

ADOPT

Agricultural Demonstration of Practices and Technologies

Final Report – Dec 15, 2011

- 1) Demonstration of New Crop Varieties for NE SK.
- 2) ADOPT Project #20100273
- 3) Saskatchewan Conservation Learning Centre Inc.
- 4) SW 20-46-26-W2 RM# 461
- 5) Seeded May 31, 2011 Combined Sept 21, 2011
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Objectives and Rationale

7) Objectives; this project demonstrated to producers the latest releases of crops from the CDC. The CLC focused on wheat, oats, red lentils, and green and yellow field peas. Producers are always looking for new varieties and like to see field demos before committing large acres to a new variety.

8) Rationale: It will help assist producers in making decisions on potential winners and losers without making major investments of their own. To provide a venue for the introduction of crop industry development opportunities.

Methodology and Results

9) Methodology: Demonstration plots of new crops were seeded on a non-replicated field scale basis designed to be utilized as an extension tool for field days. All seeding and combining was done with plot machinery. CDC Dancer oats were seeded on the 24th of May into average conditions. 102 lbs of seed and 30lbs of 38-13-0-0 / acre rate was applied at seeding. Emergence was



considered quite good, with some competition early. June 30th saw us spray the crop with 0.60l/ac rate of MCPA amine which provided adequate results. The crop maintained its health throughout the growing season. Yields were better than our expectations, due to minimal fertility. Grade and health of the crop were above our expectations. CDC Seabiscuit was managed the same as Dancer. Both oat crops had similar conditions – Seabiscuit yielded 23% higher than Dancer which was an unexpected outcome.

Our CDC Redberry lentils gave us our biggest surprise. Seeded on the 24th of May with a 50lb/acre rate – Tagteam was also applied to the seed. Emergence was excellent with minimal competition early. July 2nd saw us spray Select with a 75ml/acre rate. Control was better than expected, with some narrowleaf hawk's beard setting seed. Standability and overall health were much better than expected, along with the yield. Sept 8th saw the crop receive a 1.5ltr/acre rate of glyphosate. The crop was combined on the 15th of September and after 17% dockage, the net yield was 47.56 bsh/acre.

CDC Patrick and Golden were both seeded May 24th into ideal soil conditions (5c) with a rate of 120 lbs/acre. Tagteam was applied to both seeds prior to seeding. Emergence was adequate, with the crop responding after competition was controlled on June 30th with 0.85ml/acre rate of Pursuit. Glyphosate was applied to both on the pea crops at a rate of 1.5ltr/acre rate on Sept 8th. Both crops maintained their health to provide excellent yields on Sept 16th – both much higher than expected, mainly due to ideal growing conditions.

The breeding of these new varieties provide the producers with better cropping options, with increased health and yields.



10) Results;

Variety	Yield (bu/acre)
CDC Redberry lentils	47.56
CDC Dancer oats	89.97
CDC Seabiscuit oats	116.07
CDC Patrick green peas	70.83
CDC Golden yellow peas	74.11

Conclusions and Recommendations

The impact of this project is always significant, as our research indicates that producers feel this is the most important type of project to get them onto the farm to witness the results. The oats gained most of the attention this season with more producers going to a canola/oat rotation. Expectations would suggest oat yields have the potential to increase with added nitrogen, as minimal nitrogen was applied. We will continue to highlight these new releases from the CDC as most producers appreciate the value.

Supporting Information

12) Acknowledgements

Field Days:

Conservation Learning Centre – Annual Field Day – July 12th - 53 people
 Conservation Learning Centre – Organic Growers Field Day – July 26 – 42 producers

Conservation Learning Centre – Combine Clinic – Aug 4th – 75 produce
 Report on the project to be posted on our website

www.conservationlearningcentre.com

We would like to express our gratitude to the Ministry of Agriculture for the funding support and in-kind support with this project. To recognize the ADOPT program and the Ministry we had signage at the sites.

13) Appendices

n/a



Abstract

14) Abstract/Summary

Producers are continuously faced with the ever increasing task of extending crop rotations. With commodity prices as high as they are and with canola being king, rotations have suffered. In our region, many rotations have been reduced to canola-wheat-canola-wheat. This demonstration shows the producers some other new cropping options that they have available to include in their crop rotations. Over the 2012 growing season we demonstrated newly released varieties from the Crop Development Centre: Redberry lentils, Dancer oats, Seabiscuit oats, Patrick green peas and Golden yellow peas. Plots were established at our site south of Prince Albert, SK. CDC Redberry lentils yielded 47 bu/ac which is considered high for this Parkland area. The lentils had good weed control with only a spring application of herbicide. Both the oat and pea crops had excellent starts, with emergence being very even. CDC Dancer oats yielded 90 bu/ac, while CDC Seabiscuit oats produced 116 bu/ac. CDC Patrick green peas had a yield of 71 bu/ac., with CDC Golden yellow peas achieving over 74 bu/ac. Early competition caused concern, but all herbicides controlled the weeds and provided the ideal environment for such respectable yields. Crop demonstrations such as this enable the producer to determine if this new releases from the Crop Development Centre have potential for expanding their existing narrow range of crops in rotation.

Finances



15) Expenditure Statement

Table 3 project spending

Description of expense	Expenses					
	Salaries and Benefits	Material & Supplies	Travel - field work	Collaboration / consultation	Field Day	Admin.
postdoctoral/research	3540.00					
seed, etc		850.00				
field work, rental			650.00			
collaboration/consultation				600.00		
field day					300.00	
administration						400.00
rentals						
Category Totals	3540.00	850.00	650.00	600.00	300.00	400.00
PROJECT TOTAL EXPENSES	\$6340.00					

Table 4. Project budget and expenditure

column 1	column 2	column 3
Categories	Total approved Budget. Appendix 'B' of Contract.	Actual Spent on Project
Salaries and Benefits		
· Students		
· Postdoctoral / Research Associates	\$3,540.00	\$3,540.00



ADOPT – Application Form

· Technical / professional assistants		
Consultant Fees & Contractual Services	\$0.00	\$0.00
Rental Costs	\$500.00	\$500.00
Material and Supplies	\$850.00	\$850.00
Project Travel		
· Field Work	\$150.00	\$150.00
· Collaborations / consultations	\$600.00	\$600.00
Other		
· Field Day	\$300.00	\$300.00
· Administration	\$400.00	\$400.00
· Miscellaneous	\$0.00	\$0.00
TOTAL	\$6340.00	\$6340.00

