

**British Columbia**

**Alberta**

# **Western Canadian Grass Seed Testing Program**



## **2005 Report**

**Saskatchewan**

**Manitoba**

## **INTRODUCTION**

This report provides a summary of the grass seed trials conducted under the Western Grass Testing Program during 2005. The main objective of these trials is to determine the seed production potential and adaptability of grass varieties for contract seed production for the domestic and export market. All attempts have been made to ensure the success of these trials, however, at times environmental conditions may adversely affect the yield results regardless of the management practices followed.

We thank the following companies for their sponsorship of our 2005 research endeavors and look forward to cooperating and working with them during the 2006 production year.

Alberta Research Council  
Agriculture & Agri-Food Canada  
Barenbrug USA, Inc.  
Boreal Plant Breeding  
Brett-Young Seeds Ltd.  
Deutsche Saatveredelung  
DLF-International  
John Zuelzer & Son Canada Ltd.  
Moore Seed Processors Inc.  
Newfield Seeds Company Inc.  
Peace Pedigreed Seed  
Peace River Seed Co-op Ltd.  
The Scotts Company  
Tomorrow's Seed  
Turf-Seed, Inc.

## Data Collection Procedures

Seed Yield	reported on a clean seed basis in $\text{kg ha}^{-1}$ ( $\text{kg ha}^{-1} \times 0.9 = \text{lbs ac}^{-1}$ )
Harvest Date	date the variety was swathed.
Plant Height	measured in centimeters and is the height of the plant at harvest from ground level to the tip of the seed head ( $1 \text{ cm} \times 0.3937 = \text{inches}$ ).

## Trial Procedures

For information on specific trial procedures, contact the respective location representative listed on the following page.

### \* Please Note \*

Some varieties in this report have been tested for shorter periods of time than others. It is advised not to use average yield figures to make variety comparisons for single-year data. Only after a **minimum** of three years of testing should data be considered as 90% reliable. In some cases, data may not be reported due to extreme variations that cannot be accounted for in the statistical design.

Statistical information for this report was generated through an Analysis of Variance (ANOVA). Least significant difference (LSD) values are presented at the bottom of each table when statistically significant differences are present using the 5% level of significance. This means there is a 95% probability that you can reject the hypothesis that the treatments are the same or there is only a 5% probability that the treatment differences occurred by chance. If the difference in treatment values is less than the LSD value, the treatments are not considered to be significantly different.

### Disclaimer

Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement is implied.

## WGST Co-operators and Technical Support

Bow Island & Brooks	Henry Najda (Testing Co-ordinator) Alberta Agriculture & Rural Development Crop Diversification Centre South SS 4, Brooks, AB. T1R 1E6 Phone (403) 362-1346 Fax (403) 362-1306 <a href="mailto:henry.najda@gov.ab.ca">henry.najda@gov.ab.ca</a>	Art Kruger (Data Processing & Reporting) Alberta Agriculture & Rural Development Crop Diversification Centre South SS 4, Brooks, AB. T1R 1E6 Phone (403) 362-1349 Fax (403) 362-1306 <a href="mailto:art.kruger@gov.ab.ca">art.kruger@gov.ab.ca</a>
Beaverlodge	Dr. Nigel Fairey Agriculture & AgriFood Canada Box 29, Beaverlodge, AB. T0M 0C0 Phone (780) 354-5116 Fax (780) 354-8171 <a href="mailto:faireyn@agr.gc.ca">faireyn@agr.gc.ca</a>	Lois Connelly Agriculture & AgriFood Canada Box 29, Beaverlodge, AB. T0M 0C0 Phone (780) 354-5141 Fax (780) 354-8171 <a href="mailto:connellyl@agr.gc.ca">connellyl@agr.gc.ca</a>
Fort St. John	Colleen Giesbrecht Peace Region Forage Seed Association Box 6135 Fort St. John, BC. V0C 1N0 Phone (877) 630-2198 Fax (250) 630-2115 <a href="mailto:sburton@pris.bc.ca">sburton@pris.bc.ca</a>	Lothar Torheiden Peace Region Forage Seed Association Phone (250) 785-4778 <a href="mailto:lothartorheiden@telus.net">lothartorheiden@telus.net</a>
Outlook & Melfort	Dr. Bruce Coulman Department of Plant Sciences University of Saskatchewan Saskatoon, SK. S7N 5A8 Phone (306) 966-1387 Fax (306) 966-5015 <a href="mailto:bruce.coulman@usask.ca">bruce.coulman@usask.ca</a>	Tim Nelson Saskatoon, SK. Phone (306) 956-7233 Fax (306) 956-7247 <a href="mailto:nelson@agr.gc.ca">nelson@agr.gc.ca</a>  Linden McFarlane Melfort, SK. Phone (306) 752-2776 Ext. 227 Fax (306) 752-4911 <a href="mailto:mcfarlanel@agr.gc.ca">mcfarlanel@agr.gc.ca</a>
Arborg & Portage La Prairie	Heather McBey Manitoba Forage Seed Association Box 2000 Arborg, MB. R0C 0A0 Phone (204) 376-3309 Fax (204) 376-3311 <a href="mailto:mcbey@forageseed.mb.ca">mcbey@forageseed.mb.ca</a>	Roger Burak Manitoba Forage Seed Association Box 2000 Arborg, MB. R0C 0A0 Phone (204) 376-3314 Fax (204) 376-3311 <a href="mailto:rburak@forageseed.mb.ca">rburak@forageseed.mb.ca</a>  Gary Coukell ICMS Box 67, Highway 1A East Portage La Prairie, MB. R1N 3B2 Phone (204) 857-6609 Fax (204) 239-4478 <a href="mailto:coukell@icms.inc.com">coukell@icms.inc.com</a>

## Table of Contents

	<b>Page No.</b>
Protocol for Western Grass Seed Testing (WGST) Program .....	1
Bluegrass, Kentucky	
2002.....	4
2003.....	5
2004.....	6
Summary .....	8
Bromegrass, Smooth	
2003.....	10
2004.....	11
Summary .....	12
Fescues, Fine	
2003.....	13
2004.....	15
Summary .....	17
Fescue, Tall	
2002.....	18
2003.....	19
2004.....	20
Summary .....	21
Native Grasses	
2003.....	22
Summary .....	23
Orchard Grass	
2003.....	24
Summary .....	25
Ryegrass, Annual	
2005.....	24
Ryegrass, Perennial	
2004.....	26
Summary .....	28
Timothy	
2002.....	29
2003.....	29
2004.....	30
Summary .....	31
2005 Seeding Summary Table .....	32
Appendix 1	
Entry Application Form .....	33

# Protocol for Western Grass Seed Testing (WGST) Program

Revised January 2005

## 1. Research Sponsorship

The research sponsorship of \$120 CAN/entry/year/location is requested on an annual basis, as years of production will vary with the species being tested, and applies to the establishment year as well. Alberta Agriculture, Food and Rural Development will administer funds for the Western Grass Seed Testing Program.

## 2. Eligibility of Entries

Released and experimental lines of all tame and native grass species will be considered if they are of interest to commercial seed companies. We reserve the right not to initiate tests:

- if seed arrives late
- if there is lack of space in any year at a particular location
- if there are too few entries in any year for a particular location

## 3. Seed Requirements and Deadline for Seed Entry

The applicant will provide for **EACH TEST LOCATION**:

- 50 gm bentgrass, Kentucky bluegrass or timothy
- 100 gm of orchardgrass; creeping red, chewings, hard, meadow, sheep or tall fescue; annual or perennial ryegrass
- 200 gm of meadow or smooth brome grass, wheatgrasses

Submitted seed shall be supplied by **March 1** of the establishment year and will include the percent germination and relative maturity (early, medium or late) of each variety. Please indicate whether the submission is a forage or turf type. For fescues please indicate whether the submission is a creeping, chewings, hard, meadow, sheep or tall fescue.

## 4. Use of Seed

Seed submitted will only be used to establish the agreed upon trials. The seed will **NOT** be used for increase, selection or distribution.

## 5. Test Locations

1. Fort St. John, British Columbia
2. Beaverlodge, Alberta
3. Brooks, Alberta (irrigated)
4. Bow Island, Alberta (irrigated)
5. Vegreville, Alberta
6. Melfort, Saskatchewan
7. Outlook, Saskatchewan (irrigated)
8. Portage La Prairie, Manitoba
9. Arborg, Manitoba

The applicant selects the locations where their material is to be tested.



## 6. Test Description

Due to plot equipment differences and land availability at the various test sites, certain conditions must be met in establishing trials. Each test will be a randomized complete block consisting of a minimum of 4 replicates. No test will have more than 25 entries of a particular species. Plots will be seeded at appropriate seeding rates for the species being tested and normal cultural practices for the area will be carried out. A minimum of 3 sq. m will be harvested.

Species, check varieties and years of testing (establishment year and seed production years):

- |                                    |                                    |
|------------------------------------|------------------------------------|
| Bentgrasses - 18th Green - 4 yrs.  | Tall fescue - Courtenay - 4 yrs    |
| Kentucky bluegrass - Abbey - 4 yrs | Orchardgrass - Kay - 3 yrs         |
| Meadow brome - Fleet - 3 yrs       | Annual ryegrass - Aubade - 1 yr    |
| Smooth brome - Carlton - 4 yrs     | Perennial ryegrass - Norlea - 2 yr |
| Meadow fescue - Mimer - 4 yrs      | Timothy - Climax - 4 yrs           |
| Red fescue - Boreal - 3 yrs        |                                    |

Information to be recorded will include clean seed yield, % stand in fall and spring, plant height, harvest date and if available, climatic data for each test site.

## **7. Publication of Results**

Data will undergo appropriate statistical analyses and each applicant will be provided with an annual report. Information on varieties will be made available in various annual reports and to seed producers upon request.

- 8.** All reasonable care will be taken to ensure a successful test, however, a guarantee cannot be made that a particular test will be successful. If required a test will be reseeded.

## **9. For further information, contact:**

Henry Najda, P.Ag.  
Grass Seed Agronomist  
Crop Diversification Centre South  
Alberta Agriculture, Food and Rural Development  
SS 4  
Brooks, Alberta, Canada T1R 1E6  
Tel 403-362-1346, Fax 403-362-1306  
[henry.najda@gov.ab.ca](mailto:henry.najda@gov.ab.ca)



**Kentucky Bluegrass 2002 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Brett-Young	Orfeo	361	25-Jul-05	70
DLF-International	Blue Knight	322	25-Jul-05	62
	Broadway	376	25-Jul-05	65
DSV	214/94	269	25-Jul-05	71
	POPR 97561	320	25-Jul-05	68
	POPR 97562	320	25-Jul-05	71
	POPR 97563	268	25-Jul-05	71
	POPR 97564	360	25-Jul-05	69
	POPR 97567	300	25-Jul-05	66
	POPR 97570	304	25-Jul-05	66
	POPR 97571	279	25-Jul-05	67
	POPR 97573	421	25-Jul-05	67
	POPR 97576	333	21-Jul-05	65
Turf-Seed	Blacksburg II	339	21-Jul-05	68
	Midnight Star	366	21-Jul-05	68
Check	Abbey	666	18-Jul-05	70
	Mean	350	.	68
	CV (%)	19.1		8.2
	LSD (0.05)	95		ns

**Kentucky Bluegrass 2002 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DSV	POPR 97570	247	22-Jul-05	65
	POPR 97571	185	22-Jul-05	71
	POPR 97573	532	22-Jul-05	71
	POPR 97576	385	22-Jul-05	69
Turf-Seed	Blacksburg II	317	22-Jul-05	72
	Midnight Star	324	22-Jul-05	73
Check	Abbey	620	22-Jul-05	67
	Mean	373	.	69
	CV (%)	16.0		5.7
	LSD (0.05)	89		ns

**Kentucky Bluegrass 2003 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DSV	214/94	648	22-Jul-05	72
	N 522	385	22-Jul-05	75
	POPF 00577	305	15-Jul-05	74
	POPF 00578	175	22-Jul-05	72
	POPF 00580	309	15-Jul-05	76
	POPR 97561	491	22-Jul-05	74
	POPR 97562	486	22-Jul-05	69
	POPR 97563	395	15-Jul-05	73
	POPR 97564	705	22-Jul-05	74
	POPR 97567	498	22-Jul-05	73
	POPR 99575	430	22-Jul-05	69
Check	Abbey	998	15-Jul-05	76
	Mean	485	.	73
	CV (%)	24.6		8.7
	LSD (0.05)	172		ns

**Kentucky Bluegrass 2004 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Boreal Plant Breeding	Halti (ab)	421	29-Jun-05	50
Brett-Young	A96-425	503	25-Jul-05	66
	A96-43	339	25-Jul-05	69
	A98-146	567	25-Jul-05	67
	A98-475	302	25-Jul-05	63
	A99-2573	450	25-Jul-05	69
DLF-International	A98-139	375	25-Jul-05	71
	DLF 769037	511	25-Jul-05	64
	HB95 Hybrid	319	25-Jul-05	62
	HB96 Hybrid	282	25-Jul-05	67
	Platini	309	25-Jul-05	70
	SCR-320	506	25-Jul-05	66
	Slezanka	429	25-Jul-05	76
Scotts	HB 329	509	25-Jul-05	61
	HB 342	259	25-Jul-05	64
Check	Abbey	719	25-Jul-05	63
	Mean	427	.	65
	CV (%)	25.4		6.1
	LSD (0.05)	156		6

ab - Alpine Bluegrass

**Kentucky Bluegrass - DSV 2004 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DSV	N 522	432	25-Jul-05	56
	POPF 00577	453	18-Jul-05	69
	POPF 00578	253	18-Jul-05	72
	POPF 00580	452	18-Jul-05	70
	POPR 00582	554	21-Jul-05	67
	POPR 00589	429	25-Jul-05	59
	POPR 00593	448	25-Jul-05	56
	POPR 97564	443	25-Jul-05	71
	POPR 99575	501	25-Jul-05	64
	ZPP 81-002	205	25-Jul-05	63
	ZPP 94-320	269	25-Jul-05	59
	ZPP 94-343	404	25-Jul-05	47
	ZPP 95-776	267	25-Jul-05	65
	Check	Abbey	715	21-Jul-05
	Mean	416	.	63
	CV (%)	23.6		12.1
	LSD (0.05)	140		10

**Kentucky Bluegrass 2004 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Boreal Plant Breeding	Halti (ab)	1016	30-Jun-05	21
DSV	POPR 00582	711	15-Jul-05	30
	POPR 00589	823	22-Jul-05	27
	POPR 00593	807	22-Jul-05	29
	POPR 97564	1007	22-Jul-05	29
	ZPP 81-002	672	22-Jul-05	29
	ZPP 94-320	590	22-Jul-05	28
	ZPP 94-343	1238	22-Jul-05	26
	ZPP 95-776	562	15-Jul-05	25
Check	Abbey	1534	22-Jul-05	29
	Mean	896	.	27
	CV (%)	22.0		10.0
	LSD (0.05)	287		4

ab - Alpine Bluegrass

## Summary of seed yield (kg ha<sup>-1</sup>) for Kentucky Bluegrass in Western Canada 2003-2005

Year of Seeding	Company	Variety	Seed yield / production year						
			Bow Island			Brooks			
			1	2	3	1	2	3	
2002	Brett-Young	Orfeo	1032	687	361				
		DLF - International	Blue Knight	869	428	322			
	DSV		Broadway	878	651	371			
			214/94	1118	496	269			
			POPR 97561	808	431	320			
			POPR 97562	622	523	320			
			POPR 97563	670	384	268			
			POPR 97564	1139	779	360			
			POPR 97567	521	332	300			
			POPR 97570	837	503	304	766	457	247
			POPR 97571	836	457	279	696	412	185
			POPR 97573	907	595	421	992	689	532
		POPR 97576	739	500	333	665	481	385	
		Turf-Seed	Blacksburg II	814	439	339	644	520	317
			Midnight Star	803	538	366	588	437	324
Check	Abbey	1506	989	666	1015	519	620		
2003	DSV	214/94				583	648		
		N 522				410	385		
		POPF 00577				420	305		
		POPF 00578				290	175		
		POPF 00580				412	309		
		POPR 97561					491		
		POPR 97562				408	486		
		POPR 97563				447	395		
		POPR 97564				530	705		
		POPR 97567				350	498		
		POPR 99575				450	430		
	Check	Abbey				662	998		

**Summary of seed yield (kg ha<sup>-1</sup>) for Kentucky Bluegrass in Western Canada 2003-2005**

Year of Seeding	Company	Variety	Seed yield / production year					
			Bow Island			Brooks		
			1	2	3	1	2	3
2004	Boreal Plant Breeding	Halti	421			1016		
	Brett-Young	A96-425	503					
		A96-43	339					
		A98-146	567					
		A98-475	302					
		A99-2573	450					
	DLF-International	A98-139	375					
		DLF 769037	511					
		HB95 Hybrid	319					
		HB96 Hybrid	282					
		Platini	309					
		SCR-320	506					
		Slezanka	429					
	DSV	N 522	432					
		POPF 00577	453					
		POPF 00578	253					
		POPF 00580	452					
		POPR 00582	554			711		
		POPR 00589	429			823		
		POPR 00593	448			807		
		POPR 97564	443					
		POPR 99575	501					
		POPR 975643				1007		
		ZPP 81-002	205			672		
		ZPP 94-320	269			590		
		ZPP 94-343	404			1238		
		ZPP 95-776	267			562		
	Scotts	HB 329	509					
		HB 342	259					
	Check	Abbey	717			1534		

**Smooth Bromegrass 2003 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Newfield Seeds	Peak	18	10-Aug-05	130
Check	Carlton	67	10-Aug-05	127
	Mean	43	.	129
	CV (%)	114.6		4.6

Note : Did not produce fertile tillers, mostly forage

**Smooth Bromegrass 2003 Seed Production Trial  
Melfort, Saskatchewan 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Newfield Seeds	Peak	744	4-Aug-04	.
Check	Carlton	1115	4-Aug-05	.
	Mean	930	.	.
	CV (%)	19.9		

**Smooth Bromegrass 2003 Seed Production Trial  
Outlook, Saskatchewan 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Newfield Seeds	Peak	<b>No data reported</b>		
Check	Carlton	<b>seed shattered out in swath</b>		
	Mean	.	.	.
	CV (%)			

**Smooth Bromegrass 2003 Seed Production Trial  
Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Newfield Seeds	Peak			
Check	Carlton			
		<b>No data reported Due to hail storm</b>		
	Mean	.	.	.
	CV (%)			

**Smooth Bromegrass 2004 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Barenbrug USA	Bareno	369	29-Jul-05	89
	Doina	923	29-Jul-05	106
	Olga	928	29-Jul-05	106
Check	Carlton	960	29-Jul-05	112
	Mean	795	.	103
	CV (%)	20.4		10.8
	LSD (0.05)	259		ns

Bareno - 50 - 75 % of stand winter killed



## Summary of seed yield (kg ha<sup>-1</sup>) for Smooth Bromegrass in Western Canada 2004-2005

Year of Seeding	Company	Variety	Seed yield / production year								
			Brooks	Beaverlodge		Melfort		Outlook		Arborg	
			1	1	2	1	2	1	2	1	2
2003	Newfield Seeds	Peak		557	18	563	744	1156		683	
	Check	Carlton		520	67	845	1115	1164		993	
2004	Barenbrug USA	Bareno	369								
		Doina	923								
		Olga	928								
	Check	Carlton	960								

**Note:** Beaverlodge 2<sup>nd</sup> production year of 2003 seeding no fertile tillers produced, mostly forage.  
 Outlook 2<sup>nd</sup> production year of 2003 seeding no harvest data due to seed shatter after swathing  
 Brooks 1<sup>st</sup> production year of 2004 seeding, Bareno 50-75% winter kill

**Creeping Red Fescue 2003 Seed Production Trial  
Bow Island, Alberta 2005 Results**

<u>Company</u>	<u>Variety</u>	<u>Seed Yield (kg ha<sup>-1</sup>)</u>	<u>Harvest Date</u>	<u>Plant Height (cm)</u>
Turf-Seed	Florentine GT	1740	14-Jul-05	81
Check	Boreal	2009	11-Jul-05	82
	Mean	1875	.	81
	CV (%)	5.9		7.7

**Creeping Red Fescue 2003 Seed Production Trial  
Brooks, Alberta 2005 Results**

<u>Company</u>	<u>Variety</u>	<u>Seed Yield (kg ha<sup>-1</sup>)</u>	<u>Harvest Date</u>	<u>Plant Height (cm)</u>
Turf-Seed	Florentine GT	1709	22-Jul-05	90
Check	Boreal	1602	15-Jul-05	90
	Mean	1656	.	90
	CV (%)	11.3		11.6

**Fine Fescue 2003 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Canterra/Lamorna	LEL 2002 (cr)	909	27-Jul-05	84
Newfield Seeds	Rocky (sh)	477	27-Jul-05	79
Turf-Seed	Little Bighorn (bh)	651	22-Jul-05	81
Check	Boreal (cr)	696	27-Jul-05	91
	Mean	683	.	84
	CV (%)	29.5		9.5
	LSD (0.05)	323		ns

bh - Blue Hard Fescue  
cr - Creeping Red Fescue  
sh - Sheep Fescue

**Fine Fescue 2003 Seed Production Trial  
Fort St. John, British Columbia 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB1 (cr)	583	23-Jul-05	.
Brett-Young	FRP 101 (cr)	145	23-Jul-05	.
	Swing (cr)	261	23-Jul-05	.
Canterra/Lamorna	LEL 2002 (cr)	387	23-Jul-05	.
Turf-Seed	Aberdeen (cr)	407	23-Jul-05	.
	Florentine GT (cr)	192	23-Jul-05	.
	Inverness (cr)	284	23-Jul-05	.
	Little Bighorn (bh)	646	18-Jul-05	.
Check	Boreal (cr)	386	23-Jul-05	.
	Mean	366	.	.
	CV (%)	35.4		
	LSD (0.05)	189		

bh - Blue Hard Fescue  
cr - Creeping Red Fescue

**Fine Fescue 2003 Seed Production Trial  
Outlook, Saskatchewan 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Newfield Seeds	Rocky (sh)	569	22-Aug-05	.
Check	Boreal (cr)	1536	22-Aug-05	.
	Mean	1053	.	.
	CV (%)	31.0		

cr - Creeping Red Fescue  
sh - Sheep

**Creeping Red Fescue 2004 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB2	1302	22-Jul-05	83
DSV	FRRR 00193	963	21-Jul-05	79
	FRRR 02201	962	21-Jul-05	74
	FRRR 99182	833	21-Jul-05	80
	ZFRRR 93-110	512	21-Jul-05	81
	ZFRRR 93-118	960	22-Jul-05	79
John Zuelzer & Son	Reverent	1057	22-Jul-05	83
Peace Pedigreed Seed	Oracle	1271	21-Jul-05	77
Peace River Seed Co-op	B-1324	841	21-Jul-05	81
	Eugene	1164	22-Jul-05	80
Check	Boreal	1176	22-Jul-05	81
	Mean	1004	.	80
	CV (%)	17.7		5.9
	LSD (0.05)	257		ns

**Creeping Red Fescue 2004 Seed Production Trial  
Fort St. John, British Columbia 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB2	955	22-Jul-05	.
John Zuelzer & Son	Reverent	872	22-Jul-05	.
Peace Pedigreed Seed	Oracle	751	22-Jul-05	.
Peace River Seed Co-op	B-1324	463	22-Jul-05	.
	Eugene	813	22-Jul-05	.
Check	Boreal	998	22-Jul-05	.
	Mean	809	.	.
	CV (%)	17.6		
	LSD (0.05)	215		

**Creeping Red Fescue 2004 Seed Production Trial  
Melfort, Saskatchewan 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Peace Pedigreed Seed	Oracle	747	22-Jul-05	.
Check	Boreal	812	22-Jul-05	.
	Mean	780	.	.
	CV (%)	12.4		

**Creeping Red Fescue 2004 Seed Production Trial  
Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Peace Pedigreed Seed	Oracle	186	20-Jul-05	.
Check	Boreal	177	20-Jul-05	.
	Mean	181	.	.
	CV (%)	49		

## Summary of seed yield (kg ha<sup>-1</sup>) for Fine Fescues in Western Canada 2004-2005

Year of seeding	Species	Company	Variety	Seed yield / production year												
				Bow Island		Brooks		Beaverlodge		Fort St. John		Melfort	Outlook		Arborg	
				1	2	1	2	1	2	1	2	1	1	2	1	
2003	Creeping red	AAFC Beaverlodge	BRFB1							604	583					
		Brett-Young	FRP 101							402	145					
			Swing							262	261					
		Peace Pedigreed Seed	LEL 2002			1430	909			667	387					
		Turf-Seed	Aberdeen							622	407					
			Florentine GT	1444	1740	1392	1709			250	192					
			Inverness							465	284					
	Blue hard		Little Bighorn					799	651	350	646					
	Sheep	Newfield Seeds	Rocky					533	477				361	569		
	Creeping red	Check	Boreal	2268	2029	2231	1620	1208	696	573	386		990	1536		
2004	Creeping red	AAFC Beaverlodge	BRFB1					1302		955						
		DSV	FRRR 00193					963								
			FRRR 02201					962								
			FRRR 99182					833								
			ZFRRR 93-110					512								
			ZFRRR 93-118					960								
		John Zuelzer & Son	Reverent					1057		872						
		Peace Pedigreed Seed	Oracle					1271		751		747				186
		Peace River Seed	B-1324					841		463						
			Eugene					1164		813						
		Check	Boreal					1176		998		812				177

**Tall Fescue 2002 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Turf-Seed	Endure	1517	14-Jul-04	95
	Silverstar	1791	18-Jul-05	96
	Tomahawk GT	2079	18-Jul-05	103
Check	Courtenay	1738	14-Jul-05	119
	Mean	1781	.	103
	CV (%)	23.6		6.1
	LSD (0.05)	ns		10

**Tall Fescue 2002 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Turf-Seed	Endure	1561	22-Jul-05	98
	Silverstar	1712	22-Jul-05	101
	Tomahawk GT	1698	22-Jul-05	101
Check	Courtenay	1539	22-Jul-05	132
	Mean	1627	.	108
	CV (%)	13.4		6.6
	LSD (0.05)	ns		11

**Tall Fescue 2003 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	Hykor (festulolium)	1869	14-Jul-05	125
Turf-Seed	Matador GT	2541	18-Jul-05	96
	Silverado II	2786	18-Jul-05	99
	Tar Heel II	2009	11-Jul-05	77
Check	Courtenay	1952	14-Jul-05	129
	Mean	2231	.	105
	CV (%)	13.4		5.2
	LSD (0.05)	580		8

**Tall Fescue 2003 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Turf-Seed	Matador GT	3036	29-Jul-05	106
	Silverado II	2666	29-Jul-05	104
	Tar Heel II	995	15-Jul-05	83
Check	Courtenay	2219	22-Jul-05	122
	Mean	2229	.	104
	CV (%)	12.8		6.6
	LSD (0.05)	456		11

**Tall Fescue 2003 Seed Production Trial  
Fort St. John, British Columbia 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Turf-Seed	Matador GT	.	.	.
	Silverado II	.	.	.
	Tar Heel II	.	.	.
Check	Courtenay	.	.	.

**Trial discontinued  
winter killed**



**Tall Fescue 2003 Seed Production Trial  
Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	Hykor (f)	402	25-Jul-05	.
Tomorrow's Seed	TS-T3	610	25-Jul-05	.
Check	Courtenay	632	25-Jul-05	.
		548		
	Mean	33.5	.	.
	CV (%)	ns		
	LSD (0.05)			

f -Festulolium

**Tall Fescue 2004 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Scotts	8015	3235	21-Jul-05	95
	K01-E03	3348	21-Jul-05	93
Check	Courtenay	2637	18-Jul-05	111
	Mean	3073	.	99
	CV (%)	15.7		4.6
	LSD (0.05)	ns		8

**Summary of seed yield (kg ha<sup>-1</sup>) for Tall Fescues in Western Canada 2003-2005**

Year of seeding	Company	Variety	Type	Seed yield / production year										
				Bow Island			Brooks			Fort St. John		Arborg		
				1	2	3	1	2	3	1	2	1	2	
2002	Turf-Seed	Endure	Turf	1845	1816	1517	1406	1396	1561					
		Silverstar	Turf	2702	2550	1791	1470	1520	1712					
		Tomahawk GT	Turf	2715	2658	2079	1602	1721	1698					
	Check	Courtenay	Forage	2239	1977	1738	1265	1431	1539					
2003	DLF-International	Hykor (f)	Forage	1309	1869							113	402	
	Tomorrow's Seed	TS-T3										597	610	
	Turf-Seed	Matador GT	Turf	1770	2789					645				
		Silverado II	Turf	1623	2726					275				
		Tar Heel II	Turf	1028	1502					368				
Check	Courtenay	Forage	1417	2086					473		422	632		
2004	Scotts	8015	Turf	3235										
		K01-E03	Turf	3348										
	Check	Courtenay	Forage	2637										

f - Festulolium

**Native Grasses 2003 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Research Council	ARC-AWG-1-1 (aw)	1175	25-Jul-05	112
	ARC-CWR-2-1 (cw)	1779	8-Aug-05	100
	ARC-IRG-1-1 (ir)	195	11-Jul-05	56
	Hillcrest (aw)	1131	21-Jul-05	104
	Mean	1070	.	93
	CV (%)	18.9		9.4
	LSD (0.05)	323		14

aw - Awned Wheatgrass

cw - Canadian Wildrye

ir - Indian Ricegrass (slow establishment, little seed produced)

**Native Grasses 2003 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Research Council	ARC-AWG-1-1 (aw)	382	10-Aug-05	134
	ARC-CWR-2-1 (cw)	194	25-Aug-05	120
	ARC-IRG-1-1 (ir)	0	.	63
	Hillcrest (aw)	299	10-Aug-05	116
	Mean	219	.	108
	CV (%)	28.6		6.0
	LSD (0.05)	100		13

aw - Awned Wheatgrass

cw - Canadian Wildrye

ir - Indian Ricegrass (slow establishment, little seed produced)

## **Summary of seed yield (kg ha<sup>-1</sup>) for Native Grasses in Western Canada 2004-2005**

Company	Species	Variety	Seed yield / production year			
			Bow Island		Beaverlodge	
			1	2	1	2
Alberta Research Council	Awned Wheatgrass	ARC-AWG-1-1	1693	1175	472	382
		Hillcrest	2232	1131	472	299
	Canadian Wildrye	ARC-CWR-2-1	1768	1779	710	194
	Indian Ricegrass	ARC-IRG-1-1	0	195	126	0

**Note:** Indian Ricegrass slow to establish, low seed yields produced

**Orchard Grass 2003 Seed Production Trial**  
**Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Tomorrow's Seed	TS-A2000	324	20-Jul-05	.
	TS-A4	278	20-Jul-05	.
	TS-AP	306	20-Jul-05	.
	TS-HATT	226	20-Jul-05	.
	TS-MYK	257	20-Jul-05	.
	TS-PX2	295	20-Jul-05	.
	TS-VLA	237	20-Jul-05	.
Check	Kay	261	20-Jul-05	.
	Mean	273	.	.
	CV (%)	22.2		
	LSD (0.05)	ns		

**Annual Ryegrass 2004 Seed Production Trial**  
**Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	Axcella	.	.	.
	Jeanne		<b>Not seeded too wet</b>	
	Zorro			
Check	Aubade	.	.	.
	Mean	.	.	.
	CV (%)			
	LSD (0.05)			

**Summary of seed yield (kg ha<sup>-1</sup>) for Orchard Grass in Western Canada 2004-2005**

Year of Seeding	Company	Variety	Seed yield / production year	
			Arborg	
			1	2
2003	Tomorrow's Seed	TS-A2000	688	324
		TS-A4	516	278
		TS-AP	398	306
		TS-HATT	565	226
		TS-MYK	278	257
		TS-PX2	159	295
		TS-VLA	587	237
	Check	Kay	211	261

**Perennial Ryegrass 2004 Seed Production Trial  
Bow Island, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Turf-Seed	Quicksilver	2207	25-Jul-05	66
	Roadrunner	2172	21-Jul-05	67
Check	Norlea	2648	25-Jul-05	89
	Mean	2342	.	74
	CV (%)	5.2		3
	LSD (0.05)	213		4

**Perennial Ryegrass 2004 Seed Production Trial  
Brooks, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Turf-Seed	Quicksilver	1971	29-Jul-05	64
Check	Norlea	1987	29-Jul-05	95
	Mean	1979	.	79
	CV (%)	23.5		10.5

**Perennial Ryegrass 2004 Seed Production Trial  
Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	Capri	366	10-Aug-05	.
	Cinderella	452	10-Aug-05	.
	DP 17-9501	416	10-Aug-05	.
	DP 17-9502	497	10-Aug-05	.
	Easy Living	730	10-Aug-05	.
	Elfkin	537	10-Aug-05	.
	Esquire	724	10-Aug-05	.
	Esteem	347	10-Aug-05	.
	PDQ	442	10-Aug-05	.
	Sauvignon	422	10-Aug-05	.
Check	Norlea	534	10-Aug-05	.
	Mean	493	.	.
	CV (%)	32.5		
	LSD (0.05)	239		



## Summary of seed yield (kg ha<sup>-1</sup>) for Perennial Ryegrass in Western Canada 2005

Company	Variety	Type	Seed yield		
			Bow Island	Brooks	Arborg
DLF-International	Capri	Turf			366
	Cinderella	Turf			452
	DP 17-9501	Turf			416
	DP 17-9502	Turf			497
	Easy Living	Turf			730
	Elfkin	Turf			537
	Esquire	Turf			724
	Esteem	Turf			347
	PDQ	Turf			442
	Sauvignon	Turf			422
Turf-Seed	Quicksilver	Turf	2207	1971	
	Roadrunner	Turf	2172		
Check	Norlea	Forage	2648	1987	534

**Timothy 2002 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Moore Seed	Grasslands Charlton	138	23-Aug-05	.
Check	Climax	310	23-Aug-05	.
	Mean	224	.	.
	CV (%)	33.4		

**Timothy 2003 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Moore Seed	SBT 9501	301	10-Aug-05	134
Check	Climax	372	23-Aug-05	135
	Mean	337	.	135
	CV (%)	14.2		1.3

**Timothy 2003 Seed Production Trial  
Fort St. John, British Columbia 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	DP 70-9707	465	20-Aug-05	.
	DP 70-9802	868	20-Aug-05	.
	Winnetou	1045	20-Aug-05	.
Moore Seed	Grasslands Charlton	613	22-Aug-05	.
	SBT 9501	676	22-Aug-05	.
Check	Climax	659	20-Aug-05	.
	Mean	721	.	.
	CV (%)	17.1		
	LSD (0.05)	186		

**Timothy 2003 Seed Production Trial  
Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	DP 70-9707	27	29-Jul-05	.
	DP 70-9802	132	29-Jul-05	.
	Winnetou	143	29-Jul-05	.
Check	Climax	174	29-Jul-05	.
	Mean	119	.	.
	CV (%)	19.8		
	LSD (0.05)	38		

**Timothy 2004 Seed Production Trial  
Beaverlodge, Alberta 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
DLF-International	DP 70-4731	650	23-Aug-05	111
	DP 70-4752	266	23-Aug-05	85
	NIKLAS	280	23-Aug-05	105
	Promesse	423	23-Aug-05	100
	Tundra	653	23-Aug-05	105
	Viking	.	.	.
	Winnetou	634	23-Aug-05	110
Check	Climax	467	23-Aug-05	109
	Mean	482	.	104
	CV (%)	33.6		7.0
	LSD (0.05)	240		11

**Note:** Viking poor germination, therefore no stand establishment

**Timothy 2004 Seed Production Trial  
Arborg, Manitoba 2005 Results**

Company	Variety	Seed Yield (kg ha <sup>-1</sup> )	Harvest Date	Plant Height (cm)
Barenbrug USA	Barmidi	78	2-Aug-05	.
	PHL1R99	182	2-Aug-05	.
Check	Climax	107	2-Aug-05	.
	Mean	122	.	.
	CV (%)	21		
	LSD (0.05)	44		

## Summary of seed yield (kg ha<sup>-1</sup>) for Timothy in Western Canada 2003-2005

Year of Seeding	Company	Variety	Seed yield / production year						
			Beaverlodge			Fort St. John		Arborg	
			1	2	3	1	2	1	2
2002	Moore seed	Grasslands Charlton	362	283	138				
	Check	Climax	223	404	310				
2003	DLF-International	DP 70-9707				404	465	156	27
		DP 70-9802				613	868	388	132
		Winnetou				692	1045	421	143
	Moore Seed	Grasslands Charlton				445	613		
		SBT 9501	427	301		448	676		
	Check	Climax	406	372		501	659	286	174
2004	Barenbrug USA	Barmidi						78	
		PHL 1R99						182	
	DLF-International	DP 70-4731	650						
		DP 70-4752	266						
		Niklas	280						
		Promesse	423						
		Tundra	653						
		Viking	*						
		Winnetou	634						
	Check	Climax	467					107	

**Note:** Viking poor germination, therefore no stand establishment

## WGST 2005 Seeding Summary

Species	Company	Variety	Type	Bow Island	Brooks	Beaverlodge	Fort St. John	Arborg
Creeping Bentgrass	Turf-Seed	PST-ORAF	Forage	2005				
Kentucky Bluegrass	DSV	POPR 00587	Turf	2005	2005			
		POPR 02592	Turf	2005	2005			
		POPR 02593	Turf	2005	2005			
		POPR 97564	Turf	2005	2005			
		ZPP 83-077	Turf	2005	2005			
		Turf-Seed	PST-H97-762	Forage	2005	2005		
	Check	Abbey	Turf	2005	2005			
Creeping Red Fescue	AAFC Beaverlodge	BRFB1	Turf			2005	2005	
		BRFB2	Turf			2005	2005	
	DSV	FRRR 00191	Turf			2005		
		FRRR 02202	Turf			2005		
		ZFRR 93-111	Turf			2005		
		ZFRR 93112Q	Turf			2005		
	Check	Boreal	Turf			2005	2005	
Tall Fescue	Turf-Seed	PST-5NF	Forage	2005	2005			
	Check	Courtenay	Forage	2005	2005			
Timothy	AAFC Beaverlodge	BRFLAL1	Forage			2005	2005	
	DLF-International	DP 70-4731	Forage					2004
		DP 70-4752	Forage					2004
		Niklas	Forage					2004
		Promesse	Forage					2004
		Tundra	Forage					2004
		Viking	Forage			2004		2004
		Winnetou	Forage					2004
	Check	Climax	Forage			2005	2005	2004

### Note:

Bow Island & Brooks - all trials excellent establishment.

Beaverlodge - all trials excellent establishment, except Viking timothy seed source has poor germination therefore no establishment.

Fort St. John - timothy excellent establishment, creeping red fescue fair establishment will be re-evaluated in spring.

Arborg - excellent establishment, except Viking timothy seed source has poor germination therefore no establishment.

# Western Grass Seed Testing (WGST) Program

## Application for Entry

1. Company: \_\_\_\_\_ Contact person: \_\_\_\_\_

Mailing address \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

2. 2006 entries: (if you wish to add more entries, please attach another sheet)

Species	Type (Forage, Turf)	Variety name/code	% germ	Relative maturity (early, medium, late)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

3. Please indicate at which locations you wish your entries tested (see attached map). The applicant will be invoiced once test sites for the current test year are finalized.

Fort St. John, BC _____	Melfort, SK _____
Beaverlodge, AB _____	Outlook, SK (IRR) _____
Bow Island, AB (IRR) _____	Portage La Prairie, MB (IRR) _____
Brooks, AB (IRR) _____	Arborg, MB _____
Vegreville, AB _____	

Send by March 1, 2006 to: Henry Najda  
 Crop Diversification Centre South  
 SS 4  
 Brooks, AB Canada T1R 1E6  
 Phone: 403-362-1346, Fax: 403-362-1306, or  
 e-mail: henry.najda@gov.ab.ca.