

FORAGE INTRODUCTIONS

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**NORTHERN RESEARCH GROUP
CANADA AGRICULTURE RESEARCH BRANCH
RESEARCH STATION, BEAVERLODGE, ALBERTA**

FORAGE INTRODUCTIONS

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FOREWORD

This is our second report on the performance of introduced cultivars of grasses and legumes eligible for contract seed production in Canada. All available data are included thus this report replaces Publication NRG 69-16.

Data are obtained from single plots comprising 5 rows, 30.5 cm (1 foot) apart and 6.1 metres (20 feet) long. Two rows are harvested for herbage and the remaining 3 for seed. Each cultivar is seeded in 3 successive years and each seeding is retained for 3 harvest years. Weeds are controlled by both mechanical and chemical means. Plots are fertilized annually. Irrigation is employed only in the year of seeding of required to ensure complete stands. While many observations are recorded, emphasis is placed on winter hardiness and seed yield.

Key to Symbols

Ratings 1 to 9 (9 best), - (not rated)
 cm - centimeters (1 inch = 2.54 cm)
 kg/ha - kilograms per hectare
 lb/acre - pounds per acre

D.C. = double cut
 S.C. = single cut
 Tetra. = tetraploid
 Dip. = diploid

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GRASSES

3)

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe	Data Years	Seed Yields		Ht. cm	Comments	
							lb/acre avg. high	kg/ha avg. high			
Bluegrass - Kentucky (<i>Poa pratensis</i>)											
	Adorno	Netherlands	9	7	10/7	1	102	102	114	43	
	Altra C 1	U.S.A.	9	7	20/7	8	227	528	254	592	41
	Common	Canada	9	6	14/7	22	117	587	131	658	61 Mildew
	Cougar	U.S.A.	9	8	14/7	3	223	309	250	346	41
	Delta	Canada	9	7	22/7	5	170	561	191	629	58
	Dryland	"	9	5	18/7	5	71	133	80	149	51
	Flying	U.S.A.	9	7	14/7	3	84	114	94	128	33
	Merion	"	8	5	20/7	23	98	265	110	297	41 Rust & mildew
	Newport	"	9	7	30/7	7	105	246	118	276	51
	Nugget	"	9	8	15/7	6	134	240	150	269	36 Rust & mildew
	Park	"	9	6	20/7	17	121	448	136	502	58 Mildew
	Prato	Netherlands	9	7	20/7	6	251	461	281	517	38 Mildew
	Sk-46	Poland	9	7	15/7	6	193	357	216	400	58 Mildew
	T-No. 34	Denmark	9	7	15/7	3	156	235	175	263	56 Rust & mildew
Bluegrass - Canada (<i>P. compressa</i>)											
	Canon	Canada	9	7	5/8	1	150	150	168	168	30
	Common	"	7	6	1/8	5	122	242	137	271	-
Bluegrass - Upland (<i>P. glauca</i>)											
	Draylar	U.S.A.	9	5	14/7	3	153	240	172	269	36
Bromegrass (<i>Bromus inermis</i>)											
	Achenbach	U.S.A.	9	5	15/8	3	222	324	249	363	- Southern
	Anto	Poland	9	6	12/8	5	273	718	306	805	89 Northern
	Baylor	U.S.A.	9	9	12/8	1	211	211	237	237	66 Southern
	Blair	"	9	9	12/8	1	131	131	147	147	69 Southern
	Carlton	Canada	9	9	12/8	18	321	893	366	1001	102 Northern
	Magna	"	9	8	11/8	3	296	411	332	462	107 Intermediate
	Manchar	U.S.A.	9	7	15/8	29	251	1238	281	1388	102 Intermediate
	Polar	"	9	8	11/8	9	341	948	382	1063	102 Northern
	Redpatch	Canada	9	5	11/8	6	175	599	196	671	102 Southern
	S.A.C.	U.S.A.	9	7	11/8	8	216	565	242	633	107 Southern
	Saratoga	"	9	6	15/8	13	200	533	224	597	94 Southern
	ZK	Czech.	9	7	11/8	5	299	749	335	840	107 Northern

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da., mo.	Data Years	Seed Yields		Ht. cm	Comments	
							lb/acre avg. high	kg/ha avg. high			
Fescue - Chewings (<i>Festuca rubra</i> var. <i>commutata</i>)											
	42-14	Netherlands	9	7	16/7	3	103	174	115	195	36
	Barfalla	"	9	5	21/7	3	170	240	191	269	43
	Brabantia	"	9	7	20/7	3	315	490	378	549	33
	Brabantia L. Green	"	9	5	20/7	2	101	176	113	197	
	Cebeco	"	9	7	20/7	1	138	138	155	155	43
	Cottage	France	9	7	10/7	1	5	5	6	6	25
	Dawson	Netherlands	9	7	19/7	3	160	190	179	213	46
	Flevo	"	9	7	15/7	1	80	80	90	90	33
	Golfrood	"	7	6	30/7	7	148	594	166	667	64
	Highlight	"	9	7	17/7	11	233	756	261	847	41
	Koket	"	9	7	15/7	1	42	42	47	47	33
	Oasis	"	9	6	19/7	6	125	247	140	277	56
Snowmold resistance											
Fescue - Creeping red (<i>F. rubra</i>)											
	Agio	Netherlands	9	5	20/7	1	259	259	290	290	46
	Arctared	U.S.A.	9	6	20/7	9	347	960	389	1076	64
	Bargena	Netherlands	9	6	25/7	3	366	533	410	597	74
	Bergere	France	9	7	25/7	3	346	432	388	484	69
	Boreal	Canada	9	9	30/7	9	580	1767	650	1981	64
	Duraturf	"	9	8	30/7	14	418	934	469	1047	64
	Echo	Denmark	9	9	25/7	3	496	619	556	694	64
	Elco	"	9	8	25/7	3	480	539	538	604	74
	Elite	"	9	7	30/7	5	403	800	452	897	-
	Erika	Sweden	9	6	21/7	3	215	352	241	395	53
	FRR/H67	Netherlands	9	7	15/7	1	166	166	186	186	33
	Illahee	U.S.A.	9	6	31/7	9	250	515	280	577	-
	K.L. 257	Czech.	9	6	25/7	3	328	488	368	547	79
	Kos	Poland	9	7	15/7	1	139	139	156	156	38
	Lam. Sawa	"	9	7	20/7	1	117	117	131	131	33
	Leo	"	9	7	20/7	1	227	227	254	254	41
	Levocska	Czech.	9	8	25/7	6	453	1195	508	1340	74
	Liebenziger	Germany	9	8	20/7	1	413	413	463	463	46
	Mommersteeg's	Netherlands	9	8	26/7	2	322	493	361	553	-
	Nr. 7	Germany	9	8	10/7	1	125	125	140	140	30
	Nr. 8	"	9	8	10/7	1	106	106	119	119	30
	Nr. 9	"	9	8	10/7	1	139	139	156	156	33

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da., mo.	Data Years	Seed Yields				Ht. cm	Comments
							lb/acre	kg/ha				
							avg. high	avg. high				
	N.F.G.	Germany	9	8	25/7	3	384	427	430	479	71	
	Novorubra	Netherlands	9	8	25/7	3	406	469	455	526	64	
	Oberhaunstadter	Germany	9	6	25/7	3	389	443	436	497	71	
	Odenrot	"	9	6	25/7	3	474	634	531	711	66	
	Olds	Canada	9	9	31/7	23	463	1718	519	1926	64	
	Pennlawn	U.S.A.	9	8	31/7	12	214	534	240	599	-	
	Polar	Sweden	9	6	25/7	4	182	392	204	439	53	
	Polo	Denmark	9	9	25/7	3	457	528	512	592	74	
	RZU/P61	Netherlands	9	9	20/7	1	395	395	443	443	48	
	Rainier	U.S.A.	9	8	31/7	5	259	440	290	493	-	
	Rapid	Netherlands	9	5	25/7	3	585	674	656	756	64	
	Rassengold	Germany	9	8	20/7	1	230	230	258	258	48	
	Reptans	Sweden	9	9	25/7	14	456	1325	511	1485	64	
	Roemer	Germany	9	8	20/7	1	325	325	364	364	43	
	Rolax	Belgium	9	6	21/7	3	174	258	195	289	46	
	Roznovska	Czech.	9	8	27/7	6	402	982	451	1101	71	
	Rubin	Sweden	9	9	27/7	5	369	522	414	585	66	
	Rubina	Denmark	9	9	20/7	1	451	451	506	506	48	
	Ruby	Netherlands	9	8	27/7	8	392	1509	439	1692	61	
	Runo	Poland	9	9	20/7	1	478	478	536	536	46	
	Runa	Sweden	9	9	26/7	2	404	554	453	621	-	
	S-59	Gt. Britian	9	6	21/7	8	113	500	127	561	51	
	Sceempter	Netherlands	9	7	21/7	5	217	480	243	538	58	
	Sima	Poland	9	6	15/7	1	37	37	41	41	25	
	Sioux	Netherlands	9	8	21/7	2	415	547	465	613	-	
	Steinacher	Germany	9	8	21/7	8	485	1472	544	1650	66	
	Taborska	Czech.	9	8	25/7	6	365	1204	409	1350	66	
	Taca	Denmark	9	8	25/7	7	448	774	502	868	79	
	Tjelvar	Sweden	9	7	25/7	3	582	669	652	750	76	
	Turf	"	9	8	20/7	1	373	373	418	418	46	
	Viking	"	9	8	31/7	2	254	406	285	455	-	
	Wintergreen	U.S.A.	9	7	10/7	1	72	72	81	81	28	

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe	Data Years	Seed Yields				Ht. cm	Comments
							lb/acre	kg/ha				
					da.,mo.		avg. high	avg. high				
Fescue -Meadow (F. pratensis, F. elatior)												
	A01213	Sweden	9	8	31/7	3	284	408	318	457	81	
	As-9 (Irene)	"	9	9	31/7	8	486	1378	545	1545	84	
	Barenza	Netherlands	9	8	31/7	10	408	1278	457	1433	74	
	Belimo	"	9	8	20/7	1	558	558	626	626	58	
	Bergamo	"	9	8	31/7	3	280	402	314	451	76	
	Daphne	France	9	8	22/7	1	440	440	493	493	58	
	Dina	Poland	9	8	31/7	6	330	887	370	994	66	
	Dufa	Netherlands	9	8	31/7	8	333	1060	373	1188	76	
	Ensign	Canada	9	8	31/7	7	462	765	518	858	-	
	FPT/K0-65	Czech.	9	8	20/7	1	507	507	568	568	58	
	Levocska	"	9	9	31/7	6	473	1173	530	1315	81	
	Loken	Norway	9	9	31/7	3	255	366	286	410	86	
	Marbury	England	9	9	31/7	3	349	483	391	541	81	
	Mefon	Canada	9	8	31/7	4	376	490	421	549	-	
	Mewa	Poland	9	9	31/7	6	359	969	402	1086	76	
	Mimer	Sweden	9	9	31/7	16	536	1490	601	1670	81	
	Mommersteeg's-Hay	Netherlands	9	8	31/7	6	472	1054	529	1182	86	
	" - Pasture	"	9	7	31/7	5	311	812	349	910	69	
	Ola	Poland	9	8	31/7	6	307	892	344	1000	74	
	Paavo	Finland	9	7	31/7	3	367	466	411	522	89	
	Rossa	Netherlands	9	7	31/7	3	424	475	475	532	79	
	Roznovska	Czech.	9	7	31/7	6	493	1392	553	1560	84	
	R.v.P.	Belgium	8	7	31/7	8	531	1271	595	1425	69	
	S. 53	Gt. Britain	9	7	31/7	8	273	716	306	803	71	
	Sceempter	Netherlands	8	7	31/7	8	471	1342	528	1504	86	
	Sena	Sweden	9	7	31/7	3	519	632	582	708	76	
	Sequano	France	9	7	31/7	8	593	1248	665	1399	76	
	Sk-6	Poland	9	8	31/7	6	384	697	430	781	81	
	Steinacher	Germany	9	8	31/7	2	321	376	360	421	89	
	Trader	Canada	9	8	31/7	6	360	1065	404	1194	86	
	Wehrdaer	Germany	9	8	31/7	3	439	566	492	634	74	
	Wendelmoed	Netherlands	9	5	31/7	3	313	491	351	550	81	
Fescue - Hard (F. ovina var. duriuscula)												
	C-26	U.S.A	9	9	15/7	1	256	256	287	287	35	
	Carot	Netherlands	9	9	15/7	1	115	115	129	129	35	
	Durar	U.S.A.	9	9	21/7	9	300	1003	336	1124	79	

Species	Cultivar	Origin	Hard- ness	Herbage Yield	Seed Ripe da.,mo.	Data Years	Seed Yields		Ht.		Comments
							lb/acre avg. high	kg/ha avg. high	cm		
Fescue - Sheeps (<i>F. ovina</i>)											
	Barenza	Netherlands	9	7	15/7	1	114	114	128	128	25
	Felia	Belgium	9	7	15/7	1	104	104	117	117	28
	Ovina	Netherlands	9	6	15/7	1	29	29	33	33	25
Fescue - Tall (<i>F. arundinaceae</i>)											
	Alta	U.S.A.	8	7	31/7	10	256	419	287	470	81
	Backafall	Sweden	8	7	31/7	3	149	288	167	323	79
	Fawn	U.S.A.	8	7	31/7	5	341	1110	382	1244	64
	Manade	France	7	6	31/7	6	255	530	286	594	51
	S-170	Gt. Britain	8	6	28/7	1	19	19	21	21	58
Oatgrass - Tall (<i>Arrhenatherum elatius</i>)											
	Remus	Poland	9	6	30/7	5	102	208	114	233	107 Shatters
	Sk-5	"	9	6	18/7	6	76	200	85	224	107 "
	Wena	"	9	6	18/7	6	86	139	96	156	107 "
Oatgrass - Yellow (<i>Trisetum flavescens</i>)											
	Common	Germany	9	4	-	-	-	-	-	-	61 Shatters
Orchardgrass -(<i>Dactylis glomerata</i>)											
	Aries	France	6	6	25/7	2	191	368	214	413	74
	Chinook	Canada	8	7	25/7	6	105	155	118	174	81
	Fala	Poland	8	7	25/7	6	155	354	174	397	107
	Hercules	Canada	6	6	10/8	3	83	148	93	166	-
	Holstenkamp	Germany	8	7	23/7	1	88	88	99	99	58
	Marton vassaria	Czech.	8	7	25/7	3	90	122	101	137	76
	Roznovska	Czech.	8	7	25/7	6	106	229	119	257	81
	T.No. 15	Denmark	8	7	25/7	3	67	133	75	149	86
	T.No. 16	@	8	7	25/7	4	124	276	139	309	91
	T.No. 17	"	6	5	25/7	3	102	213	114	239	84
	Tardus II	Sweden	7	6	25/7	7	111	205	124	230	94
	Tardus	France	6	5	25/7	2	12	19	13	21	74

Species	Cultivar	Origin	Hard- ness	Herbage Yield	Seed Ripe da., mo.	Data Years	Seed Yields				Ht. cm	Comments
							lb/acre avg. high	kg/ha avg. high				
Reed Canarygrass (<i>Phalaris arundinacea</i>)												
	Common	Canada	9	7	21/7	4	35	108	39	121	-	Shatters
	Frontier	"	9	8	27/7	12	31	114	35	128	102	"
	Luba	Poland	9	8	25/7	6	23	85	26	95	117	"
Russian wildrye (<i>Elymus junceus</i>)												
	Common	Canada	9	6	2/8	12	230	937	258	1050	-	
	Sawki	"	9	6	4/8	9	348	985	390	1104	84	
Ryegrass (<i>Lolium multiflorum</i>)												
	Barenza (W)	Netherlands	-	5	16/9	1	551	551	618	618	-	
	Barwoltra (W)	Germany	-	5	16/9	1	569	569	638	638	-	
	Billion (W)	"	-	6	16/9	1	626	626	702	702	-	
	Mowester (W)	Poland	-	5	16/9	1	909	909	1018	1018	-	
	Roznovsky (W)	Czech.	-	6	16/9	1	878	878	984	984	-	
	Tewera 113 (W)	Netherlands	-	7	16/9	1	405	405	454	454	-	
	Tewera 114 (W)	"	-	5	16/9	1	556	556	623	623	-	
	Vertas (W)	"	-	7	16/9	1	674	674	756	756	-	
	Tetrone	Germany	5	-	14/8	1	708	708	794	794	-	
Ryegrass (<i>L. perenne</i>)												
	Argo	Poland	5	5	25/8	3	614	980	688	1099	51	
	Barenza	Netherlands	5	5	24/8	1	277	277	311	311	36	
	Barlenna	"	6	5	14/8	1	211	211	237	237	36	
	Glasnevin	Ireland	3	-	-	1	-	-	-	-	-	
	Linn.	U.S.A.	4	4	25/8	1	160	160	179	179	46	
	Mommersteeg's Pasture	Netherlands	5	3	25/8	3	389	741	436	831	46	
	NK-100	U.S.A.	4	4	15/8	2	431	457	483	512	-	
	Norlea	Canada	7	6	22/8	10	414	1245	464	1396	41	
	Oregon Comm.	U.S.A.	6	4	23/8	3	274	416	307	466	46	
	Pelo	Netherlands	6	4	23/8	3	276	427	309	479	43	
	Perma	"	4	-	-	1	-	-	-	-	-	

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da.,mo.	Data Years	Seed lb/acre avg. high	Yields kg/ha avg. high	Ht. cm	Comments	
	Roznovsky	Czech.	6	5	20/8	4	319	775	358	869	56
	R.v.P. Pasture	Belgium	5	3	30/8	3	227	272	254	305	51
	Sceempter	Netherlands	5	3	24/8	1	200	200	224	224	38
	Stadion	"	3	-	-	1	-	-	-	-	-
	T-No. 10	Denmark	5	6	25/8	1	1099	1099	1232	1232	-
	T-No. 11	"	5	7	8/8	1	1158	1158	1298	1298	-
	T-No. 12	"	5	7	25/8	1	1209	1209	1355	1355	-
	T-No. 13	"	5	6	25/8	1	1179	1179	1322	1322	-
	T-No. 14	"	1	-	-	-	-	-	-	-	-
	Viris	Sweden	5	6	23/8	2	585	907	656	1017	-
Timothy (<i>Phleum bertolonii</i> , <i>P. nodosum</i>)											
	Evergreen	Sweden	9	7	25/8	8	281	459	315	515	69
	S-50	Gt. Britain	9	6	25/8	8	143	321	160	360	48
	Sport	France	9	6	25/8	8	190	494	213	554	51
Timothy (<i>Phleum pratense</i>)											
	Astra	Sweden	9	9	10/8	8	202	414	226	464	86
	Barenza	Netherlands	9	8	15/8	10	301	498	337	558	79
	Bounty	Canada	9	8	15/8	6	177	379	198	425	94
	Champ	"	9	8	7/8	5	186	453	209	508	61
	Clair	U.S.A.	9	4	20/8	2	54	92	61	103	-
	Climax	Canada	9	9	10/8	25	280	820	314	919	91
	Daeno	Denmark	9	8	10/8	8	246	578	276	648	81
	Drummond	Canada	9	9	18/8	12	260	605	291	678	81
	Engmo	Norway	9	8	20/8	5	405	739	454	828	-
	Erecta	Belgium	9	8	8/8	10	283	642	317	720	76
	Eskimo	Netherlands	9	9	8/8	6	255	621	286	696	84
	Foka	Poland	9	7	8/8	6	247	580	277	650	89
	Glasnevin Gem	Ireland	9	7	11/8	3	85	166	95	186	64
	Grasslands Kahu	New Zealand	9	7	11/8	3	116	155	130	174	74
	Heidemij	Netherlands	9	7	25/8	8	183	352	205	395	64
	Hokuo	Japan	9	8	7/8	2	159	240	178	269	84
	Kampe II	Sweden	9	9	7/8	8	268	542	300	608	91
	King	Netherlands	9	8	22/8	8	190	453	213	508	64
	Kor	Poland	9	7	7/8	6	250	647	280	725	89
	Korpa	Iceland	9	7	7/8	1	352	352	395	395	73

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da., mo.	Data Years	Seed Yields lb/acre avg. high	kg/ha avg. high	Ht. cm	Comments
	L-84	Italy	9	8	7/8	10	270	480	303	538 74
	Landsberger	Germany	9	8	5/8	3	216	346	242	388 81
	Levocska	Czech.	9	9	5/8	6	243	644	272	722 84
	Lofar	Netherlands	9	8	20/8	10	220	507	247	568 84
	Lorain	U.S.A.	9	8	15/8	8	194	672	217	753 91
	Motterwitzer	Germany	9	8	7/8	1	291	291	326	326 66
	N.F.G.	"	9	8	7/8	1	256	256	287	287 68
	No.90	Scotland	9	9	15/8	8	314	811	352	909 84
	Oakmere	Gt. Britain	9	7	25/8	3	36	88	40	99 66
	Odenwalder	Germany	9	9	5/8	8	290	717	325	804 74
	Omnia	Sweden	9	8	15/8	10	340	702	381	787 79
	Pajbjerg	Denmark	9	9	9/8	8	194	453	217	508 76
	Para	Poland	9	9	8/8	6	338	793	379	889 81
	Pecora	France	9	7	20/8	10	249	443	279	497 81
	Phlewiola	Germany	9	9	7/8	3	182	232	204	260 89
	S-48	Gt. Britain	9	7	30/8	9	225	724	252	812 61
	S-51	"	9	8	15/8	8	128	336	143	377 84
	S-352	"	9	9	5/8	1	203	203	228	228 71
	Sceempter	Netherlands	9	7	22/8	9	161	357	180	400 69
	Scotia	Gt. Britain	9	9	11/8	3	199	250	223	280 86
	SK-46	Poland	9	9	6/8	6	251	581	281	651 86
	Spaths	Germany	9	8	5/8	3	199	341	223	382 79
	T-48	Sweden	9	8	15/8	8	233	528	261	592 89
	Timo	Netherlands	9	8	22/8	6	184	541	206	606 74
	Vanadis	Sweden	9	9	15/8	10	314	590	352	661 86
	Verdant	U.S.A.	9	9	7/8	1	331	331	371	371 81
	Vetrovsky	Czech.	9	9	7/8	6	285	633	319	710 81
Wheatgrass, Crested (<i>Agropyron cristatum</i>)										
	Fairway	Canada	9	9	22/8	17	437	958	490	1074 69
	Muzla	Czech.	9	8	22/8	6	458	825	525	925 71
Wheatgrass, Crested (<i>A. desertorum</i>)										
	Nordan	U.S.A.	9	8	28/8	3	329	489	369	548 -
	Summit	Canada	9	9	25/8	18	310	507	348	568 81

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da.,mo.	Data Years	Seed Yields lb/acre avg. high	kg/ha avg. high	Ht. cm	Comments
Wheatgrass, Intermediate (<i>A. intermedium</i>)										
	Chief	Canada	9	9	15/9	10	449	850	503	953 127
Wheatgrass, Pubescent (<i>A. trichophorum</i>)										
	Greenleaf	Canada	9	9	25/9	3	325	504	364	565 122
	Mandan	U.S.A.	9	9	25/9	11	382	800	428	897 122
Wheatgrass, Slender (<i>A. trachycaulum</i>)										
	Primar	U.S.A.	9	7	1/9	6	233	467	261	524
Wheatgrass, Streambank (<i>A. riparium</i>)										
	Sodar	U.S.A.	9	7	31/7	16	307	1255	344	1407 71
Wheatgrass, Tall (<i>A. elongatum</i>)										
	Orbit	Canada	9	7	23/9	6	248	462	278	518 100

LEGUMES

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da.,mo.	Data Years	Seed Yield lb/acre avg. high	Seed Yield kg/ha avg. high	Ht. cm	Comments
Alfalfa (<i>Medicago sativum</i>)										
	Alfa	Sweden	8	7	15/9	9	106	436	119	489 81
	Apex	"	8	8	15/9	8	104	231	117	259 79
	Beaver	Canada	8	9	15/9	11	74	263	83	295 76
	Dekalb Strain	U.S.A.	8	7	15/9	6	50	70	56	78 71
	Europa	France	7	7	15/9	8	83	226	93	253 71
	FD 100	"	8	8	15/9	8	95	308	106	345 71
	Grimm	U.S.A.	8	7	10/9	4	187	290	210	325 -
	Hodoninska	Czech.	9	8	15/9	6	45	94	50	105 61
	Kisvardai	"	9	6	8/9	3	33	42	37	47 66
	Kleszozewska	Poland	9	7	15/9	6	67	102	75	114 64
	Ladak	Canada	9	8	10/9	12	92	180	103	202 64
	Lucerna H652	Romania	9	7	10/9	6	60	102	67	114 66
	Marton Vasaria	Czech.	9	7	8/9	2	16	21	18	24 69
	Miechowska	Poland	9	7	15/9	6	38	89	43	100 64
	Nagyszenasi	Czech.	9	6	15/9	3	40	64	45	72 66
	Nitranka	Czech.	9	8	15/9	6	63	186	71	209 58
	Ovari	Czech.	9	8	15/9	3	41	67	46	75 71
	Prerovska	"	9	9	15/9	6	64	93	72	104 64
	Rambler	Canada	8	9	15/9	17	87	147	98	165 58
	Rhizoma	"	7	7	15/9	7	151	358	169	401 -
	Roamer	"	8	8	15/9	3	69	114	77	128 69
	Slovenska podunajska	Czech.	9	8	15/9	6	70	106	78	119 66
	" Trebisovska	"	9	7	15/9	6	59	93	66	104 61
	Vernal	U.S.A.	5	7	10/9	1	158	158	177	177 -
	Vojteska Kasticka	Czech.	8	9	10/9	6	115	176	129	197 58
	" Moravska	"	8	7	10/9	6	60	103	67	115 66
	" Stripicka	"	8	7	10/9	6	61	109	68	122 51
	WL 210	U.S.A.	8	5	22/9	1	26	26	29	29 43
	WL215	"	8	5	22/9	1	37	37	41	41 46
	WL 305	"	8	5	22/9	1	26	26	29	29 58
	WL 306	"	7	5	22/9	1	18	18	20	20 46

Species	Cultivar	Origin			Seed Ripe da.,mo.	Data Years	Seed lb/acre avg. high	Yields kg/ha avg. high	Ht. cm	Comments		
Clover, Alsike (<i>Trifolium hybridum</i>)												
	Alon	Canada	6	6	30/8	8	184	422	206	473	28	Dip.
	Aurora	"	8	9	30/8	24	310	675	348	757	31	"
	Iso	Finland	6	7	20/8	5	191	338	214	379	-	Tetra
	Jetel Zvihly Taborsky)	Czech.	5	6	10/8	1	280	280	314	314	28	Dip.
	Kurir	Sweden	8	6	26/8	7	207	475	232	532	31	"
	Odenwalder	Germany	6	6	20/8	1	275	275	308	308	33	"
	Otofte	Denmark	7	6	10/8	1	306	306	343	343	28	"
	Otofte 4N	"	7	6	10/8	1	134	134	150	150	33	Tetra
	Superfine	France	6	6	30/8	7	312	532	350	596	-	Dip.
	Svea	Sweden	8	7	26/8	6	309	622	346	697	28	"
	Tammisto	Finland	7	8	20/8	14	306	753	343	844	-	"
	Tetra	Sweden	7	9	26/8	20	210	420	235	471	33	Tetra
Clover, Red (<i>Trifolium pratense</i>)												
	Alaskaland	U.S.A.	6	8	5/9	5	258	336	289	377	-	Dip. S.C.
	Altaswede	Canada	7	9	26/8	20	293	683	328	766	58	" "
	Barfiola	Netherlands	6	7	14/9	1	58	58	65	65	35	Tetra D.C.
	Bjursele	Sweden	5	7	26/8	4	207	263	232	295	36	Dip. S.C.
	Bollsta	Norway	6	9	10/9	5	193	276	216	309	-	" "
	Cesky Krajovyl	Czech.	7	6	10/9	3	356	915	399	1026	46	" "
	Changins	Switzerland	7	6	24/8	1	206	206	231	231	35	" "
	Chlumecky	Czech.]	5	5	28/8	1	182	182	204	204	31	" "
	Disa	Sweden	4	-	-	-	-	-	-	-	-	Dip. S.C.
	Essi	"	7	5	18/8	2	151	179	169	201	33	" "
	Fetzers Kitzinger	Germany	5	5	14/8	1	302	302	339	339	-	" "
	Gloria	Poland	6	5	14/8	2	192	229	215	257	33	" "
	Hamidori	Japan	7	6	18/8	2	121	152	136	170	33	Dip. D.C.
	Hermes I	Sweden	4	-	-	-	-	-	-	-	-	-
Heyes Hohenheimer		Germany	5	5	13/8	2	156	219	175	246	38	Dip. D.C.
	Holeho	Czech.	4	-	-	-	-	-	-	-	-	-
	Holy	"	7	6	24/8	1	221	221	248	248	35	Dip. D.C.
	Hungarapoli	Hungary	7	6	14/8	5	165	263	184	295	43	Tetra.D.C.
	Jicinsky	Czech.	7	6	30/8	2	225	304	252	341	31	Dip. S.C.
	Jo.-37	Finland	7	7	30/8	10	136	366	152	410	-	" "

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da.,mo.	Data Years	Seed lb/acre avg. high	Yields kg/ha avg. high	Ht. cm	Comments	
	Kuhn	Netherlands	5	7	26/8	1	88	88	99	31	Dip. D.C.
	Kustrask	Sweden	6	7	10/9	5	186	253	209	284	" S.C./
	Lakeland	U.S.A.	6	5	18/8	2	110	142	123	159	" D.C.
	Lasalle	Canada	6	6	30/8	11	105	147	118	165	" "
	Lembkes	Germany	4	-	-	-	-	-	-	-	" S.C.
	Mekra	"	7	6	10/8	1	155	155	174	174	" D.C.
	Merkur	Sweden	5	5	-	-	-	-	-	-	-
	Molstad	Norway	5	6	10/9	8	272	497	305	557	Dip. S.C.
	Odenwalder	Germany	6	5	13/8	2	152	205	170	230	" D.C.
	Offer	Sweden	6	7	2/9	4	228	299	256	336	" S.C.
	Ostsaat	Germany	7	6	10/8	1	312	312	350	350	" D.C.
	Ottawa	Canada	6	5	26/8	2	121	210	136	235	Dip. D.C.
	Oygard	-	5	7	10/9	4	216	322	242	361	" S.C.
	Pajbjerg Bora	Denmark	7	6	26/8	3	243	346	272	388	" S.C.
	Podtatranska E	Czech.	5	5	14/8	1	141	141	158	158	Dip. D.C.
	Prerovsky dvonsecny	"	7	5	14/8	3	248	425	278	476	" "
	Rea	Sweden	7	9	27/8	13	208	457	233	512	64 Tetra S.C.
	Renova	Switzerland	7	7	24/8	1	214	214	240	240	33 Dip. D.C.
	Resistentia	Sweden	7	7	1/9	5	263	376	295	422	- Dip. S.C.
	Robina	Netherlands	7	5	13/8	3	116	235	130	263	31 " "
	S 123	Gt. Britain	4	-	-	5	-	-	-	-	" "
	Schnyder	Switzerland	7	6	24/8	1	190	190	213	213	33 Dip. D.C.
	Sapporo	Japan	5	5	14/8	6	96	96	108	108	31 Dip. D.C.
	SV-059	Sweden	5	7	14/8	3	262	343	294	385	- Tetra S.C.
	Tammisto	Finland	7	6	26/8	16	178	336	200	377	51 Dip. S.C.
	Tepo	"	6	7	28/8	11	89	203	100	228	- Tetra S.C.
	Teroba	Netherlands	6	5	13/8	2	25	29	28	33	31 Dip. S.C.
	Tetri	"	7	6	14/8	4	140	261	157	293	41 Tetra S.C.
	Tigid W.S.R.11	-	6	6	36/8	5	290	368	325	413	- " "
	Transilvania 50/9	Romania	6	5	14/8	1	133	133	149	149	36 Dip. S.C.
	Trebicksky E	Czech.	5	4	18/8	4	150	150	168	168	31 " "
	Tripo	Norway	7	9	30/8	14	201	507	225	568	71 Tetra S.C.
	Tuna	Sweden	6	8	30/8	5	221	349	248	391	- Dip. S.C.
	U-039	"	4	-	-	4	-	-	-	-	" "
	Ultuna	"	5	6	28/8	6	179	231	201	259	- " "
	Ulva	"	6	5	28/8	1	292	292	327	327	- Tetra S.C.
	Vidarshov	-	6	7	15/9	4	233	347	261	389	- Dip. S.C.
	Viglassla	Czech.	6	6	30/8	3	289	564	324	632	43 " D.C.
	Viola	Poland	6	5	30/8	4	286	426	321	478	41 " D.C.

Species	Cultivar	Origin	Hardi- mess	Herbage Yield	Seed Ripe da.,mo.	Data Years	Seed lb/acre avg. high	Yields kg/ha avg. high	Ht. cm	Comments
Clover, White (<i>Trifolium repens</i>)										
	Armada	Netherlands	8	5	10/8	1	99	99	111	15
	Blanca R.v.P.	Belgium	8	4	10/8	1	51	51	57	13
	Cultura	Netherlands	8	4	10/8	1	50	50	56	13
	Daeno K	Denmark	8	5	10/8	1	93	93	104	15
	Fries Groninger	Netherlands	7	5	30/8	6	94	107	105	15
	Gigant	Germany	7	5	30/8	2	69	107	77	15
	Kent	Gt. Britain	7	5	20/8	1	27	27	30	13
	Kivi	Sweden	7	4	30/8	3	26	66	29	13
	Ladino	U.S.A.	6	5	30/8	10	61	222	68	15
	Louisiana Sl	U.S.A.	6	5	10/8	1	11	11	12	10
	Merit	"	7	5	26/8	2	30	32	34	15
	Nora	Sweden	8	5	28/8	14	165	352	185	25
	Ovcak	Czech.	7	7	30/8	6	77	171	86	13
	Pajbjerg	Denmark	6	5	10/8	1	96	96	108	15
	Pertina	Netherlands	6	5	10/8	1	40	40	45	13
	Pilgrim	U.S.A.	6	5	20/8	3	30	48	34	13
	Podkowa	Poland	8	5	20/8	6	104	181	117	10
	Steinacher	Germany	7	5	10/8	1	46	46	52	13
	T-No.4	Denmark	7	5	15/8	1	2	2	2	-
	Tamar	Netherlands	4	-	-	±	-	-	-	-
	Tohoku 1	Japan	6	5	26/8	2	32	34	36	13
	Tregor	France	7	5	10/8	1	34	34	38	13
	Trevise	France	6	5	10/8	1	34	34	38	13
	Vacares	"	6	5	10/8	1	42	42	47	13
	Viglassba	Czech.	7	5	30/8	6	97	149	109	15
	Von Kamekes	Germany	7	5	30/8	2	64	90	72	10

Sainfoin (*Onobrychis* spp)

Busciansky	Czech.	6	5	15/8	3	382	448	428	502	51
Eski	U.S.A.	8	6	15/8	6	310	480	348	538	46
Saro	Poland	8	6	5/8	1	11	11	12	12	-
SK-48	"	7	5	15/8	5	113	286	127	321	48
Sparceta ICA 6	Romania	7	7	22/8	5	290	411	325	461	71
Visnovsky	Czech.	6	6	15/8	5	214	347	240	389	48

Species	Cultivar	Origin	Hardi- ness	Herbage Yield	Seed Ripe da., mo.	Data Years	Seed Yields lb/acre avg. high	kg/ha avg. high	Ht. cm	Comments
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Trefoil (*Lotus corniculatus*)

Cascade	U.S.A.	5	7	9/8	2	295	308	331	345	-
Empire	"	6	7	15/8	9	284	748	318	839	-
Granger	"	5	7	10/8	2	331	424	371	475	-
Leo	Canada	8	8	30/8	13	378	836	424	937	43
Maitland	"	6	6	5/8	1	37	37	41	41	20
Malejovsky	Czech.	7	6	15/8	4	198	432	222	484	38
Mansfield	U.S.A.	6	7	10/8	2	396	523	444	587	-
Taborsky	Czech.	7	7	20/8	4	244	665	274	745	31
Tana	U.S.A.	6	7	15/8	2	202	217	226	243	-
Trebicky E	Czech.	7	6	15/8	5	303	800	340	897	31
Viglassky	"	8	7	20/8	5	204	482	229	540	31
Viking	U.S.A.	5	6	30/8	5	211	448	237	502	-