Forage Introductions C.R. Elliott

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Beaverlodge, AB

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FOREWORD

The production of forage seeds has long been an integral part of agriculture in the northern areas of Alberta and British Columbia. In recent years, with the advent of contract production of seed of foreign cultivars under O.E.C.D. Herbage Scheme, this industry has expanded rapidly. Many new cultivars were thus available for increase but information on their adaptability was wanting.

A testing program was designed in 1966 to rapidly evaluate these introduced cultivars at the Beaverlodge Research Station. Initial testing has been restricted to those cultivars which have been of particular interest to the Canadian Seed Trade. Consequently, the Trade was the primary source of seed for testing.

While many observations are recorded emphasis is placed on winter hardiness and relative seed yielding ability. 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 if required to ensure complete stands.

This is the first report prepared on this program. We hope it will be useful to Seed Growers, members of the Seed Trade, and to Plant Breeding Institutions.

Key to Symbols:

Ratings 1 to 9 (9 best), - (not rated)
cm. - centimeters (1 inch = 2.54 cm)
kg/ha - kilograms per hectare (1 pound per acre
= 1.12 kg/ha)
* - first year data only.

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

Grasses

4		ns, Canada Dept. o		Seed Yields					1, 1,00 emper, 1909
Species	Cultivar	Origin	Hardiness	Kg/ha	Seed Ripe	Agron. Rating		One Year's Data	Comments
Bluegrass- Ke	ntucky (<u>Poa</u> p <u>rat</u>	tensis)							
	Altra	U.S.A.	9	250	7/20	7	41		·
	Common	Canada	9 9	100	7/14	6	61		Mildew
	${ t Cougar}$	U.S.A.	9	300	7/14	8	41	*	LITTUEM
	Delta	Canada	9	100	7/22	$\overset{\circ}{7}$	-		
	Dryland	Canada	9	70	7/18	5	51		
	Fylking	U.S.A.	9	100	7/14	7	33	*	
	Merion	U.S.A.	g.	100	7/20	5	41		Prot & mala
	Newport	U.S.A.	9	100	7/30	7	4 ! 		Rust & mildew
	Nugget	U.S.A.	9	150	7/15	8	- 36		D
	Park	U.S.A.	9	100	7/20	6	58		Rust & mildew
	Prato	Netherlands	9	200	7/20	7	38		Mildew
	SK-46	Poland	<u> 9</u>	220	7/15	7	58		Mildew
	T-No.34	Denmark	ý	150	7/15	$\overset{\prime}{7}$	56		Mildew
Bluegrass- Car	nada (P. compres	sa)	,	1,70	17:5	1	20		Rust & mildew
-	Common	Canada	7	100	8/1	6	_		
Bluegrass- Upl	land (<u>P</u> . g <u>laucan</u>	tha)	•	100	0/ 1	O			
•	Draylar	U.S.A.	9	200	7/14	5	36	*	
Bromegrass (<u>B</u>	comus inermis)								
	Achenbach	U.S.A.	9	220	8/15	5			
	Anto	Poland	ý	300	8/12	6	89		
	Carlton	Canada	9	400	8/12		=		
	Magna	Canada	9	375	8/12 8/11	9 8	102 107	*	
	Manchar	U.S.A.	9 9	250	8/15	$\overset{\circ}{7}$	107	^	
	Polar	U.S.A.	ý	325	8/11		102		
	Redpatch	Canada	9	150	8/11		102		
	S.A.C.	U.S.A.	ý	150	8/11		107		
	Saratoga	U.S.A.	9	150	8/15	6	94		
	ZK	Czechoslovakia	9	300	8/11		107		
Fe scu e - Chewi	ings (F. rubra v	ar. <u>commutata</u>)							
	Barfalla		9	200	7/21	5	43	*	
	B ra bantia	Netherlands	ý	350	8/1	7	4) -	••	
	Brabantia L.		9	100	8/1	5	_		
	DI ADMITORIA III	G1 0011)	2	100	0/ 1	フ	-		

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha		Agron. Rating	Ht.	One Year's Data	Comments
Fescue - Chewi	ings (<u>F</u> . <u>rubra</u> var	c. commutata) Co	nt¹d						
	Golfrood	Netherlands	7	120	7/30	6	64		
	Highlight	Netherlands	9	350	7/17	7	41		Snowmold resis
	Oasis	Netherlands	9	150	7/19	6	56		tance
Fescue - Creep	oing Red (F. rubra	<u>.</u>)							
	42 - 8	Netherlands	9	500	7/25	5	64	*	
	Arctared	U.S.A.	ý	400	7/20	6	64		
	Bargena	Netherlands	ý	50 0	7/25	6	74	*	
	Bergere	France	ý	300	7/25	7	69	*	
	Boreal	Canada	ý	600	7/30	9	64		
	Dawson	Netherlands	ý	180	7/19	7	46	*	
	Duraturf	Canada	ý	400	7/30	8	64		
	Echo	Denmark	ý	600	7/25	9	64	*	
	Elco	Denmark	ý	500	7/25	é	74	*	
	Elite	Denmark	ý	350	7/30	$\overset{\circ}{7}$			
	Erika	Sweden	ģ	150	7/21	6	53	*	
	Illahee	U.S.A.	9 9	200	7/31	6			
	K.L. 257	-	ý	400	7/25	6	79	*	
	Levocska	Czechoslovakia		500	7/25	8	74		
	Novorubra	Netherlands	9	400	7/25	8	64	*	
	N.F.G.	Germany	ý	400	7/25	8	71	*	
	Oberhaunstadte		ý	350	7/25	6	71	*	
	Odenrot	Germany	ý	350	7/25	6	66	*	
	Olds	Canada	ý	550	7/31	9	64		
	Pennlawn	U.S.A.	9	250	7/31	8	-		
	Polar	Sweden	9	200	7/25	6	- 53		
	Polo	Denmark	9	5 5 0	7/25	9	74	*	
	Rainier	U.S.A.	. 9	300	7/31	8	-		
	Reptans	Sweden	9	550	7/25	9	64		
	Rolax	Belgium	9	100	7/21	6	46		
	Roznovska	Czechoslovakia		300	7/27	8	40 71		
	Rubin	Sweden	9	400	7/27	9	66		
	Ruby	Netherlands	9 - 5	0.50	7/27	8	61		

Species	3 Cultivar	Origin	Hardiness	Seed Tieldo Kg/ha	Seed Ripo	Agron. Rating	Ht.	One Year's Data	Comments
Fescue - (Creeping Red (F. ru	<u>ıbra</u>) Cont'd							
	S-59	Great Britain	9	100	7/21	6	51		
	Sceempter	Netherlands	9	250	7/21	7	58		
	Sioux	Netherlands	9	300	7/21	8	JO 		
	Steinacher	Germany	9	400	7/21	8	66		
	Taborska	Czechoslovakia	9	400	7/25	8	66		
	Taca	Denmark	9	450	7/25	8	79		
	Tjelvar	Sweden	ý	500	7/25	7	76	*	
	Viking	Sweden	ý	200	$\frac{7}{2}$	8	70 	•	
Fescue - N	Meadow (<u>F</u> . p <u>ratens</u> i	is, F. elatior)							
	A01213	Sweden	9	250	7/31	8	81	*	
	AS-9	Sweden	ý	500	7/31	9	84		
	Barenza	Netherlands	ý	500	7/31	8	74		
•	Bergamo	Netherlands	ý	400	7/31	8	76 76		
	Dina	Poland	ý	250	7/31	8	66		
	Dufa	Netherlands	ý	350	7/31	8	76		
	Ensign	Canada	ý	450	7/31	8			
	Levocska	Czechoslovakia	9	350	7/31	9	- 81		
	Loken	Norway	ý	350	7/31		86	*	
	Marbury	England	9	450	7/31	9	80 81	*	
	Mefon	Canada	9	400	7/31	9 8	-	*	
	Mewa	Poland	ý	300	7/31		~		
	Mimer	Sweden	9	550 550		9	76		
	Mommersteeg's Hay	Netherlands	9	500 500	7/31	9	81		
	" Pasture	Netherlands	9	300 300	7/31	8	86		
	Ola	Poland	9	300 300	7/31	7	69		
	Paavo	Finland	9	-	7/31	8	74	v	
	Rossa	Netherlands		400	7/31	7	89	*	
	Roznovska	Czechoslovakia	9	400	7/31	7	79	*	
	R.v.P.	Belgium	9 8	500 500	7/31	7	84		
	S-53	-		500	7/31	7	69		
	- -	Great Britain	9	300	7/31	7	71		
	Sceempter	Netherlands	8	350	7/31	7	86		
	Sena	Sweden	9 - 6	_ 500	7/31	7	76	*	

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating		One Year's Data	Comments
Fescue - Meadow	(<u>F</u> . p <u>ratensis</u> , <u>F</u>	. <u>elatior</u>) Cont	†d						
	Sequana SK-6 Steinacher Trader Wehrdaer Wendelmoed	France Poland Germany Canada Germany Netherlands	9 9 9 9 9	450 450 350 350 450 300	7/31 7/31 7/31 7/31 7/31 7/31	7 8 8 8 8 8	76 81 89 86 74 81	* * *	
Fescue - Hard (<u>F</u>	• <u>ovina</u> var. <u>dur</u>	iuscula)							
	Durar	U.S.A.	9	2 5 0	7/21	9	79		
Fescue - Tall (<u>F</u>	• arundinaceae)								
	Alta Backafall Fawn Manade	U.S.A. Sweden U.S.A. France	9 9 9 9	350 250 200 150	7/31 7/31 7/31 7/31	7 7 7 6	81 79 64 51	*	
Oatgrass, Tall (Arrhenatherum <u>el</u>	atius)							
	Remus SK-5 Wena	Poland Poland Poland	9 9 9	150 150 150	7/30 7/18 7/18	6 6 6	107 107 107		Shatters Shatters Shatters
Oatgrass, Yellow	(Yellow trisetu	m - <u>Trisetum</u> fla	avescens)						
	Common	Germany	9	_	-	4	61		Seed Shattered
Orchardgrass (<u>Dac</u>	tylis glomerata)							
	Aries Chinook Danish Common Fala	Fran c e Canada Denmark Poland	7 9 1 9 -7-	75 110 - 150	7/25 7/25 - 7/25	6 7 - 7	74 81 - 107		

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating	Ht.	One Year's Data	Coments
Orchardgrass (Dactylis glomerat	<u>a</u>)							
	Hercules	Canada	6	75	8/10	3			
	Marton vasaria	?	9	90	7/25	7	76	*	
	Roznovska	Czechoslovakia	9	110	7/25	7	81		
	T-No. 15	Denmark	8	100	7/25	7	86		
	T-No. 16	Denmark	8	120	7/ 25	7	91		
	T-No. 17	Denmark	6	80	7/25	5	84		
	Tardus II	Sweden	7	140	7/25	6	94		
	Taurus	France	6	10	7/25	5	74		
eed Canarygras	ss (<u>Phalaris</u> <u>arun</u>	dinacea)							
	Common	Canada	9	50	7/21	7			O) II
	Frontier	Canada	ý	70	7/27	8	102		Shatters
	Luba	Poland	9	50	7/25	8	117		Shatters Shatters
dussian Wild-ry	ve (<u>Elymus</u> j <u>unceu</u>	<u>s</u>)				•			
	Common	Canada	9	220	8/2	6			
	Sawki	Canada	9	300	8/4	6	- 84		

Note: Russian Wild-rye seed is produced on 2 year old stands, and older, at Beaverlodge. Yields from first-year stands are negligible.

Ryegrasses (Lolium multiflorum)

Barenza (W)	Netherlands	_		550	9/16	5	
${ t Barwoltra}({ t W})$	Germany	_		550	9/16	5	_
Billion (W)	Germany	-		600	9/16	6	
Mowester (W)	Poland	-		900	9/16	5	_
Roznovsky (W)	Czechoslovakia	-		850	9/16	6	_
Tewera 113(W)	Netherlands	_		400	9/16	7	
Tewera 114(W)	Netherlands	-		550	9/16	5	
Vertas (W)	Netherlands	-		670	9/16	$\hat{7}$	_
m ,							
Tetrone	Germany	5	-8-	700	8/14		_

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating	Ht. cm.	One Year's Data	Comments
Ryegrass (L.)	p <u>erenra</u>)								
	Argo	Poland	5	500	8/25	5	51		
	Mommersteeg's	Netherlands	5	300	8/25	3	46		
	NK-100	U.S.A.	4	300	8/15	4	-		
	Norlea	Canada	7	500	8/22	6	41		
	Oregon Common	U.S.A.	6	200	8/23	4	46		
	Pelo	Netherlands	6	250	8/23	4	43		
	Roznovsky	Czechoslovakia	a 9	250	8/20	5	56		
	R.v.P. Pasture	Belgium	5	15 0	8/30	3	51		
	T-No.10	Denmark	5	500	8/25	6	_		
	T-No.12	Denmark	5	500	8/25	7	_		
	T-No.13	Denmark	5	500	8/25	6	_		
	T-No.14	Denmark	1		_	_	_		
	Viris	Sweden	5	500	8/23	6	_		
	Linn.	U.S.A.	6	100	8/18	4	-		
	_								

Note: At Beaverlodge perennial ryegrass exhibits good hardiness for the first winter but sustains considerable injury the second winter, responding much like a biennial.

Timothy (Pleum bertolonii, P. nodosum)

	Evergreen S-50 Sport	Sweden Great Britain France	9 9 9		400 250 300	8/25 8/25 8/25	7 6 6	69 48 51
Timothy (Phleum p	o <u>retense</u>)							
	Astra	Sweden	9		300	8/10	9	86
	Barenza	Netherlands	9		350	8/15	8	79
	Bounty	Canada	9		300	8/15	8	94
	Champ	Canada	9		200	8/7	8	61
	Clair	U.S.A.	9		50	8/20	4	
	Climax	Canada	9		420	8/10	9	91
	Daeno	-	9	0	250	8/10	8	81

Species	Cultivar	Origin	Hardiness	Seed Yields k/g/ha	Seed Ripe	Agron. Rating	Ht.	One Year's Data	Comment
imothy (Phleu	<u>m pretense</u>) Co	ont'd							
	Drummond	Canada	9	350	8/18	9	81		
	Engmo	Norway	9	450	8/20	8	_		
	Erecta	Belgium	9	400	8/8	8	76		
	Eskimo	Netherlands	9	300	8/8	9	84		
	Foka	Poland	9	250	8/8	$\overset{\leftarrow}{7}$	89		
	Glasnevin C	Gem) Ireland	9	50	8/11	7	64	*	
		Kahu) New Zealand	9	150	8/11	$\overset{'}{7}$	74	*	
	Heidemij	Netherlands	9	300	8/25	7	64		
	Hokuo	Japan	ý	250	8/7	8	84	*	
	Kaempe II	Sweden	ý	300	8/7	9	91	*	
	King	Netherlands	ý	200	8/22	8	64		
	Kor	Poland	9	270	8/7	7	89		
	L.84	Italy	ý	350	8/7	8	74		
	Landsberger		<u> 9</u>	350	8/5	8	81	*	
	Levocska	Czechoslovakia	ý	300	8/5	9	84		
	Lofar	Netherlands	9	300	8/20	8	04 84		
	Lorain	U.S.A.	9	300	8/15	9	04 91		
	No.90	Scotland	9	380	8/15	9	91 84		
	Oakmere	Great Britain	9	20	8/25	9 7	66	*	
	Odenwalder	Germany	9	375	8/5	•		*	
	Omnia	Sweden	9	375	8/5 8/15	9	74		
	Pajbjerg	Denmark				8	79		
	Para	Poland	9	280	8/9	9	76		
	Pecora	France	9	400	8/8	9	81		
	Phlewiola		9	350 230	8/20	7	81	v	
	Fnrew101a S - 48	Germany	9	230	8/7	9	89	×	
	· · · · · · · · · · · · · · · · · · ·	Great Britain	9	250	8/30	7	61		
	S-51	Great Britain	9	200	8/15	8	84		
	Sceempter	Netherlands	9	200	8/22	7	69		
	Scotia	Great Britain	9	250	8/11	9	86	*	
	SK-45	Poland	9	300	8/6	9	86		
	Spaths	Germany	9	340	8/5	8	79	*	
	T-48	Sweden	9	300	8/15	8	89		
	Timo	Netherlands	9	200	8/22	8	74		
	Vanadis	Sweden	9	4.00	8/15	9	86		
	Vetrovsky	Czechoslovakia	9 -10-	350	8/7	ģ	81		

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating		One Year's Data
Wheatgrass,	Crested (Agropyr	on cristatum)						
Wheatgrass,	Fairway Muzla Crested (<u>A</u> . <u>dese</u>	Canada Czechoslovakia rtorum)	9 9	500 500	8/22 8/22	9 8	69 71	
	Nordan Summit	U.S.A. Canada	9 9	400 450	8/28 8/25	8 9	- 81	
Wheatgrass,	Intermediate (\underline{A} .	intermedium)						
	Chief	Canada	9	700	9/15	9	127	
Wheatgrass,	Pubescent (A. tr	<u>ichophorum</u>)						
	Greenleaf Mandan	Canada U.S.A.	9 9	500 600	9/25 9/25	9 9	122 122	*
Wheatgrass,	Slender (A. track	hy <u>caulum</u>)						
	Primar	U.S.A.	9	3 50	9/1	7		
Wheatgrass,	Streambank (A. ri	<u>iparium</u>)						
	Sodar	U.S.A.	9	700	7/31	7	71	
Wheatgrass,	Tall (A. elongatu	<u>ım</u>)						
	Orbit	Canada	9	400	9/23	7	100	

Comments

Legumes

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating	Ht. cm.	One Year's Data	Comments
Alfalfa (<u>Medi</u>	icago sativum)								
Not	te: Alfalfa seed y	ields from thes	e studies an	re considered	low be	cause of	the c	ompetition	of other
	legumes for po	llinator insect	s. Yields n	reported here	expres	s the re	lative	yielding	ability
	of cultivars a	s determined by	seed produc	ed, flower de	evelopm	ent and	genera	l vigor.	·
	Alfa	Sweden	8	430	9/15	7	81		
	Apex	Sweden	8	230	9/15	8	79		
	Beaver	Canada	8	300	9/15	9	76		
	Dekalb Strain	U.S.A.	8	100	9/15	7	71		
	Europa	France	7	200	9/15	7	71		
	F D- 100	France	8	3 00	9/15	8	71		
	Grimm	U.S.A.	8	300	9/10	7	-		
	Hodoninska	Czechoslovakia		100	9/15	8	61		
	K isv arda i	Czechoslovakia		100	9/8	6	66	*	
	Kleszozewska	Poland	9	100	9/15	7	64		
	Ladak	Canada	9	2 00	9/10	8	64		
	Lucerna H652	Romania	9	100	9/10	7	66		
	Marton vasaria	Czechoslovakia		50	9/8	7	69	}{	
	Miechowska	Poland	9	100	9/15	7	64		
	Nagyszenasi	Czechoslovakia		100	9/15	6	66	*	
	Nitranka	Czechoslovakia		75	9/15	8	58		
	Ovar i	Czechoslovakia		75	9/15	8	71	*	
	Prerovska	Czechoslovakia		100	9/15	9	64		
	Rambler	Canada	8	150	9/15	ģ	58		
	Rhizoma	Canada	7	150	9/15	7	_		
	Roamer	Canada	8	150	9/15	8	69		
	Slovenska podu	najska)Czech.	9	100	9/15	8	66		
		Czechoslovakia		100	9/15	7	61		
	Vernal	U.S.A.	5	50	9/10	7			
	Vojteska kasti	cka) Czech.	8	300	9/10	9	58		
	" moravska	Czechoslovakia	8	100	9/10	7	66		
	" stupicka	Czechoslovakia		100	9/10	7	51		
Clover, Alsik	e (<u>Trifolium hybri</u>	idum)							
	Alon	Canada	6	300	8/30	6	28		Diploid
	Aurora	Canada	8 - 13 -	450	8/30	9	31		Diploid

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating	Ht.	One Year's Data	Comments
Clover, Alsik	ke (<u>Trifolium hybr</u>	ridum) Cont'd.							
	Iso	Finland	6	300	8/20	7			Tetraploid
	Kurir	Sweden	8	3 <i>E</i> 0	8/26	6	31		Diploid
	Odenwalder	Germany	6	150	8/20	6			Diploid
	Superfine	France	6	250	8/30	6			_iploid
	Svea	Section	8	450	8/26	7	31		Diploid
	Tammisto	Finland	7	350	8/20	8	_		Diploid
	Tetra	Sweden	7	400	8/26	9	33		Tetraploid
Clover, Red ((<u>Trifolium</u> p <u>ratens</u>	<u>se</u>)							
	Alaskaland	U.S.A.	6	300	9/5	8	_		Diploid S.C.
	Altaswede	Canada	7	500	8/26	9	58		Diploid S.C.
	Bjursele	Sweden	5	300	8/26	$\acute{7}$	36		Diploid S.C.
	Bollsta	Norway	6	300	9/10	9	•••		Diploid S.C.
Ces	sky Krajovylx	Czechoslovakia		800	9/1	6	46		Diploid S.C.
	Chlumeeky	Czechoslovakia		200	8/27	5	31		Diploid S.C.
	Disa	Sweden	5	_		_		*	Diploid S.C.
	Essi	Sweden	7	150	8/18	5	33	*	Diploid S.C.
Fe	etzers Kitzinger	Germany	5	300	8/14	5			Diploid S.C.
	Gloria	Poland	6	150	8/14	5	33		Diploid S.C.
	Hamidori	Japan	7	100	8/18	5	33	> \$	Diploid S.C.
	Hermes	Sweden	4	-		_	-		Diploid S.C.
He	eyes Hohenheimer	Germany	5	200	8/13	5	38		Diploid S.C.
	Hungarapoli	Hungary	$\hat{7}$	300	8/14	6	43		Tetra. D.C.
	Jicinsky	Czechoslovakia		300	8/30	6	31		Diploid S.C.
	Jo. 37	Finland	7	300	8/30	7	→ —		Diploid S.C.
	Kuhn	Netherlands	7	100	8/26	5	31	*	Diploid D.C.
	Kustrask	Sweden	6	300	9/10	7	ノ・ 		Diploid S.C.
	Lakeland	U.S.A.	6	-	8/18	5	26		Diploid D.C.
	Lasalle	Canada	6	150	8/30	6	20		Diploid D.C.
	Lembkes	Germany	4		0/ JU 	_	_		Diploid S.C.
	Merkur	Sweden	5			Ę.	4		prhrord n.o.
	Molstad	Norway	5 5	300	9/10	6	5 3		Diploid S.C.
	Moistad Odenwalder	•	5	200					
	Offer	Germany Sweden	6 6 1,		8/13 9/2	ž	38 48		Diploid D.C. Diploid S.C.

Species	Cultivar	Origin	Hardiness	Seed Yields Kg/ha	Seed Ripe	Agron. Rating	Ht.	One Year's Data	Comments
lover, Red (Trifolium pratense) Contid.							
	Ottawa	Canada	6	50	8/26	5	31		Diploid D.C.
	Oygard		5	250	9/10	7			Diploid S.C.
	Pajbjerg Bora	Denmark	7	350	8/26	6	51	*	Diploid S.C.
	Podtatranska E.			100	8/14	5	36		Diploid D.C.
	Prerovsky dvon.			400	8/14	5	38		Diploid D.C.
	Rea	Sweden	7	300	8/27	9	64		Tetra. S.C.
	Resistenta	Sweden	7	35 9	9/1	7	-		Diploid S.C.
	Robina	Netherlands	7	100	8/13	5	31		Diploid S.C.
	S 123	Great Britain	4	-	•	-	_		Diploid S.C.
	Sapporo	Japan	4	150	8/14	5	31		Diploid S.C.
	S.V. 059	Sweden	5	300	8/14	7			Tetra. S.C.
	Tammisto	Finland	7	300	8/26	6	51		Diploid S.C.
	Tepo	Finland	6	200	8/28	7	_		Tetra. S.C.
	Teroba	Netherlands	7	50	8/13	5	31	*	Diploid S.C.
	Tetri	Netherlands	7	250	8/14	6	41		Tetra. S.C.
	Tigid W.S.R.11	-	6	350	8/30	6	<u>.</u>		Tetra. S.C.
	Transilvania	Romania	6	150	8/14	5	36		Diploid S.C.
	Trebicsky E.	Czechoslovakia		150	8/18	4	31		Diploid S.C.
	Tripo	Norway	7	400	8/30	9	71		Tetra. S.C.
	Tuna	Sweden	6	300	8/30	8	_		Diploid S.C.
	U - 039	Sweden	4	-		-	_		Diploid S.C.
	Ultuna	Sweden	4	200	8/28	6			Diploid S.C.
	Ulva	Sweden	6	300	8/28	5			Tetra. S.C.
	Vidarshov		6	350	9/15	7	_		Diploid D.C.
	Viglassla	Czechoslovakia	· ·	500	8/30	6	43		Diploid S.C.
	Viola	Poland	7	200	8/30	5	41		Diploid S.C.
lover, White	(Trifolium repens))							
	Dutch Common	Canada	6	500	8/20	6			
	Fries Groninger	Netherlands	7	150	8/30	5	15		
	Gigant	Gernmany	7	150	8/30	5	15	¥	
	Kent	Great Britain	7	100	8/20	5 5	13		
	Kivi	Sweden	7	100	8/30	4	13	*	
			,	, 50	0, 10	4	- 7	**	

Clover, White			Hardiness	Kg/ha	Seed Ripe	Agron. Rating	Ht.	Year's Data	Comments
	(Trifolium repen	<u>s</u>) Cont'd							
	Merit	U.S.A.	7 -	100	8/26	5	15	*	
	Nora	Sweden	7	350	8/26	5	43		
	0v c ak	Czechoslovakia	8	200	8/30	7	13		
	Pilgrim	U.S.A.	6	50	8/20	5	13		
	Podk ow a	Poland	8	200	8,/20	5	10		
	T-No.4	Denmark	7	50	8/15	5	_		
	Tehoku 1	Japan	8	50	8/26	5	15	*	
	Viglassba	Czechoslovakia	8	150	8/30	5	15		
	V. Kamekes	Germany	8	100	8/30	5	10	*	
Sainfoin (<u>Onob</u>	rychis spp.)								
	Busciansky	Czechoslovakia	8	400	8/15	5	66		
	Esk i	U.S.A.	8	475	8/15	6	46		
	SK-48	Poland	8	300	8/15	5	48		
	Sparceta ICA 6	Romania	8	400	8/22	$\overset{\frown}{7}$	71		
	Visnovsky	Czechoslovakia	8	350	8/15	6	48		
Trefoil (Lotus	corniculatus)								
	Cascade	U.S.A.	5	300	8/9	7	***		
	$E_{ t mpire}$	U.S.A.	6	450	8/15	$\dot{7}$			
	Granger	U.S.A.	5	300	8/10	7			
	Leo	Canada	8	700	8/30	8	43		
	Malejovsky	Czechoslovakia	7	400	8/15	6	45 38		
	Mansfield	U.S.A.	6	400	8/10	7)0 -		
	Taborsky	Czechoslovakia	7	500	8/20	7	31		
	Tana	U.S.A.	6	200	8/15	7	ار 		
	Trebicsky E.	Czechoslovakia	7	500	8/15	6	31		
	Viglassky	Czechoslovakia	8	400	8/20	7	31		
	Vigiasbay	U.S.A.	5	300	8/30	6	ク! -		