

Phillex Quinoa Variety Trial

Project duration: May 2019 – October 2019
Objectives: To demonstrate the use of cover cropping strategies
Collaborators: Percy Phillips, Phillex Quinoa

Results

Figure 1 shows the average grain yield by variety and the mean yield for all varieties.

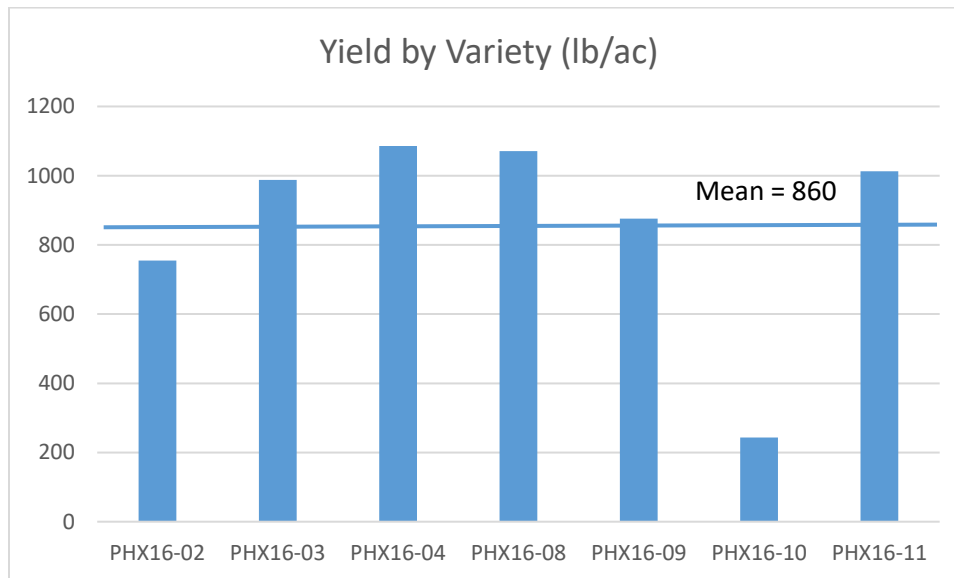


Figure 1: 2019 average yield by variety and mean for all varieties.

Background

PCDF collaborates with Percy Phillips of Phillex, Ltd. to examine the potential of new quinoa varieties for production in Manitoba. The yields observed for 2019 were low in comparison to previous years, due in large part to poor conditions for crop establishment. The first 24 days after planting saw high winds and just 30% of the normal precipitation for the period. Consequently, emergence was not uniform across the plots and yields were generally lower than those observed in other years.

Materials & Methods

Experimental Design: Random Complete Block Design
Entries: 7
Seeding: May 22
Harvest: Sept 25

Agronomic info

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

Table 1: Treatments

PHX16-01	PHX16-08
PHX16-02	PHX16-09
PHX16-03	PHX16-10
PHX16-07	

Data collected	Date Collected
Emergence:	May 30
Height:	Aug 19
Vigor:	Mid Jul
Yield:	Oct 7
Moisture:	Oct 7

Table 2: Spring 2019 Soil Test

	Available	Needed
N	74 lb/ac	130 lb/ac
P	15 ppm	25 lb/ac
K	189 ppm	10 lb/ac

Table 3: Added Fertility

Blend	Blend (actual lbs/ac)	Actual lbs N	Actual lbs P
46-0-0	117.1	53.88	0
11-52-0-0	19.23	2.12	10
Total	-	56.0	10

N sidebanded: P banded with seed

Table 4: Herbicide Application

Crop stage	Date	Product	Rate
Pre-emerge	May 23	Glyphosate	640 ml/ac
In-crop	June 10	Coragen	50 ml/ac
	June 19	Quizalafop	300 ml/ac
		Lagon	250 ml/ac
		Decis	150 ml/ac
	August 2	Coragen	60 ml/ac
	August 21	Coragen	60 ml/ac
Desiccation	September 17	Reglone	1 L/ac