Tristan	OSECO		0
Redland II	NAPB (MLM)		0

1979 RED CLOVER SUMMARY

Seeding Year	Data Year	Redland			Ottawa		
		1st	2nd	Total	1st	2nd	Total
1975	Kapuskasing '76			2883			3147
	Kapuskasing '77			2495			1982
1976	Guelph '77	3243	3221	6464	3023	3635	6658
	Guelph '78	3130	2117	5247	3010	2617	5628
	Kemptville '77	4738	2038	6776	4455	2680	7135
	Kapuskasing '77	3676	2431	6107	3230	2572	5802
1977	Ridgetown '78	4675	2555	8781	4811	3005	9343
	New Liskeard '78	3665	3191	6856	3523	3336	6859
	Ridgetown '79	3937	1588	5524	4061	1695	5756
Mean				5681			5812
Mean S. Ont.				6558			6904
Mean N. Ont.				4585			4448
Mean Year 1				6311			6491
Mean Year 2				4422			4455

ONTARIO RED CLOVER TESTS

A-RCR77-79

Ridgetown - seeded 1977
harvested 1979

Cultivar	Cut 1	Cut 2	Total	
<i>Lakeland</i>			0	
Florex	4872	1785	4017	6657
Redland	3937	1588	4026	5524
Prosper 1	4576	2050	4027	6626
Ottawa	4061	1695	4003	5756
C.V. (%)	13.09	8.6	12.9	
L.S.D. (.05)		210.1	772.1	

No red clover varieties supported in 1979.

White Clover Varieties

Current Status of Varieties - as of November 9, 1979

<u>Variety</u>	<u>Entered by</u>	<u>Official Status</u>	<u>Station years of data</u>
Merit	O.F.C.C.	Recommended in Pub. 296	-
Pilgrim	"	Licenced 1961	3
Ladino Cert.	"	Licenced	3
Common	"		3
Sacramento	Szego		3
Szarvasi	Pickseed		3

ONTARIO WHITE CLOVER TESTS

A: WCR 78-79

Ridgetown - seeded 1978
harvested 1979

Cultivar	Cut 1	Cut 2	Total
Ladino	5107	1711	8662 6818
Merit	4341	2167	8604 6507
Common	4883	952	8003 5836
Sacramento	4779	1863	8005 6642
Szarvasi	5238	2023	8006 7260
Pilgrim	4573	1932	8001 6504

No white clover varieties supported in 1979.

ONTARIO WHITE CLOVER TESTS

Thunder Bay - seeded 1978
harvested 1979

A: WCTB 78-79

Cultivar	Cut 1	Cut 2	Total
Szarvasi	2636	0	8006 2636
Pilgrim	2894	0	8001 2894
Ladino	2632	0	8002 2632
Common	2833	0	8003 2833
Merit	2701	0	8004 2701
Sacramento	2464	0	8005 2464

Brome Grass Varieties

Current Status of Varieties - as of November 9, 1979

<u>Variety</u>	<u>Entered by</u>	<u>Official Status</u>	<u>Station years of data</u>
Baylor	O.F.C.C.	Recommended, Pub. 296	-
Beacon	"	" "	-
Blair	"	" "	-
Saratoga	"	" "	-
Tempo	"	" "	-
Barton	OSECO	Dropped at company request	-
K1-105(Bromex)	Nat. N.K.	Support for licence. Deferred (3)	-
13009(Jubilee)	MLM	Support for licence. Deferred (3)	-
13010	MLM		3
13011	MLM		3
S 7855	O.F.C.C.		3
S 8590	O.F.C.C.		3
S 8800	O.F.C.C.		0

Bromegrass

Yield results for 1979 are reported for only three locations, Ridgetown, Ottawa and Thunder Bay. The check variety, Saratoga produced higher yields than in some previous tests probably as a result of better quality seed. No strains have accumulated sufficient data to require consideration for licencing.

In the 1979 seeding 13 varieties or strains were included in tests at Elora, Kemptville, Ottawa and New Liskeard. All these tests appeared to establish satisfactorily by the end of the season.

F.S. Warren
Coordinator

Ontario Bromegrass Tests

Expt 1056

Ridgetown

1979 hay yields from 1978 seeding

Variety or strain	Yield (DM kg/ha)		Total
	Cut 1	Cut 2	
Baylor	5684	2810	8494
MLM13010	5698	2586	8284
MLM13011	5782	2661	8443
Saratoga	6132	2572	8703
S-7855	5908	2785	8694
S-8590	5742	2461	8204
mean	5824	2646	8470
L.S.D. (5%)	594	274	716
C.V. (%)	6.8	6.9	5.6

Ontario Bromegrass Tests

Expt 4783

Ottawa

1979 hay yields from 1978 seeding

Variety or strain	Yield (DM kg/ha)		Total
	Cut 1	Cut 2	
Baylor	4440	3333	7773
MLM13010	4620	3192	7811
MLM13011	4375	3285	7660
Saratoga	4667	3883	8549
S-7855	4879	2919	7799
S-8590	4349	3219	7568
Tempo	4466	3180	7646
mean	4542	3287	7829
L.S.D. (5%)	N.S.	N.S.	N.S.
C.V.	15.2	15.2	11.4

Ontario Bromegrass Tests

Expt 7125

Thunder Bay

1979 hay yields from 1978 seeding

Variety or strain	Yield (DM kg/ha)		Total
	Cut 1	Cut 2	
Baylor	4696		
MLM13010	4605		
MLM13011	5800		
Saratoga	4563		
S-7855	4490		
S-8590	4340		
mean	4749		
L.S.D. (5%)	949		
C.V. (%)	11.0		

Ontario Bromegrass Tests

Summary

1979 hay yields from 1978 seeding at 3 locations
Total yield (DM kg/ha)

Variety or strain Expt. No.	Location			Mean
	Ridgetown 1056	Ottawa 4783	Thunder Bay ¹ 7125	
Baylor	8494	7773	4696	6988
MLM13010	8284	7811	4605	6900
MLM13011	8443	7660	5800	7301
Saratoga	8703	8549	4563	7272
S-7855	8694	7799	4490	6994
S-8590	8204	7568	4340	6704
mean	8470	7829	4749	7016
L.S.D. (5%)	716	N.S.	949	
C.V.	5.6	11.4	11.0	

1. Thunder Bay - total for one cut

Orchard Grass Varieties

Current Status of Varieties - as of November 9, 1979

Variety	Entered by	Official Status	Station years of data
Hallmark	O.F.C.C.	Recommended, Pub. 296	-
Juno	"	" "	-
Ina	"	" "	-
Napier	"	" "	-
Sumas	"	" "	-
Kay	"	" "	-
Kall	OSECO	Dropped at company request	-
Dart	OSECO	Dropped at company request	-
Dayton	OSECO	Not supported 1979. Examine 1980	19
Comet	Nat. N.K.	Not supported 1979. Examine 1980	13
K3-9	Nat. N.K.	Support for licence. Deferred (2)	-
K2-9	Nat. N.K.	Support for licence. Deferred (2)	-
K2-7	Nat. N.K.	Dropped at company request	9
WWH 92	OSECO	Not supported 1979. Re-examine 1980	10
OK-SF 19	Ottawa Res. St.		4
Hawk	NAPB (OSECO)		0
Crown	NAPB (MLM)		0
04012	MLM		0
OK-WH-19	Ottawa Res. St.		0.
OR-WH	Ottawa Res. St.		0

Orchardgrass 1979

The only strain up for examination at this time is K2-7; it was not passed for licensing at our 1978 meeting.

The only new data available is from Ridgetown and the K2-7 line is in last place in the table.

Another problem concerns Majestic which was licensed in 1971. The company has over 100 acres of seed increase in the U.S.A. This variety should be re-entered into the provincial test in 1980.

The variety Hallmark has been increased by a hybrid technique. Breeders seed is produced by a large clonal production of the parent plants and then pedigreed seed is produced from the breeders is perhaps why Hallmark out-produces all of our contemporary early orchardgrass varieties.

In the 1978 seeding OK-SF 19 placed second in Kapuskasing and Thunder Bay, whereas it is near the bottom at Ottawa and Guelph. This points up the fact that these two regions should be treated differently in our recommendations.

W.R. Childers

Ontario Orchardgrass Test
1979 hay yields from 1977 seeding
Yield (DM kg/ha)

Location	Ridgetown		Expt. 1048		
Variety	Cut 1	Cut 2	1979 Total	1978 Total	2 Year Mean
Dayton	6785	1934	8719	8757	8738
Napier	6594	1992	8586	8546	8566
K3-9	6420	2145	8565	8795	8680
Nordstern	6551	2008	8558	9311	8935
Hallmark	5948	2584	8532	9107	8820
Sumas	6659	1805	8464	8727	8596
Ina	6068	2290	8358	8674	8516
Kay	6476	1881	8357	8589	8473
Comet	5845	2493	8337	8242	8290
K2-8	6449	1754	8203	8522	8363
Juno	5995	2174	8168	8848	8508
Tardus II	5926	2141	8067	8331	8199
Frode	5552	2209	7761	8175	7968
WWH 92	5722	1868	7590	8650	8120
K2-7	5365	1978	7342	7489	7416
Total Mean	6157	2084	8241		
L.S.D. (5%)	594.95	310.67	657.91		
C.V.	6.77	10.44	5.59		

Ontario Orchardgrass Test
1979 hay yields from 1978 seeding
Yield (DM kg/ha)

Location	Guelph		Expt. 2787	
Variety	Cut 1	Cut 2	Cut 3	Total
Napier	7256	2312	2552	12120
K3-9	6501	3311	2143	11956
Sumas	6780	2685	2357	11821
Kay	6515	2936	2122	11573
Hallmark	6133	3096	2287	11516
Juno	6502	2627	2312	11442
K2-8	6413	2893	2051	11357
Ina	5863	3083	2265	11211
WWH 92	5989	2679	2364	11032
Comet	5930	2735	2353	11017
Dayton	6920	1948	2120	10989
OK-SF 19	6401	2245	1958	10605
Total Mean	6434	2713	2240	11387
LSD (5%)	789.24	563.08	287.57	1040.59
CV	8.50	14.39	8.90	6.34

Ontario Orchardgrass Test
1979 hay yields from 1978 seeding
Yield (DM kg/ha)

Location	Ottawa	Expt. 4781	
Variety	Cut 1	Cut 2	Total
Hallmark	5324	2687	8011
Sumas	5451	1954	7405
Ina	4949	2341	7289
K2-8	5385	1771	7156
WWH 92	5039	2022	7062
K3-9	5172	1864	7036
Kay	4996	1950	6947
Juno	4625	2314	6939
Napier	4167	2652	6819
Dayton	4604	2060	6664
OK-SF 19	5072	1577	6649
Comet	3927	2261	6188
Total Mean	4893	2166	7014
L.S.D. (5%)	908.35	938.04	882.87
C.V.	12.87	30.02	8.73

Ontario Orchardgrass Test
1979 hay yields from 1978 seeding
Yield (DM kg/ha)

Location	Kapuskasing		Expt. 6087
Variety	Cut 1	Cut 2	Total
K2-8	4541	2479	7019
OK-SF 19	4526	2394	6921
K3-9	4225	2576	6801
Sumas	4087	2533	6620
Hallmark	3386	2810	6196
Juno	3785	2338	6123
WWH 92	3634	2485	6119
Ina	3322	2662	5984
Kay	3621	2356	5977
Comet	3520	2164	5683
Dayton	3482	1947	5428
Napier	2980	2321	5301
Total Mean	3759	2422	6181
L.S.D. (5%)	524.70	623.17	854.22
C.V.	9.68	17.84	9.58

Ontario Orchardgrass Test
1979 hay yields from 1978 seeding
Yield (DM kg/ha)

Location	Thunder Bay	Expt. 7124
Variety	Cut 1	
Kay	5010	
OK-SF 19	4442	
K2-8	4360	
Sumas	4150	
Juno	4073	
Dayton	3938	
K3-9	3853	
Comet	3744	
Ina	3707	
Hallmark	3518	
WWH 92	3188	
Napier	2761	
Total Mean	3895	
L.S.D. (5%)	650.84	
C.V.	9.87	

Timothy Varieties

Current Status of Varieties - as of November 9, 1979

Variety	Entered by	Official Status	Station years of data
Toro	O.F.C.C.	Recommended, Pub. 296	-
Basho	"	" "	-
Champ	"	" "	-
Itasca	"	" "	-
Timfor	"	" "	-
Climax	"	" "	-
Milton	"	" "	-
Pronto	"	" "	-
Richmond	MLM	Licensed. Recommended in Pub. 296 in 1980	-
N7-126	Nat. N.K.	Support for variety withdrawn	-
Goliath(TimH7)	MLM	Support for licence. Deferred (2)	-
Odenwalder	OSECO	Support for licence. Deferred (2)	-
Maris Polka	N.S.D.O.	Not supported 1979. Testing completed	12
17017	MLM	Not supported 1979. Testing completed	10
LFS 23	Ottawa Res. St.		3
LFY 10	Ottawa Res. St.		3
LSS 9	Ottawa Res. St.		3
009	Ottawa Res. St.		4
Mohawk	U.C.O.		0
Alpage	OSECO		0
Phlewiola	OSECO		0
Rasant	OSECO		0
LCM 8	Ottawa Res. St.		0
OG-HD-7	Ottawa Res. St.		0
OG-HD-10	Ottawa Res. St.		0

Timothy Varieties

Seven timothy trials were harvested for yield in 1979. These were:

- (1) Seeded 1977 - Kemptville
Kapuskasing
Thunder Bay
- (2) Seeded 1978 - Ridgetown
Guelph
Ottawa (2 tests)

The 1978 seeding at Guelph was a repeat of the 1977 trial.

Two varieties are to be considered for support for licensing,
namely:

Maris Polka
MLM 17017

Two varieties were supported for licencing, but licence has not
been granted; namely Odenwalder and Goliath.

The variety N7-126 was supported for licencing, but so far as known,
no application has been submitted.

One variety will be added to the recommended list as soon as seed
available, namely, Richmond.

Timothy Varieties - To Be Considered - November 1979.

<u>Variety</u>	<u>Station- years</u>	<u>Yield (kg/ha)</u>		
		<u>Cut 1</u>	<u>Cut 2</u>	<u>Total</u>
Climax	12	6590	2530	9120
Odenwalder		6170	2680	8850
Champ		6290	2440	8730
Climax	11	6140	2450	8590
Champ		6040	2460	8500
Maris Polka		6050	2350	8400
Climax	9	6210	2550	8760
Champ		6030	2420	8450
MLM 17017		5840	2140	7980

Yields (kg/ha) of Recommended Varieties

Variety	1977 ¹		Mean 1977, '78, 79 ²	
	Cut 1	Total	Cut 1	Total
Timfor	6880	10,190	6580	9360
Itasca	6640	9,760	6530	9070
Climax	6800	9,830	6410	8950
Basho	5820	9,040	6100	8940
Toro	6170	9,160	6360	8920
Milton	6620	9,740	6260	8900
Champ	6190	9,410	6240	8750
Pronto	6350	9,240	6200	8550
Mean (all entries)	6230	9,260		

1) Average of 3 stations

2) Average of 13 station years

Yields (Kg/ha) of Licensed Varieties

Variety	1978 ¹		1979 ²		Mean	
	Cut 1	Total	Cut 1	Total	Cut 1	Total
Timfor	5940	8540	6850	9500	6400	9020
Itasca	5780	7970	6970	9460	6380	8720
Toro	5790	7930	6840	9450	6320	8690
Basho	5360	7490	6730	9850	6050	8670
Climax	5860	7950	6580	9180	6220	8570
Milton	5700	8110	6450	9010	6080	8560
Champ	5740	7400	6610	9310	6180	8360
Pronto	5780	7420	6410	8960	6100	8190
Mean (all entries)	5740	7830	6640	9280	6190	8560

Variety	1978 ¹		1979 ³		Mean	
	Cut 1	Total	Cut 1	Total	Cut 1	Total
Timfor	5940	8540	7230	10,610	6580	9580
Toro	5790	7930	7420	10,600	6610	9270
Climax	5860	7950	7060	10,430	6460	9190
Richmond	5410	7620	7000	10,700	6210	9160
Itasca	5780	7970	7150	10,250	6470	9110
Milton	5700	8110	6730	10,020	6220	9070
Basho	5360	7490	6900	10,500	6130	9000
N7-126	5680	7910	6750	9,980	6220	8950
Goliath	5880	7640	7200	10,020	6540	8830
Champ	5740	7400	6820	10,220	6280	8810
Pronto	5780	7420	6800	10,120	6290	8770
Mean (all entries tested)	5740	7830	6950	10,280	6350	9060

1) Average of 4 stations

2) Average of 6 stations for Cut 1, and 5, for season total

3) Average of 4 stations for Cut 1, and 3, for season total

Timothy Summary - Yields

A)			B		
Variety	Seeded '78, ¹		Variety	Seeded '77, ³	
	Cut 1	Total		Cut 1	Total
Basho	6380	8400	Toro	7320	10,830
Ottawa 009	6220	8330	Timfor	7240	10,600
Itasca	6610	8270	Richmond	6950	10,590
Champ	6190	7950	Basho	6950	10,580
			Itasca	7290	10,440
Timfor	6090	7820	Odenwalder	6660	10,400
Toro	5670	7720	Climax	7020	10,360
LFY-10	6100	7700			
LFS-23	6120	7560	Goliath	7400	10,230
Milton	5890	7500	Champ	6740	10,050
Climax	5620	7300			
Pronto	5640	7210	N7-126	6710	9,940
LSS-9	5600	7190	MLM 17017	7000	9,810
			Milton	6530	9,780
Mean	6010	7780	Mean	6960	10,270
L.S.D.	N.S.	720	L.S.D.	N.S.	N.S.
C.V.	110	97	C.V.	12.0	8.7
	<u>Cut 1²</u>	<u>Total²</u>		<u>Cut 1⁴</u>	<u>Total⁵</u>
Champ	7000	8990	Champ	6110	9,540
Ottawa 009	7243	9580	Maris Polka	5980	9,150

1. Mean of 2 locations - Ridgetown and Ottawa

2. Mean of 3 locations - Ridgetown, Ottawa and Guelph.

3. For Cut 1, mean of Guelph Kemptville, Kapuskasing, and Thunderbay; for season total, mean of Guelph, Kemptville and Kapuskasing.

4. Mean of 3 locations - Kemptville, Kapuskasing and Thunder Bay.

5. Mean of 2 locations - Kemptville, and Kapuskasing.

Expt. 1055 Timothy Provincial Trial, Ridgetown. Seeded 1978.

Code	Name	Yield 1979		
		Cut 1	Cut 2	Total
6030	Toro	6940	2780	9720
6009	Basho	6840	2600	9440
6062	Ottawa 009	6520	2680	9200
6026	Itasca	6910	2240	9150
6005	Champ	6670	2410	9080
6063	LFS-23	6780	1670	8450
6040	Timfor	6270	2170	8440
6037	Pronto	6370	2040	8410
6003	Milton	6230	2080	8310
6002	Climax	6240	2060	8300
6065	LSS-9	6140	1950	8090
6064	LFY-10	6330	1630	7960
LSD 5% (kg/ha)		N.S.	380	710
Total Mean (kg/ha)		6520	2190	8710
CV		7.03	11.96	5.65

Expt. 1055. Timothy Provincial Trial, Ridgetown. Seeded 1978.

<u>Variety</u>	<u>Date-50% Headed</u> (June)	<u>%Heads</u> (July 30)
Ottawa 009	7.0	42
Basho	8.0	28
Toro	8.2	36
Champ	9.5	25
LFS-23	9.5	10
LFY-10	10.0	10
Timfor	10.2	19
LSS-9	10.5	18
Pronto	10.5	9
Climax	10.5	8
Milton	11.0	9
Itasca	11.0	10
Mean	9.8	18

Expt. 2788. Timothy Provincial Trial, Guelph. Seeded 1978.

Code	Name	Yield 1979		
		Cut 1	Cut 2	Total
6062	Ottawa 009	9290	2790	12,080
6040	Timfor	9080	2630	11,710
6026	Itasca	8870	2800	11,670
6050	Richmond	8720	2860	11,580
6059	MLM TIM H7 (Goliath)	9080	2480	11,560
6009	Basho	8920	2580	11,500
6058	Oldenwalder	8570	2900	11,470
6030	Toro	8680	2780	11,460
6003	Milton	8860	2540	11,400
6002	Climax	8880	2420	11,300
6055	MLM 17017	9100	2160	11,260
6039	N7-126	8740	2440	11,180
6061	Pronto	8760	2370	11,130
6005	Champ	8630	2440	11,070
LSD 5% (kg/ha)		N.S.	N.S.	N.S.
Total Mean (kg/ha)		8840	2600	11,440
CV		11.56	14.70	9.13

Expt. 2788. Timothy Provincial Trial, Guelph. Seeded 1978.

Variety	% Headed 1979		
	June 15	June 19	June 21
Ottawa 009	35	100	100
Toro	25	90	100
Basho	25	90	100
Richmond	40	85	100
Odenwalder	40	70	100
Milton	15	60	95
Champ	5	50	95
MLM 17017	10	50	90
Maris Polka	10	35	85
Itasca	5	50	75
Timfor	5	15	50
Climax	0	10	50
Pronto	1	5	10
Goliath	0	2	10
N7-126	1	1	10

Expt. 2776. Timothy Provincial Trial, Guelph, Seeded 1977.

	Vigor ¹	% Headed			
	(May 9)	June 15	June 19	June 21	June 27
Richmond	8.7	50	85	100	100*
Odenwalder	8.3	40	90	95	100*
Basho	5.7	20	85	100	100*
Champ	5.3	5	40	90	100*
Toro	4.7	2	20	70	100
Milton	5.0	5	40	65	100
Timfor	4.7	5	10	40	95**
Itasca	5.3	5	25	50	95
Climax	5.0	0	10	40	95
N7-126	4.3	0	10	40	85
Maris Polka	6.3	5	25	40	75
MLM 17017	4.8	5	25	40	75
Pronto	4.7	0	2	30	75
Goliath	6.0	0	1	15	50

¹ Rating: (good) to 1 (poor)

* Anthesis

** 10% of heads showing anthesis

Expt. 4782. Timothy Provincial Trial, Ottawa. Seeded 1978.

Code	Name	Yield 1979		
		Cut 1	Cut 2	Total
6062	Ottawa 009	5920	1550	7470
6064	LFY-10	5860	1550	7430
6026	Itasca	6310	1070	7380
6009	Basho	5920	1430	7350
6040	Timfor	5910	1300	7210
6005	Champ	5710	1110	6820
6003	Milton	5540	1140	6680
6063	LFS-23	5450	1230	6680
6002	Climax	5000	1300	6300
6065	LSS-9	5060	1230	6290
6037	Pronto	4900	1110	6010
6030	Toro	4410	1310	5720
LSD 5% (kg/ha)		820	N.S.	940
Total Mean (kg/ha)		5500	1280	6780
CV		10.36	24.63	9.61

Expt. 4784. Timothy Provincial Trial, Ottawa. Seeded (Fall) 1978.

Code	Name	Yield 1979		
		Cut 1	Cut 2	Total
6063	LFS-23	4460	3590	8050
6009	Basho	5140	2880	8020
6030	Toro	4390	3350	7740
6040	Timfor	4580	2990	7570
6062	Ottawa 009	4510	2960	7470
6005	Champ	4500	2780	7280
6002	Climax	4500	2780	7280
6003	Milton	4280	2990	7270
6072	LCM-8	4260	2880	7140
6064	LFY-10	4180	2840	7020
6037	Pronto	4640	2300	6940
6065	LSS-9	4380	2300	6680
LSD 5% (kg/ha)		N.S.	N.S.	N.S.
Total Mean (kg/ha)		4520	2880	7400
CV		9.65	22.58	10.97

Expt. 3015. Timothy Provincial Trial, Kemptville. Seeded 1977.

Code	Name	Yield 1979		
		Cut 1	Cut 2	Total
6002	Climax	9700	4400	14,100
6030	Toro	9890	4170	14,060
6050	Richmond	9450	4220	13,670
6040	Timfor	8820	4660	13,480
6009	Basho	8900	4450	13,350
6058	Oldenwalder	8820	4420	13,240
6059	MLM TIM H7 (Goliath)	9470	3500	12,970
6037	Pronto	8120	4460	12,580
6026	Itasca	8270	4310	12,580
6005	Champ	8650	3870	12,520
6060	Maris Polka	8690	3830	12,520
6039	N7-126	8240	4190	12,430
6003	Milton	8080	4250	12,330
6055	MLM 17017	8830	3180	12,010
LSD 5% (kg/ha)		N.S.	560.	N.S.
Total Mean (kg/ha)		8850	4140	12,990
CV		13.66	9.56	9.26

Expt. 6038. Timothy Provincial Trial, Kapuskasing. Seeded 1977.

Code	Name	Yield 1979		
		Cut 1	Cut 2	Total
6005	Champ	5050	2010	7060
6050	Richmond	4840	2020	6860
6040	Timfor	5240	1410	6650
6061	Pronto	5150	1500	6650
6009	Bash	4940	1710	6650
6026	Itasca	5300	1210	6510
6058	Oldenwalder	4540	2120	6660
6039	N7-126	5150	1180	6330
6003	Milton	4980	1340	6320
6055	MLM 17017	5030	1190	6220
6030	Toro	4840	1430	6270
6060	Maris Polka	4780	1220	6000
6002	Climax	4480	1410	5890
6059	MLM TIM H7 (Goliath)	5020	520	5540
LSD 5% (kg/ha)		N.S.	470.	N.S.
Total Mean (kg/ha)		4960	1450	6410
CV		9.76	19.41	8.37

Expt. 7106. Timothy Provincial Trial, Thunder Bay. Seeded 1977.

Code	Name	Yield 1979
		Cut 1
6026	Itasca	6150
6040	Timfor	5790
6030	Toro	5260
6959	MLM TIM H7 (Goliath)	5230
6037	Pronto	5160
6002	Climax	5160
6055	MLM 17017	5150
6058	Odenwalder	5070
6003	Milton	5010
6050	Richmond	5000
6005	Champ	4970
6039	N7-126	4870
6009	Basho	4840
6060	Maris Polka	4380
LSD 5% (kg/ha)		780
Total Mean (kg/ha)		5140
CV		10.58

Reed Canary Grass

Current Status of Varieties - as of November 9, 1979

<u>Variety</u>	<u>Entered by</u>	<u>Official Status</u>	<u>Station years of data</u>
Rise	O.F.C.C.	Recommended, Pub. 296	-
Frontier	O.F.C.C.	Recommended, Pub. 296	-
Grove	O.F.C.C.		0
Vantage	NAPB (OSEC0)		0
Castor	O.F.C.C.		0

ONTARIO FORAGE CROP COMMITTEE MANAGEMENT TRIALS

Alfalfa-Grass Seeding Rate Trials

Coated Seed Trials in Legume and Grass Species

Alfalfa - Grass Seeding Rate Study - Ridgetown, 1979

Mixture Data

Seeding rate	Saranac yield DM	Iroquois Yield DM	Variety Mean Yield DM
<u>Cut 1</u>			
Itasca 2	6590	6912	6736
Itasca 4	6873	6894	6784
Itasca 6	6662	6902	6782
Saratoga 2	6843	6830	6836
Saratoga 5	6866	6898	6882
Saratoga 8	6956	6145	6551
Alfalfa 10	6755	7026	6891
LSD Mains	NS		
Subs	NS		
Inter	NS		
C.V.	7.5%		
<u>Cut 2</u>			
Itasca 2	4364	4538	4481
Itasca 4	4529	4369	4449
Itasca 6	4626	4370	4498
Saratoga 2	4440	4347	4394
Saratoga 5	4187	4400	4293
Saratoga 8	4607	4431	4519
Alfalfa 10	4328	4074	4201
LSD Mains	NS		
Subs	NS		
Inter	NS		
C.V.	6.3%		
<u>Cut 3</u>			
Itasca 2	3359	3064	3212
Itasca 4	3234	3175	3205
Itasca 6	3325	3089	3192
Saratoga 2	3409	3228	3318
Saratoga 5	3300	3206	3253
Saratoga 8	3133	3156	3145
Alfalfa 10	3261	3158	3210
LSD Mains	NS		
Subs	NS		
Inter	NS		
C.V.	6.6%		

NOTE: N.S. for mains, subs and interaction in total yield with a C.V. 3.9%

Alfalfa - Grass Seeding Rate Study - Kemptville, 1979

Mixture Data

Seeding rate	Saranac		Iroquois		Variety Mean	
	Yield DM	% Grass	Yield DM	% Grass	Yield DM	% Grass
<u>Cut 1</u>						
Itasca 2	5472		6170		5822	29
Itasca 4	5414		5743		5578	33
Itasca 6	5054		6000		5527	40
Saratoga 2	5094		5532		5363	32
Saratoga 5	5943		5631		5787	42
Saratoga 8	5563		5950		5756	39
Alfalfa 10	5276		5164		5220	1
LSD Mains	NS					NS
Subs	NS					13
Inter	NS					NS
C.V.	9.7%					34%
<u>Cut 2</u>						
Itasca 2	4476		3844		4160	
Itasca 4	4529		4437		4483	
Itasca 6	4379		4603		4491	
Saratoga 2	4591		4132		4361	
Saratoga 5	4673		4502		4590	
Saratoga 8	4829		4479		4654	
Alfalfa 10	4608		4358		4483	
LSD Mains	NS					
Subs	NS					
Inter	NS					
C.V.	9.3%					
<u>Cut 3</u>						
Itasca 2	2718		2736		2727	
Itasca 4	2752		2913		2832	
Itasca 6	2814		2840		2827	
Saratoga 2	2769		2918		2843	
Saratoga 5	2920		2857		2888	
Saratoga 8	2905		2819		2862	
Alfalfa 10	2985		2649		2817	
LSD Mains	NS					
Subs	NS					
Inter	NS					
C.V.	8.4%					

Alfalfa - Grass Seeding Rate Study, Guelph 1979

Seeding rate	Mixture data					
	Saranac		Iroquois		Variety means	
	Yield DM	% Grass	Yield DM	% Grass	Yield DM	% Grass
<u>Cut 1</u>						
Itasca 2	7462	82	8363	67	7912	74.5
Itasca 4	7565	85	8373	74	7969	79.5
Itasca 6	7233	84	8197	70	7715	77.0
Saratoga 2	6866	78	7500	67	7183	72.5
Saratoga 5	7512	80	7669	81	7590	80.5
Saratoga 8	7989	87	7637	83	7813	85.0
Alfalfa 10	4613	0	5116	0	4864	0.0
LSD Main					N.S.	*
Sub					489	7.38
Inter					N.S.	N.S.
C.V.					6.6	10.6
<u>Cut 2</u>						
Itasca 2	1713	12	2144	10	1928	11.0
Itasca 4	1841	14	2123	9	1982	11.5
Itasca 6	1814	11	2018	9	1916	10.0
Saratoga 2	2368	20	2492	17	2430	18.5
Saratoga 5	2163	24	2358	19	2260	21.5
Saratoga 8	2143	26	2163	22	2153	24.0
Alfalfa 10	2729	0	2705	0	2717	0.0
LSD Main					N.S.	N.S.
Sub					194	2.05
Inter					N.S.	N.S.
C.V.					8.7	15.1
<u>Cut 3</u>						
Itasca 2	1372	6	1433	3	1402	4.5
Itasca 4	1493	8	1621	5	1557	6.5
Itasca 6	1311	6	1337	3	1324	4.5
Saratoga 2	1444	10	1423	7	1433	8.5
Saratoga 5	1622	15	1645	11	1633	13.0
Saratoga 8	1614	17	1576	14	1595	15.5
Alfalfa 10	1589	0	1653	0	1621	0.0
LSD Main					N.S.	N.S.
Sub					86	2.48
Inter					N.S.	N.S.
C.V.					5.6	22.1
<u>Total Yield</u>						
Itasca 2	10553		11940		11246	
Itasca 4	10899		12117		11508	
Itasca 6	10358		11552		10955	
Saratoga 2	10678		11415		11046	
Saratoga 5	11297		11673		11485	
Saratoga 8	11746		11376		11561	
Alfalfa 10	7681		9474		8577	
LSD Main					N.S.	
Sub					554	
Inter					784	
C.V.					5.0	

Summary of coated seed results from the Ontario Forage Crop Committee

1. Coated seed, on the basis of per pound (kg) of product purchased, contains 40% less seed than the same weight of non-coated seed.
2. There is no advantage to using coated alfalfa seed on good cultivated land.
3. There is an advantage to using coated trefoil seed under adverse establishment conditions.
4. If coated seed is used, seed at a higher rate (possibly an increase of 20%) in order to obtain a comparable stand.
5. Coated seed is a good system of inoculation if the seed is used in the year of coating.
6. There is no yield advantage from seeding coated seed of grass species.

Exp. 1065. Alfalfa Coated Seed Test. Ridgetown. Seeding, 1979. Harvest, 1979.

Species	Varieties	Treatment	Seeding kg/ha	kg/ha d.m.		Total
				Harvest 1 July 18	Harvest 2 Aug. 31	
Alfalfa	Apollo	Grozone	11.2	4143	2921	7064
			18.6	4155	3067	7222
		Prill-on	11.2	3739	3001	6740
			18.6	3985	3162	7147
	Iroquois	Base	11.2	4586	3168	7754
		Rh I ¹	11.2	4310	3196	7506
			18.6	4567	2804	7371
			11.2	4209	2997	7206
		Rh II ²	18.6	4354	3193	7547
			11.2	4106	2978	7084
			18.6	4333	3116	7449
		G - Coat	11.2	4364	2976	7340
			18.6			
		Base	11.2			
		LSD 5%		763	387	969
		C.V. %		12.4	8.8	9.2

1. Rhizo-kote

2. Gold coat

Exp. 1059. Timothy. Ridgetown. Seeding, 1978. Harvest, 1979.

Species	Variety	Treatment	Seeding Rate	kg/ha d.m.		
				Harvest 1 June 18	Harvest 2 July 23	Total
Timothy	Toro	Prill-on	8.9 kg/ha	6403	1903	8306
"	"	Prill-on	17.9	6788	2259	9047
		Base	8.9	6386	2032	8418
		LSD 5%		772	514	981
		C.V.%		6.8	14.3	6.6

Exp. 1057. Alfalfa. Ridgetown. Seeding, 1978. Harvest, 1979.

Species	Variety	Treatment	Seeding Rate kg/ha	kg/ha d.m.			Total
				Harvest 1 June 18	Harvest 2 July 23	Harvest 3 Sept. 10	
Alfalfa	Apollo	Grozone	11.2	6512	3167	2461	12140
"	"	"	18.6	6832	3302	2418	12552
"	"	Prill-on	11.2	6928	3152	2441	12521
		Prill-on	19.6	6561	4091	2426	13078
		Base	11.2	6694	4248	2355	13297
		LSD 5%		443	587	154	730
		CV %		4.2	6.9	4.1	3.2

Exp. 1066. Trefoil Coated Seed Test. Ridgetown. Seeding, 1979. Harvest, 1979.

Species	Varieties	Treatment	Seeding kg/ha	kg/ha d.m.
				Harvest 1 July 18
Trefoil	Leo	Prill-on	11.2	2724
"	"	"	19.6	3058
"	"	Base	11.2	3055
		LSD 5%		283
		C.V.%		5.5

Exp. 8704. Legume Inoculant Study. New Liskeard. Seeding, 1977. Harvest, 1979.

Species	Varieties	Inoculation Method	kg/ha d.m.		Total
			Harvest 1	Harvest 2	
Alfalfa	WL 215	zero	4430	2915	7345
		Inoculant	3791	2920	6711
		Prillcoated	4549	3209	7758
		Prillcoated + Inoculant	3753	2852	6605
		Prillcoated + 20% more seed	4674	4125	8799
		Beaverlodge Inoculant	4219	3632	7851
		Prillcoated + Beaverlodge	4487	3131	7618
		Inoculant			
		Bordeleau Inoculant IA	3923	3628	7551
		Bordeleau Inoculant II	4068	3191	7259
		Bordeleau Inoculant III	3856	2794	6650
		Bordeleau Inoculant III	4111	3285	7396
		Bordeleau Inoculant V	4162	3119	7281
		Bordeleau Inoculant III	4549	3536	8085
Trefoil	Leo	zero	4247	3137	7384
		Inoculant	4113	3199	7312
		Prillcoated	4217	3235	7452
		Prillcoated + Inoculant	4233	3520	7753
		Prillcoated + 20% more seed	3941	2995	6936
		LSD 5%	722	825	1012
		CV %	12.1	17.8	9.5

Exp. 8701. Legume Inoculation Trial. 1976. New Liskeard. Seeded, 1976. Harvest, 1977.

Species	Variety	Inoculation Method	kg/ha d.m.		Total
			Harvest 1 June 22	Harvest 2 Aug. 9	
Alfalfa	WL215	Prillcoated Seed Only	3640	2588	6228
		Prillcoated Seed + Fresh			
		Inoculant	3941	2456	6397
		Freshly Inoculated Seed	4202	2705	6907
Trefoil	Leo	Prillcoated Seed Only	2265	1851	4116
		Prillcoated Seed +			
		Fresh Inoculant	2396	1717	4113
		Freshly Inoculated Seed	2179	1846	4025
		LSD 5%	539	573	811
		CV %	11.5	17.3	10.1

Exp. 3090. Coated Trefoil, 1979. Kemptville. Seeded 1978. Harvest 1979.

Species	Variety	Treatment	Seeding Rate kg/ha	kg/ha. d.m. Square Meter		
				Harvest 1	Harvest 2	Total
Birdsfoot trefoil	Leo	Prill-on	11.2	7105	4165	11271
		Prill-on	19.6	7105	4668	11775
		Check	11.2	7726	4487	12215
		LSD 5%		916	1166	
		C.V.%		7.2	15.1	

Exp. 8704. Legume Inoculation Trial. 1977. New Liskeard. Seeded, 1977. Harvest, 1978.

Species	Variety	Inoculation Method	kg/ha d.m.		
			Harvest 1 July 7	Harvest 2 Aug. 19	Total
Alfalfa	WL215	Zero	3724	2746	6470
		Inoculant	3399	2792	6191
		Prillcoated	4352	2563	6915
		Prillcoated + Inoculant	3343	2653	5996
		Prillcoated + 20% more seed	5051	2942	7993
		Beaverlodge Inoculant	5179	2791	7970
		Prillcoated + Beaverlodge			
		Innoculant	4897	2757	7654
		Bordeleau Inoculant IA	4077	2843	6920
		Bordeleau Inoculant II	5302	2830	8132
		Bordeleau Inoculant III	3847	2808	6655
		Bordeleau Inoculant IV	3419	2791	6210
		Bordeleau Inoculant V	3772	2754	6526
		Bordeleau Inoculant VI	4385	2697	7092
Trefoil	Leo	Zero	3608	1374	4982
		Inoculant	4103	1218	5321
		Prillcoated	4052	1180	5352
		Prillcoated + Inoculant	2763	1270	4033
		Prillcoated + 20% more seed	3797	1306	5103
		LSD 5%	1424	271	
		C.V. %	24.8	8.1	

Exp. 3090. Coated Alfalfa, 1979. Kemptville. Seeded 1978. Harvest 1979.

Specie	Variety	Treatment	Seeding Rate kg/ha	kg/ha. d.m. Square Meter			Total
				Harvest 1	Harvest 2	Harvest 3	
Alfalfa	Apollo	Grozone	11.2	5511	4634	276	10422
		Grozone	18.6	5410	4869	983	11263
		Prill-on	11.2	6030	4916	276	11224
		Prill-on	19.6	5830	4810	962	11678
		Check	11.2	5354	4423	906	10912
		LSD 5%		1366	1133	1543	
		C.V.%		15.7	15.5	147.0	

Exp. 4220. Coated Seed, 1978. Guelph. Seeded 1978. Harvest 1979.

Species	Variety	Treatment	Seeding Rate kg/ha	Number of Plants per Square Meter		
				June 29	July 13	June 16
Alfalfa	Apollo	Grozone	11.2	119	110	109
		"	18.6	146	136	122
		Prill-on	11.2	118	103	83
		"	19.6	178	167	152
		Base	11.2	158	152	148
Trefoil	Leo	Prill-on	11.2	94	102	54
		Prill-on	19.6	89	102	52
		Base	11.2	84	83	55
Timothy	Toro			(July 6)	(July 20)	
		Prill-on	8.9	131	139	48
		Prill-on	17.9	248	253	65
		Base	8.9	224	247	57

Exp. 6724. Kap Coated Seed Trial. Kapuskasing. Seeded, 1979. Harvest, 1979.

Species	Variety	Treatment	Seeding Rate kg/ha	kg/ha d.m. Harvest 1 Sept. 17	No. of Plants* Per Square Meter Sept. 17
Alfalfa	Apollo	Grozone	11.2	3369	309
			18.6	3163	340
		Prill-on	11.2	2719	335
			18.6	3153	385
		Base	11.2	3413	383
	Iroquois	Rh I	11.2	3140	270
			18.6	3576	277
		RhII	11.2	3405	277
			18.6	2987	428
		G-Coat	11.2	3106	407
			18.6	3180	364
		Base	11.2	3297	373
	Vernal	RhI	11.2	3835	328
			15.3	2840	299
		RhII	11.2	2888	493
			16.8	3325	438
		Base	11.2	3051	340
		LSD 5%		869	
		C.V.		16.2	

*Based on row counts 9" x 24".

Exp. 6721. Coated Seed, 1978. Kapuskasing. Seeded 1978. Harvest 1979.

Species	Variety	Treatment	Seeding Rate kg/ha	kg/ha. d.m. Square Meter		
				Harvest 1 June 29	Harvest 2 July 13	Total
Alfalfa	Apollo	Grozone	11.2	3824	2351	6175
		"	18.6	4098	2394	6442
		Prill-on	11.2	3842	2549	6391
		"	19.6	3979	2256	6235
		Base	11.2	4003	2643	6646
		Prill-on	11.2	3709	3137	6846
Trefoil	Leo	Prill-on	19.6	3890	2876	6766
		Base	11.2	3967	2872	6839
					(Sept. 10)	
Timothy	Toro	Prill-on	8.9	4577	1598	6175
		Prill-on	17.9	4409	1585	5994
		Base	8.9	4632	1541	6173
		LSD 5%		512	458	706
		C.V. %		7.3	11.5	6.4

Exp. 4221. Coated Seed Study. Guelph. Seeded, 1979. Harvest, 1979.

Species	Variety	Treatment	Seeding Rate kg/ha	Plants/m ²	Harvest 1 July 23	Harvest 2 Sept. 6	Season Total
Alfalfa	Apollo	Grozone	11.2	154	3085	3238	6323
			18.6	291	3388	3072	6460
		Prill-on	11.2	161	3136	3163	6299
			18.6	281	3473	3118	6591
	Iroquois	Base	11.2	302	3756	3342	7098
		Rh I	11.2	196	3575	3334	6909
			18.6	309	3898	3501	7399
		Rh. II	11.2	198	3494	3433	6927
			18.6	303	3875	3509	7384
		G-Coat	11.2	179	3746	3609	7355
			18.6	262	4094	3524	7618
	Vernal	Base	11.2	254	3405	3436	6841
		Rh I	11.2	154	3204	3048	6252
			18.6	313	3883	3270	7153
		Rh II	11.2	170	3537	3099	6636
			18.6	339	3604	3280	6884
		Base	11.2	266	3546	3194	6740
		LSD 5%			487	314	586
		C.V.%			9.5	6.6	11.9

Exp. 4220. Coated Seed, 1978. Guelph. Seeded 1978. Harvest 1979.

Specie	Variety	Treatment	Seeding Rate kg/ha	kg/ha d.m.			Total
				Harvest 1 June 14	Harvest 2 July 25	Harvest 3 Sept. 17	
Alfalfa	Apollo	Grozone	11.2	3847	2259	1868	7974
		"	18.6	4410	2502	2050	8962
		Prill-on	11.2	4165	2384	2061	8610
		"	19.6	3876	2576	2110	8562
		Base	11.2	3897	2531	2117	8545
					(July 30)		
Trefoil	Leo	Prill-on	11.2	3704	742	628	5074
		Prill-on	19.6	3364	687	1603	4654
		Base	11.2	3395	729	597	4721
Timothy	Toro	Prill-on	8.9	6594	993	1591	9178
		Prill-on	17.9	6546	1091	1642	9279
		Base	8.9	7002	956	1718	9676
		LSD 5%		991	241	197	1053
		C.V. %		14.4	11.9	9.5	28.9

Ontario Forage Seed Usage Survey - Summary 1975-78

	75/76	Seed Shipped (lbs)		Mean
		76/77	77/78	
<u>Alfalfa</u>				
Public varieties	2,124,400	1,747,400	1,465,000	1,778,933
Proprietary varieties	<u>678,900</u>	<u>733,600</u>	<u>830,300</u>	<u>747,600</u>
Total pedigreed	2,803,300	2,481,000	2,295,300	2,526,533
Commercial	<u>646,100</u>	<u>617,600</u>	<u>665,900</u>	<u>643,200</u>
Total all alfalfa seed	3,449,400	3,098,600	2,961,200	3,169,733
% pedigreed of total	81.3	80.1	77.5	79.7
<u>Red Clover</u>				
Public var.	47,500	33,300		
Proprietary var.	-	-		
Total pedigreed	<u>47,500</u>	<u>33,300</u>	<u>82,100</u>	<u>54,300</u>
Commercial double-cut	739,300	880,200	894,200	837,900
Commercial-single-cut	<u>268,600</u>	<u>249,400</u>	<u>318,600</u>	<u>278,866</u>
Total commercial	<u>1,007,900</u>	<u>1,129,600</u>	<u>1,212,800</u>	<u>1,116,767</u>
Total all red clover seed	1,055,400	1,162,900	1,294,900	1,171,067
% pedigreed of total	4.5	2.9	6.3	4.6
<u>Birdsfoot Trefoil</u>				
Public			159,400	
Proprietary			9,600	
Total pedigreed	351,300	190,500	<u>169,000</u>	236,933
Commercial	<u>210,100</u>	<u>197,400</u>	<u>229,600</u>	<u>212,366</u>
Total all trefoil seed	<u>561,400</u>	<u>387,900</u>	<u>398,600</u>	<u>449,300</u>
% pedigreed of total	62.6	49.1	42.4	52.7
<u>White Clover</u>				
Pedigreed			104,300	
Commercial			<u>93,000</u>	
Total all white clover	221,400	183,800	<u>197,300</u>	200,833
% pedigreed of total			52.9	

Summary (continued)

<u>Alsike Clover</u>	75/76	76/77	77/78	1978/79
Total alsike clover seed	449,500	406,400	433,400	479,767
<u>Sweet Clover</u>				
Total all sweet clover seed	237,900	252,800	188,700	226,467
<u>Timothy</u>				
Public	1,500,700	1,242,600		
Proprietary	109,000	54,100		
Total pedigreed	1,609,700	1,296,700	1,123,300	1,343,233
Commercial	891,100	1,015,100	1,026,300	977,500
Total all timothy seed	2,500,800	2,311,800	2,149,600	2,320,733
% pedigreed of total	64.4	56.1	52.2	57.8
<u>Bromegrass</u>				
Pedigreed	375,300	236,900	163,500	258,567
Commercial	616,700	451,000	558,900	522,200
Total all bromegrass seed	992,000	687,900	722,400	780,767
% pedigreed of total	37.8	34.4	22.6	31.6
<u>Orchardgrass</u>				
Public	34,400	15,300	8,700	19,467
Proprietary	65,900	53,400	70,500	63,267
Total pedigreed	100,300	68,700	79,200	82,733
Commercial	99,700	76,300	92,600	89,533
Total all orchardgrass seed	200,000	145,000	171,800	172,267
% pedigreed of total	50.2	47.4	46.1	47.9
<u>Reed Canary Grass</u>				
Pedigreed	2,200	-		
Commercial	26,200	12,600		
Total all reed canary grass seed	28,400	12,600	5,500	13,500
% pedigreed of total	7.7	0		
<u>Meadow Fescue</u>				
Total meadow fescue seed	133,000	98,000	64,400	58,467
<u>Tall Fescue</u>				
Total all tall fescue seed	130,300	75,400	93,700	64,800

ONTARIO FORAGE SEED USAGE SURVEY - 1979 REPORT

<u>Alfalfa</u>	<u>Lbs. Shipped - July 1/78 to June 30, 1979</u>	<u>1977 as % of 1976</u>	<u>1978 as % of 1976</u>	<u>1979 as % of 1976</u>
Angus	48,800	N.A.	N.A.	N.A.
Iroquois	293,900	170	93	161
Saranac	493,100	67	78	90
Vernal	792,700	73	57	59
Other public varieties	<u>76,300</u>	180	197	908
Total Public Varieties	1,704,800	82	69	80
All Proprietary Varieties	<u>1,202,900</u>	108	122	177
Total Pedigreed (Public + Proprietary)	2,907,700	88	82	104
All Commercial Seed	<u>613,400</u>	96	103	95
Total, All Alfalfa Seed	3,521,100	90	86	102

Red Clover

Lakeland	9,200	88	123	44
Ottawa	10,500	56	44	39
All other public & proprietary varieties	<u>48,300</u>	N.A.	N.A.	N.A.
Total, Pedigreed (Public + Proprietary)	68,000	70	173	143
Commercial double cut	777,400	119	121	105
Commercial single cut	370,500	93	119	138
Total, Commercial Seed	<u>1,147,900</u>	112	120	114
Total, All Red Clover Seed	1,215,900	110	123	115

Birdsfoot Trefoil

Empire	77,900	50	31	41
Leo	95,200	60	67	67
All other public & proprietary varieties	<u>5,900</u>	56	82	33
Total Pedigreed (Public + Proprietary)	179,000	54	48	51
All Commercial Seed	<u>278,100</u>	94	109	132
Total, All Trefoil Seed	457,100	69	71	81

<u>White Clover</u>	<u>Lbs. Shipped - July 1/78 to June 30, 1979</u>	<u>1977 as % of 1976</u>	<u>1978 as % of 1976</u>	<u>1979 as % of 1976</u>
Ladino	111,500	91	N.A.	93
All other public & proprietary varieties	<u>11,400</u>	N.A.	N.A.	N.A.
Total Pedigreed (Public + Proprietary)	122,900	N.A.	N.A.	N.A.
All Commercial Seed	<u>87,400</u>	N.A.	N.A.	N.A.
Total, All White Clover Seed	210,300	83	89	95
<u>Alsike Clover</u>				
Total, All Alsike Clover	340,600	90	96	76
<u>Sweet Clover</u>				
Total, All Sweet Clover	223,900	106	79	94
<u>Timothy</u>				
Climax	683,500	79	69	66
Champ	220,000	98	73	52
Basho	<u>55,600</u>	N.A.	N.A.	N.A.
Total Public Varieties	959,100	83	N.A.	64
All Proprietary Varieties	<u>166,000</u>	50	N.A.	152
Total Pedigreed (Public + Proprietary)	1,125,100	80	70	70
All Commercial Seed	<u>785,100</u>	114	115	88
Total, All Timothy Seed	1,910,200	92	86	76
<u>Bromegrass</u>				
Saratoga	78,200	60	64	77
All other public & proprietary varieties	<u>110,000</u>	64	36	40
Total Pedigreed (Public Proprietary)	188,200	63	44	50
All Commercial Seed	<u>646,500</u>	73	91	105
Total, All Brome Seed	834,700	69	73	84

<u>Orchard Grass</u>	<u>Lbs. Shipped - July 1/78 to June 30, 1979</u>	<u>1977 as % of 1976</u>	<u>1978 as % of 1976</u>	<u>1979 as of 1976</u>
All Public Varieties	10,300	44	25	30
All Proprietary Varieties	<u>51,000</u>	81	107	77
Total Pedigreed (Public + Proprietary)	61,300	68	79	61
All Commercial Seed	<u>71,200</u>	76	93	71
Total, All Orchard Grass	132,500	72	86	66
<u>Reed Canary Grass</u>				
Total Pedigreed (Public + Proprietary)	1,400	0	N.A.	64
All Commercial Seed	<u>12,100</u>	48	N.A.	46
Total, All Reed Canary	13,500	44	19	48
<u>Meadow Fescue</u>				
Total, All Meadow Fescue	37,400	74	48	28
<u>Tall Fescue</u>				
Total, All Tall Fescue	117,400	58	72	90
Total Seed Sales (all species).....	9,014,600	88.5	87.2	90.5
Total Seed Sales - Big 7	8,281,800	88.8	87.9	92.2
(alfalfa, red clover, trefoil, white clover, timothy, orchard and brome grass)				

This survey is a co-operative project between Statistics Canada,
Ontario members of the Canadian Seed Trade Association, and the Ontario Forage
Crops Committee.