

# Western Canada Forage Barley Coop Line Evaluation

**Project duration** - May 2017 – August 2017

**Objectives** - To evaluate different forage barley lines for grain quality characteristics for the purpose of evaluation and recommendation of lines for registration

**Collaborators-** Dr. Patricia Juskiw – Barley Breeder, Lacombe Field Crop Development Centre  
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## Project findings

The data were generated for the Prairie Recommending Committee for Oat and Barley; however, due to intellectual property issues pertaining to Plant Breeders' Rights, results for individual lines are not provided in this report. For more information on the Coop trial, contact Patricia Juskiw, Lacombe Field Crop Development Centre, [Patricia.Juskiw@gov.ab.ca](mailto:Patricia.Juskiw@gov.ab.ca).

## Background

The barley breeding effort at the Lacombe Crop Development Centre coordinates the generation of data for new 2 row and 6 row barley lines for both grain and forage purposes in order to be evaluated for recommendation. This report concerns the forage outcomes of the trial.

## Materials & Methods

Experimental Design: Random Complete Block Design  
Entries: 20 total; 5 checks, 11 varieties in first round testing, 4 varieties in second round testing.  
Seeding: May 30  
Harvest: August 22

**Table 1: Varieties included in trial at Roblin, 2017**

AC Ranger	FB472	FB208	FB022
CDC Austenson	FB473	FB479	FB207
Gadsby	FB476	FB480	FB483
Vivar	FB023	FB481	FB484
CDC Cowboy	FB024	FB482	FB485

## Data collected and date collected

Heading: July 21  
Height: August 22  
Lodging: August 22  
Forage wet weight: August 22  
Forage dry weight: September 7

## Agronomic info

Previous year's crop: Oat barley silage  
Soil Type: Erickson Loam Clay  
Landscape: Rolling with trees to the east  
Seedbed preparation: Heavy harrowed twice

**Table 2: Spring 2017 Soil Test**

	Available	Needed
<b>N</b>	86 lb/ac	124lb/ac
<b>P</b>	10 ppm	10 ppm
<b>K</b>	183 ppm	0 ppm
<b>S</b>	184 lb/ac	0 lb/ac

**Table 3: Added N and P**

Blend	Blend (actual lbs/ac)	Actual lbs N	Actual lbs P
<b>46-0-0</b>	78.01	35.89	0
<b>11-52-0-0</b>	19.23	2.12	10
<b>Total</b>		38	10

*N side banded; P banded with seed*

**Table 4: Pesticide Application**

Stage	Date	Product	Rate
<b>Pre-Emerge</b>	May 18	RoundUp WeatherMax	0.94 L/ac
<b>In crop</b>	June 27	Axial BIA Prestige XCA	0.96 L/ac 0.26 L/ac
<b>Desiccation</b>	August 24	Roundup	0.67 L/ac