

British Columbia

Alberta

Western Canadian Grass Seed Testing Program



2006 Report

Saskatchewan

Manitoba

INTRODUCTION

This report provides a summary of the grass seed trials conducted under the Western Grass Testing Program during 2006. 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 2006 research endeavors:

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

Data Collection Procedures

Seed Yield	reported on a clean seed basis in 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.

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Protocol for Western Grass Seed Testing (WGST) Program

Revised January 2006

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.

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:

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**Kentucky Bluegrass 2003 Seed Production
Brooks, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DSV	214/94	347	17-Jul-06	69
	N 522	223	6-Jul-06	69
	POPF 00577	235	6-Jul-06	84
	POPF 00578	158	10-Jul-06	71
	POPF 00580	213	6-Jul-06	86
	POPR 97561	220	17-Jul-06	65
	POPR 97562	251	10-Jul-06	71
	POPR 97563	236	6-Jul-06	74
	POPR 97564	452	10-Jul-06	73
	POPR 97567	299	10-Jul-06	71
	POPR 99575	365	10-Jul-06	74
	Check	Abbey	477	6-Jul-06
	Mean	290		73
	CV (%)	25.9		16.5
	LSD (0.05)	108		17

**Kentucky Bluegrass 2004 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Boreal Plant Breeding	Halti (ab)	212	26-Jun-06	45
Brett-Young	A96-425	765	14-Jul-06	54
	A96-43	470	12-Jul-06	61
	A98-146	621	18-Jul-06	54
	A98-475	348	14-Jul-06	55
	A99-2573	553	14-Jul-06	63
DLF-International	A98-139	665	12-Jul-06	73
	DLF 769037	525	12-Jul-06	60
	HB95 Hybrid	546	14-Jul-06	55
	HB96 Hybrid	479	14-Jul-06	59
	Platini	464	12-Jul-06	65
	SCR-320	526	18-Jul-06	54
	Slezanka	567	12-Jul-06	64
Scotts	HB 329	381	18-Jul-06	53
	HB 342	423	18-Jul-06	55
Check	Abbey	1081	12-Jul-06	54
	Mean	539		58
	CV (%)	15.8		11.2
	LSD (0.05)	121		9

ab - Alpine Bluegrass

**Kentucky Bluegrass - DSV 2004 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DSV	N 522	383	18-Jul-06	56
	POPF 00577	176	7-Jul-06	65
	POPF 00578	298	7-Jul-06	60
	POPF 00580	247	7-Jul-06	66
	POPR 00582	516	7-Jul-06	63
	POPR 00589	359	12-Jul-06	59
	POPR 00593	489	12-Jul-06	61
	POPR 97564	523	12-Jul-06	60
	POPR 99575	363	12-Jul-06	55
	ZPP 81-002	244	12-Jul-06	55
	ZPP 94-320	422	18-Jul-06	54
	ZPP 94-343	554	18-Jul-06	45
	ZPP 95-776	329	12-Jul-06	54
Check	Abbey	986	12-Jul-06	60
	Mean	421		58
	CV (%)	20.2		10.3
	LSD (0.05)	121		9

**Kentucky Bluegrass 2004 Seed Production
Brooks, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Boreal Plant Breeding	Halti	301	26-Jun-06	60
DSV	POPR 00582	525	6-Jul-06	81
	POPR 00589	708	13-Jul-06	73
	POPR 00593	776	13-Jul-06	75
	POPR 97564	770	17-Jul-06	76
	ZPP 81-002	430	13-Jul-06	68
	ZPP 94-320	494	21-Jul-06	69
	ZPP 94-343	714	17-Jul-06	53
	ZPP 95-776	574	13-Jul-06	70
Check	Abbey	1206	13-Jul-06	71
	Mean	661		70
	CV (%)	21.4		8.6
	LSD (0.05)	212		9

**Kentucky Bluegrass 2005 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DSV	POPR 00587	497	18-Jul-06	60
	POPR 02592	529	18-Jul-06	68
	POPR 02593	498	18-Jul-06	69
	POPR 97564	465	21-Jul-06	69
	ZPP 83-077	456	18-Jul-06	69
Rose Agri-Seed	PST-H97-762	115	12-Jul-06	85
	PST-Oraf (bg)	409	18-Jul-06	90
Check	Abbey	616	18-Jul-06	65
	Mean	453		72
	CV (%)	23.4		5.6
	LSD (0.05)	163		6

bg - Bentgrass

**Kentucky Bluegrass 2005 Seed Production
Brooks, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DSV	POPR 00587	788	17-Jul-06	75
	POPR 02592	876	17-Jul-06	78
	POPR 02593	766	17-Jul-06	84
	POPR 97564	800	17-Jul-06	75
	ZPP 83-077	764	17-Jul-06	78
Check	Abbey	1262	17-Jul-06	70
	Mean	876		76
	CV (%)	8.9		3.9
	LSD (0.05)	117		4

Summary of seed yield (kg ha⁻¹) for Kentucky Bluegrass in Western Canada 2004-2006

Year of Seeding	Company	Variety	Seed yield / production year					
			Bow Island			Brooks		
			1	2	3	1	2	3
2003	DSV	214/94				583	648	347
		N 522				410	385	223
		POPF 00577				420	305	235
		POPF 00578				290	175	158
		POPF 00580				412	309	213
		POPR 97561					491	220
		POPR 97562				408	486	251
		POPR 97563				447	395	236
		POPR 97564				530	705	452
		POPR 97567				350	498	299
		POPR 99575				450	430	365
	Check	Abbey				662	998	477
2004	Boreal Plant Breeding	Halti (alpine)	421	212		1016	301	
		Brett-Young						
			A96-425	503	765			
			A96-43	339	470			
			A98-146	567	621			
			A98-475	302	348			
			A99-2573	450	553			
	DLF-International		A98-139	375	665			
			DLF 769037	511	525			
			HB95 Hybrid	319	546			
			HB96 Hybrid	282	479			
			Platini	309	464			
			SCR-320	506	526			
	DSV		Slezanka	429	567			
			N 522	432	383			
			POPF 00577	453	176			
			POPF 00578	253	298			
			POPF 00580	452	247			
			POPR 00582	554	516	711	525	
			POPR 00589	429	359	823	708	
			POPR 00593	448	489	807	776	
		POPR 97564	443	523	1007	770		
		POPR 99575	501	363				
		ZPP 81-002	205	244	672	430		
		ZPP 94-320	269	422	590	494		
		ZPP 94-343	404	554	1238	714		
	ZPP 95-776	267	329	562	574			

Summary of seed yield (kg ha⁻¹) for Kentucky Bluegrass in Western Canada 2004-2006

Year of Seeding	Company	Variety	Seed yield / production year					
			Bow Island			Brooks		
			1	2	3	1	2	3
2004	Scotts	HB 329	509	381				
	con't	HB 342	259	423				
	Check	Abbey	717	1034		1534	1206	
2005	DSV	POPR 00587	497			788		
		POPR 02592	529			876		
		POPR 02593	498			766		
		POPR 97564	465			800		
		ZPP 83-077	456			764		
	Rose Agri-Seed	PST-H97-762	115					
	(creeping bentgrass)	PST-ORAF	409					
	Check	Abbey	616			1262		

**Smooth Bromegrass 2003 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
FarmPure Seeds	Peak	114	1-Aug-06	95
Check	Carlton	132	1-Aug-06	99
	Mean	123	.	97
	CV (%)	9.0		6.2

**Smooth Bromegrass 2003 Seed Production
Melfort, Saskatchewan 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
FarmPure Seeds	Peak	No seed harvested in 2006		
Check	Carlton			
	Mean			
	CV (%)			

**Smooth Bromegrass 2003 Seed Production
Outlook, Saskatchewan 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
FarmPure Seeds	Peak	150	26-Jul-06	
Check	Carlton	113	26-Jul-06	
	Mean	131		
	CV (%)	20.0		

**Smooth Bromegrass 2003 Seed Production Trial
Arborg, Manitoba 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
FarmPure Seeds Check	Peak Carlton	No harvest data, did not head out possibly caused by an early frost		
	Mean	.	.	.
	CV (%)			

**Smooth Bromegrass 2004 Seed Production
Brooks, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Barenbrug USA	Bareno	.	.	.
	Doina	550	19-Jul-06	120
	Olga	577	19-Jul-06	128
Check	Carlton	373	19-Jul-06	113
	Mean	500		121
	CV (%)	23.9		15.2
	LSD (0.05)	ns		ns

Bareno - winter damage 2005, no data taken 2006

Summary of seed yield (kg ha⁻¹) for Smooth Bromegrass in Western Canada 2004-2006

Year of Seeding	Company	Variety	Seed yield / production year												
			Brooks		Beaverlodge			Melfort		Outlook			Arborg		
			1	2	1	2	3	1	2	1	2	3	1	2	3
2003	FarmPure Seeds	Peak			557	18	114	563	744	1156	.	150	683	.	.
	Check	Carlton			520	67	132	845	1115	1164	.	113	993	.	.
2004	Barenbrug USA	Bareno	369	.											
		Doina	923	550											
		Olga	928	577											
	Check	Carlton	960	373											

Note: Beaverlodge 2nd production year of 2003 seeding no fertile tillers produced, mostly forage.
Melfort 3rd production year of 2003 seeding no seed harvested .
Outlook 2nd production year of 2003 seeding no harvest data due to seed shatter after swathing .
Arborg 2nd production year of 2003 seeding no harvest data due to hail storm damage .
Arborg 3rd production year of 2003 seeding no harvest data , did not head out. Possibly caused by an early frost.
Brooks 1st production year of 2004 seeding, Bareno 50-75% winter kill - testing discontinued.

**Creeping Red Fescue 2004 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB2	212	13-Jul-06	49
DSV	FRRR 00193	194	13-Jul-06	44
	FRRR 02201	127	13-Jul-06	48
	FRRR 99182	201	13-Jul-06	46
	ZFRRR 93-110	57	13-Jul-06	46
	ZFRRR 93-118	194	13-Jul-06	47
John Zuelzer & Son	Reverent	252	13-Jul-06	55
Peace Pedigreed Seed	Oracle	247	13-Jul-06	45
Peace River Seed	B-1324	114	13-Jul-06	49
	Eugene	199	13-Jul-06	50
Check	Boreal	228	13-Jul-06	47
	Mean	184	.	48
	CV (%)	49.6		8.5
	LSD (0.05)	ns		6

**Creeping Red Fescue 2004 Seed Production
Fort St. John, British Columbia 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB2	358	.	.
John Zuelzer & Son	Reverent	346	.	.
Peace Pedigreed Seed	Oracle	559	.	.
Peace River Seed	B-1324	198	.	.
	Eugene	375	.	.
Check	Boreal	405	.	.
	Mean	374	.	.
	CV (%)	30.3		
	LSD (0.05)	171		

**Creeping Red Fescue 2004 Seed Production
Melfort, Saskatchewan 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Peace Pedigreed Seed Check	Oracle Boreal	No seed harvested in 2006		
	Mean			
	CV (%)			

**Creeping Red Fescue 2004 Seed Production Trial
Arborg, Manitoba 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Peace Pedigreed Seed Check	Oracle Boreal	227 226	17-Jul-06 17-Jul-06	. .
	Mean	227	.	.
	CV (%)	35.6		

**Creeping Red Fescue 2005 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB1	957	18-Jul-06	62
	BRFB2	756	18-Jul-06	60
DSV	FRRR 00191	560	18-Jul-06	59
	FRRR 02202	650	18-Jul-06	55
	ZFRR 93-111	619	18-Jul-06	61
	ZFRR 93-112Q	632	18-Jul-06	62
Check	Boreal	822	18-Jul-06	64
	Mean	714	.	60
	CV (%)	15.3		7.1
	LSD (0.05)	162		ns

**Creeping Red Fescue 2005 Seed Production
Fort St. John, British Columbia 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFB1	813	.	.
	BRFB2	832	.	.
Check	Boreal	812	.	.
	Mean	820	.	.
	CV (%)	12.3		
	LSD (0.05)	ns		

Summary of seed yield (kg ha⁻¹) for Fine Fescues in Western Canada 2005-2006

Year of seeding	Species	Company	Variety	Seed yield / production year												
				Beaverlodge		Fort St. John		Melfort		Arborg						
				1	2	1	2	1	2	1	2					
2004	Creeping red	AAFC Beaverlodge	BRFB2	1302	212	955	358									
			DSV	FRRR 00193	963							194				
			FRRR 02201	962	127											
			FRRR 99182	833	201											
			ZFRRR 93-110	512	57											
			ZFRRR 93-118	960	194											
			John Zuelzer & Son	Reverent	1057	252	872					346				
			Peace Pedigreed Seed	Oracle	1271	247	751					559	747	.	186	227
			Peace River Seed	B-1324	841	114	463					198				
				Eugene	1164	199	813					375				
	Check	Boreal	1176	228	998	405	812	.	177	226						
2005	Creeping red	AAFC Beaverlodge	BRFB1	957		813										
			BRFB2	756		832										
		DSV	FRRR 00191	560												
			FRRR 02202	650												
			ZFRR 93-111	619												
			ZRRR 93-112Q	632												
		Check	Boreal	822		812										

Note: Melfort 2nd production year of 2004 seeding, no seed harvested in 2006

**Tall Fescue 2003 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DLF-International	Hykor (festulolium)	899	7-Jul-06	113
Turf-Seed	Matador GT	1174	12-Jul-06	74
	Silverado II	1204	12-Jul-06	80
	Tar Heel II	563	7-Jul-06	68
Check	Courtenay	1461	7-Jul-06	116
	Mean	1060		90
	CV (%)	8.1		7.1
	LSD (0.05)	167		10

**Tall Fescue 2003 Seed Production
Brooks, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Turf-Seed	Matador GT	1739	13-Jul-06	101
	Silverado II	1865	13-Jul-06	103
	Tar Heel II	711	10-Jul-06	86
Check	Courtenay	1397	10-Jul-06	134
	Mean	1428		106
	CV (%)	14.3		7.6
	LSD (0.05)	328		13

**Tall Fescue 2003 Seed Production Trial
Arborg, Manitoba 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DLF-International	Hykor	501	17-Jul-06	.
Tomorrow's Seed	TS-T3	653	17-Jul-06	.
Check	Courtenay	597	17-Jul-06	.
	Mean	583	.	.
	CV (%)	26.8		
	LSD (0.05)	ns		

**Tall Fescue 2004 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Scotts	8015	1641	12-Jul-06	79
	K01-E03	1286	12-Jul-06	80
Check	Courtenay	1745	7-Jul-06	124
	Mean	1557		94
	CV (%)	10.5		2.3
	LSD (0.05)	284		4

**Tall Fescue 2005 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Rose Agri-Seed	PST-5NF	1342	7-Jul-06	111
Check	Courtenay	1846	7-Jul-06	116
	Mean	1594		114
	CV (%)	8.2		9.1

**Tall Fescue 2005 Seed Production
Brooks, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Rose Agri-Seed	PST-5NF	1807	10-Jul-06	130
Check	Courtenay	1976	10-Jul-06	128
	Mean	1892		129
	CV (%)	9.0		3.5

Summary of seed yield (kg ha⁻¹) for Tall Fescues in Western Canada 2004-2006

Year of seeding	Company	Variety	Type	Seed yield / production year										
				Bow Island			Brooks			Arborg				
				1	2	3	1	2	3	1	2	3		
2003	DLF-International	Hykor (f)	Forage	1309	1869	899					113	402	501	
	Tomorrow's Seed	TS-T3									597	610	653	
	Turf-Seed	Matador GT	Turf	1613	2541	1174	1926	3036	1739					
		Silverado II	Turf	1825	2786	1204	1420	2666	1865					
		Tar Heel II	Turf	999	2009	563	1056	995	711					
Check	Courtenay	Forage	1283	1952	1461	1551	2219	1397			422	632	597	
2004	Scotts	8015	Turf	3235	1641									
		K01-E03	Turf	3348	1286									
	Check	Courtenay	Forage	2637	1745									
2005	Rose Agri-Seed	PST-5NF	Forage	1342			1807							
	Check	Courtenay	Forage	1846			1976							

f - Festulolium

**Native Grasses 2003 Seed Production
Bow Island, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Research Council	ARC-AWG-1-1 (aw)	Trial discontinued due to weed infestation		
	ARC-CWR-2-1 (cw)			
	ARC-IRG-1-1 (ir)			
	Hillcrest (aw)			
	Mean			
	CV (%)			
	LSD (0.05)			

aw - Awned Wheatgrass
cw - Canadian Wildrye
ir - Indian Ricegrass

**Native Grasses 2003 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Research Council	ARC-AWG-1-1 (aw)	130	1-Aug-06	90
	ARC-CWR-2-1 (cw)	162	23-Aug-06	82
	ARC-IRG-1-1 (ir)	.	.	.
	Hillcrest (aw)	110	1-Aug-06	69
	Mean	134	.	80
	CV (%)	33.7		10.7
	LSD (0.05)	ns		15

aw - Awned Wheatgrass
cw - Canadian Wildrye
ir - Indian Ricegrass (no seed produced)

Summary of seed yield (kg ha⁻¹) for Native Grasses in Western Canada 2004-2006

Company	Species	Variety	Seed yield / production year				
			Bow Island		Beaverlodge		
			1	2	1	2	3
Alberta Research Council	Awned Wheatgrass	ARC-AWG-1-1	1693	1175	472	382	130
		Hillcrest	2232	1131	472	299	110
	Canadian Wildrye	ARC-CWR-2-1	1768	1779	710	194	162
	Indian Ricegrass	ARC-IRG-1-1	0	195	126	0	0

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

Bow Island discontinued after 2nd production year due to weed infestation

**Timothy 2003 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Moore Seed	SBT 9501	187	8-Aug-06	90
Check	Climax	173	8-Aug-06	85
	Mean	180	.	88
	CV (%)	10.0		4.9

**Timothy 2003 Seed Production
Fort St. John, British Columbia 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DLF-International	DP 70-9707	68	.	.
	DP 70-9802	318	.	.
	Winnetou	237	.	.
Moore Seed	Grassland Charlton	195	.	.
	SBT 9501	217	.	.
Check	Climax	143	.	.
	Mean	196	.	.
	CV (%)	29.8		
	LSD (0.05)	106		

**Timothy 2003 Seed Production Trial
Arborg, Manitoba 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DLF-International	DP 70-9707	210	31-Jul-06	.
	DP 70-9802	258	31-Jul-06	.
	Winnetou	389	31-Jul-06	.
Check	Climax	239	31-Jul-06	.
	Mean	274	.	.
	CV (%)	34.2		
	LSD (0.05)	ns		

**Timothy 2004 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DLF-International	DP 70-4731	337	8-Aug-06	74
	DP 70-4752	284	8-Aug-06	58
	Niklas	57	8-Aug-06	54
	Promesse	223	8-Aug-06	60
	Tundra	159	8-Aug-06	63
	Viking	.	.	.
	Winnetou	267	8-Aug-06	70
Check	Climax	187	8-Aug-06	70
	Mean	216	.	64
	CV (%)	24.2		17.7
	LSD (0.05)	78		ns

Note: Viking poor germination, therefore no stand establishment

**Timothy 2004 Seed Production Trial
Arborg, Manitoba 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
Barenbrug USA	Barmidi	269	27-Jul-06	.
	PHL1R99	475	27-Jul-06	.
Check	Climax	493	27-Jul-06	.
	Mean	412	.	.
	CV (%)	19.4		
	LSD (0.05)	139		

**Timothy 2005 Seed Production
Beaverlodge, Alberta 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
AAFC Beaverlodge	BRFLAL1	527	8-Aug-06	87
Check	Climax	600	8-Aug-06	82
	Mean	563	.	85
	CV (%)	18.6		9.0

**Timothy 2005 Seed Production
Arborg, Manitoba 2006 Results**

Company	Variety	Seed Yield (kg ha ⁻¹)	Harvest Date	Plant Height (cm)
DLF-International	DP 70-4731	369		
	DP 70-4752	383		
	Niklas	100		
	Promesse	351		
	Tundra	289		
	Viking	.	.	.
	Winnetou	392		
Check	Climax	289		
	Mean	311	.	
	CV (%)	25.0		
	LSD (0.05)	115		

Note: Viking poor germination, therefore no stand establishment

Summary of seed yield (kg ha⁻¹) for Timothy in Western Canada 2004-2006

Year of Seeding	Company	Variety	Seed yield / production year								
			Beaverlodge			Fort St. John			Arborg		
			1	2	3	1	2	3	1	2	3
2003	DLF-International	DP 70-9707				404	465	68	156	27	210
		DP 70-9802				613	868	318	388	132	258
		Winnetou				692	1045	237	421	143	389
	Moore Seed	Grasslands Charlton				445	613	195			
		SBT 9501	427	301	187	448	676	217			
	Check	Climax	406	372	173	501	659	143	286	174	239
	2004	Barenbrug USA	Barmidi							78	269
PHL 1R99									182	475	
DLF-International		DP 70-4731	650	337							
		DP 70-4752	266	284							
		Niklas	280	57							
		Promesse	423	223							
		Tundra	653	159							
		Viking	*	*							
Check		Winnetou	634	267							
		Climax	467	187					107	493	
2005	AAFC Beaverlodge	BRFLAL1	527								
	DLF-International	DP 70-4731							369		
		DP 70-4752							383		
		Niklas							100		
		Promesse							351		
		Tundra							289		
		Viking							*		
		Winnetou							392		
	Check	Climax	600						289		

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

WGST 2006 Seeding Summary

Species	Company	Variety	Type	Bow Island	Brooks	Beaverlodge	Fort St. John
Kentucky Bluegrass	Euro Grass Breeding	POPF 00580	Forage	2006	2006		
		POPR 00583	Turf	2006	2006		
		POPR 04594	Turf	2006	2006		
		POPR 04596	Turf	2006	2006		
		POPR 04598	Turf	2006	2006		
		POPR 97564	Turf	2006	2006		
		POPR 97570	Turf	2006	2006		
		ZPP 83-077	Turf	2006	2006		
		ZPP 94-320	Turf	2006	2006		
		ZPP 94-343	Turf	2006	2006		
		Check	Abbey	Turf	2006	2006	
Creeping Red Fescue	Barenbrug USA	01-FR-1	Turf			2006	
		Barena III	Turf			2006	
		Barthema	Turf			2006	
		Barustic	Turf			2006	
	Turf Care Supply	TL10709	Turf			2006	
	Check	Boreal	Turf			2006	
Tall Fescue	Rose Agri-Seed	PST-5TDH	Turf	2006	2006		
	Check	Courtenay	Forage	2006	2006		
Timothy	Brett-Young	19004	Forage			2006	2006
		98665	Forage			2006	2006
		98667	Forage			2006	2006
		99966	Forage			2006	2006
		99984	Forage			2006	2006
		CT 70-9704	Forage			2006	2006
		FLP07	Forage			2006	2006
		INPH 9803	Forage			2006	2006
	Check	Climax	Forage			2006	2006

Note:

Bow Island & Brooks - not seeded due to program restructuring

Beaverlodge - all trials excellent establishment

Fort St. John - poor establishment due to dry conditions, will reseed in 2007