



# **B.C. GRAIN PRODUCERS ASSOCIATION**

## **Oat Registration Support Co-op Project**

**April 1<sup>st</sup>, 2011 – February 28<sup>th</sup>, 2012 - Funding**

**Final Report to:**

PEACE RIVER AGRICULTURAL  
DEVELOPMENT FUND

Box 6641 Fort St. John, BC V1J 4J1

**December 14<sup>th</sup>, 2011**

**Contact:**

Martin Moore, Research Chair  
BC Grain Producers Association  
Box 6004  
Fort St. John, BC  
V1J 4H6

Tel: (250) 787-2588  
Fax: (250) 785-5713  
Email: [windyacr@pris.ca](mailto:windyacr@pris.ca)

Clair Langlois, Research Mngr.  
BC Grain Producers Association  
401 - 114<sup>th</sup> Avenue  
Dawson Creek, BC  
V1G 2Z7

Tel: (250) 782-2557  
Fax: (250) 784-2299  
Email: [bcbpa-r@pris.ca](mailto:bcbpa-r@pris.ca)

## Executive Summary of “Oat Registration Support Co-op” Project - December 14<sup>th</sup>, 2011

The BC Grain Producers Association felt it would be beneficial to our area to be part of the inter-provincial western-run oat co-op trial, a trial that screens potential oat lines out for the registration process. By actively participating via growing the co-op right here in the BC Peace, we have direct influence on decisions oat breeders will make in their selection process by giving them data on how the lines perform in the northern prairies. The data from this oat co-op would be used by contributing oat breeders in conjunction with data from other sites to which this trial is to be grown, in order to support successful new oat candidates for their future registration. This would benefit local BC Peace River producers directly by allowing new oat materials and genetics (creation of new varieties) to be tested under our northern climate and under our unique local conditions. Most, if not all other testing locations for this oat co-op are grown at much lower latitudes in the Western Prairie provinces, and as such do not place the materials under the added stresses of our more northern regions, nor under our unique growing seasons, such as long day-length which oats in particular react positively to. The BC Grain Producers Association therefore planted this oat co-op at the Dawson Creek research farm right in the same block of tests as all other oat tests, such as the other oat pre-coops from Agriculture Canada and a private oat coop as well as the regional oat trial, in order to see if it does indeed enhance our influence on materials being tested within the oat registration co-op.

At the end of this “mini-project” we have asked the coordinator of the oat registration co-op, currently Dr, Jennifer Mitchell-Fetch of Agriculture Canada, to comment in writing whether or not this trial helped the oat breeding effort by gathering results from our region. Just such a letter is attached. We (BCGPA) feel very positive about the results and their influence to the system as a whole by providing northern data so we will continue seeking funds to cover this test from spring 2012 until spring 2017 via part of our application to Investment Agriculture Foundation of BC (such application and details of contributors will be supplied to Levy Council shortly).

Results from 2011 were excellent, despite flooding conditions during June and into the first part of July, the trial survived with all plots involved in tact by harvest. Coefficient of Variance value (CV) for the trial regarding yield data was 7.1%, a value well below the most stringent of statistical thresholds, meaning data was sound and reliable for the test. Resulting yields were very high, approaching 200 bu/ac for some materials in the test, which was due to all the good moisture at the right time even if on the excessive side at first.

The BC Grain Producers Association had asked **PRAD** for a total commitment of **\$2,400.00** for this oat registration support co-op project. The BC Grain Producers Association via “retained earnings” would likewise contribute equally another matching \$2,400.00 for a **grand contributing total of \$4,800.00 from both funders**. These totals were based on previous experience and current knowledge of the estimated costs needed to recover the costs to grow this co-op trial at the size predicted. Since the trial was exactly the size predicted, (108 plots), and as extra hand-weeding and hand-rouging of wild oats increased costs slightly due to excessive and continuous June and early July rains, we have incurred all expected costs to the full allotted amount if not more than budgeted.

The project has wrapped up a bit ahead of schedule but it was felt there was no point in delaying the final report. Thus, please see attached financial budget on the last page of this

report for a full explanation of expenses and funding arrangements as previously agreed to. All time-lines were executed as per application with the exception of finished up a little early.

**Declaration**

I declare that the statements made in this final report are true.

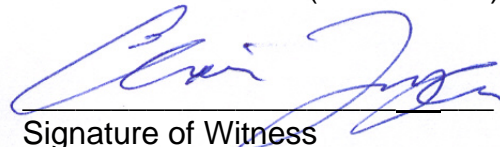
Martin Moore  
Name of Applicant (Please Print)

Clair F. Langlois  
Name of Witness (Please Print)

R.R.#1, Comp. 13, Site 16, Fort St. John V1J 4M6  
Address of Applicant (Please Print)

401-114<sup>th</sup> Ave, Dawson Creek BC V1G 2Z7  
Address of Witness (Please Print)

  
Signature of Applicant

  
Signature of Witness

Research Chair  
Position of Applicant in Organization

Research Manager  
Position of Applicant in Organization

**B.C. Grain Producers Association**

Oat - WCORT - 2011

Trial ID: Oat-WCORT-DC-11

Location: DawsonCreek

Rating Data Type	heading	height	maturity	yield	YIELD	
Rating Unit	days to	cm	days to	g/6.24m <sup>2</sup>	kg/ha	
Number of Subsamples	1	1	1	1	1	
Entry No.	Entry Name	2	3	4	5	6
1	CDC Dancer	53.3 d-h	118.3 c-i	102.0 h	5064.73 abc	8116.6 abc
2	AC Morgan	51.3 h	115.0 e-j	104.7 c-h	5639.10 abc	9037.0 abc
3	Leggett	51.0 h	110.0 hij	103.3 d-h	4835.50 abc	7749.2 abc
4	04P03-HC5D	60.7 a	126.7 b-e	106.0 bcd	4950.30 abc	7933.2 abc
5	06P04B-E02D2	52.0 gh	140.0 a	104.3 c-h	4784.40 abc	7667.3 abc
6	06Mn12-AC4	52.3 fgh	116.7 d-j	104.3 c-h	5170.07 abc	8285.4 abc
7	06Mn12-AD5	56.7 b-e	108.3 ij	104.7 c-h	5324.43 abc	8532.7 abc
8	06Mn25-BA2	56.0 b-g	121.7 b-h	105.7 b-e	5531.43 abc	8864.5 abc
9	06Mn25-AP1	57.3 bcd	121.7 b-h	105.7 b-e	5237.40 abc	8393.3 abc
10	06Mn12-AC2	53.3 d-h	116.7 d-j	104.7 c-h	5122.43 abc	8209.0 abc
11	06Mn23-AJ4	56.3 b-f	123.3 b-g	103.3 d-h	3790.63 d	6074.7 d
12	06Mn23-AJ3	55.7 b-g	126.7 b-e	104.7 c-h	4718.17 bc	7561.2 bc
13	SA070923	51.3 h	116.7 d-j	105.7 b-e	5518.90 abc	8844.4 abc
14	SA070712	54.7 c-h	128.3 bcd	104.3 c-h	5812.43 ab	9314.8 ab
15	SA081567	58.3 abc	118.3 c-i	105.7 b-e	5471.30 abc	8768.1 abc
16	SA081705	56.3 b-f	125.0 b-f	105.3 c-f	5208.77 abc	8347.4 abc
17	SA081093	53.3 d-h	121.7 b-h	104.7 c-h	4889.43 abc	7835.6 abc
18	SA080096	53.7 d-h	126.7 b-e	103.3 d-h	4797.53 abc	7688.4 abc
19	SA080678	56.0 b-g	121.7 b-h	102.7 fgh	5356.93 abc	8584.8 abc
20	SA080106	54.7 c-h	113.3 f-j	105.3 c-f	5812.30 ab	9314.6 ab
21	SA080068	51.0 h	115.0 e-j	102.3 gh	4544.77 c	7283.3 c
22	SW090317	52.0 gh	110.0 hij	102.0 h	5194.40 abc	8324.4 abc
23	SW 081506	56.7 b-e	110.0 hij	103.0 e-h	5292.00 abc	8480.8 abc
24	Newburg	54.7 c-h	133.3 ab	103.7 c-h	5426.23 abc	8695.9 abc
25	108C235	51.3 h	105.0 j	105.3 c-f	5459.27 abc	8748.8 abc
26	108C105	51.0 h	113.3 f-j	104.0 c-h	5099.03 abc	8171.5 abc
27	108C260	55.7 b-g	111.7 g-j	105.0 c-g	5441.33 abc	8720.1 abc
28	108C233	51.0 h	118.3 c-i	104.7 c-h	5004.10 abc	8019.4 abc
29	108C206	51.3 h	118.3 c-i	106.0 bcd	5398.13 abc	8650.9 abc
30	05P14-OA15	59.0 ab	128.3 bcd	109.0 a	4965.90 abc	7958.2 abc
31	05P19-OA02	54.0 d-h	118.3 c-i	105.3 c-f	4764.83 abc	7636.0 abc
32	05P17-OA35	52.7 e-h	130.0 bc	104.0 c-h	5261.87 abc	8432.5 abc
33	05P16-OA26	52.3 fgh	116.7 d-j	106.3 bc	5452.40 abc	8737.8 abc
34	04P06A-OA01	57.0 bcd	116.7 d-j	108.0 ab	5848.80 a	9373.1 a
35	04P07A-OA50	57.0 bcd	123.3 b-g	104.3 c-h	5559.00 abc	8908.7 abc
36	05P15-OA06	52.7 e-h	131.7 ab	102.3 gh	5396.13 abc	8647.7 abc
LSD (P=.05)	2.30	7.18	1.51	603.426	967.089025	
Standard Deviation	1.41	4.40	0.92	369.522	592.218687	
CV	2.59	3.67	0.88	7.11	7.11	
Bartlett's X2	45.876	17.448	25.812	36.808	36.808	
P(Bartlett's X2)	0.018*	0.983	0.772	0.385	0.385	
Replicate F	1.409	11.587	6.818	16.391	16.385	
Replicate Prob(F)	0.2511	0.0001	0.0020	0.0001	0.0001	
Treatment F	10.305	9.242	8.192	3.604	3.604	
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.



Mr. Garnet Berge  
Chair, Peace River Agricultural Development Fund  
Box 6641  
Fort St. John, BC V1J 4J1

Your file    *Notre référence*

Our file    *Notre référence*

Dear Mr. Berge:

I would like to express my appreciation for the contribution of your organization to enable the BC Grain Producers Association (BCGPA) to grow a site of the Western Co-operative Oat Registration Trial (WCORT) at their Dawson Creek, British Columbia location.

The WCORT provides the data required by the Canada Food Inspection Agency to register oat cultivars for commercial production in western Canada. By enabling the BCGPA to grow a site for this test, you have allowed us to provide data and information that will be pertinent to growers in the BC and Alberta Peace area for making decisions on the cultivars best suited to their local growing environment. This test site also enables breeders to select breeding lines that perform well across all of the oat growing area of western Canada.

Our collaboration with the BC Grain Producers Association (BCGPA) at the Dawson Creek and Fort St. John, British Columbia sites is essential because the BCGPA has the location access and equipment, as well as the scientific and technical resources to perform the work according to the Registration Trials work plan and protocol, as outlined by the Prairie Grain Development Committee. The Dawson Creek and Fort St. John locations are important because they provide the extremely short growing season required for breeding oat varieties adapted to the Parkland and Peace River production areas.

We trust that your organization will continue to enable the BCGPA to grow the WCORT and provide this essential service to the oat breeding and oat growing community of western Canada.

Sincerely yours,

Jennifer Mitchell Fetch  
Research Scientist - Oat Breeder  
Agriculture and Agri-Food Canada | Agriculture et Agroalimentaire Canada  
Cereal Research Centre  
195 Dafoe Road  
Winnipeg, MB R3T 2M9  
[Jennifer.MitchellFetch@agr.gc.ca](mailto:Jennifer.MitchellFetch@agr.gc.ca)