Organic Oats Variety Evaluation

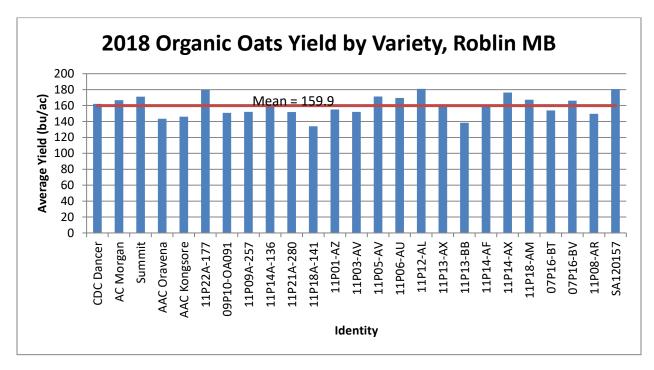
Project duration May 2018 – October 2018

Objective To evaluate oat varieties for organic production.

Collaborators Jennifer Mitchell-Fetch, AAFC Brandon

Results

Figure 1: 2018 Average organic oats yield by variety



Background

Research suggests that selection of cereal crops specific to organic agriculture should be conducted on organically managed land [1,2]. Conventional management systems may mask or confound certain plant characteristics, resulting in selection of sub-optimal cultivars for organic production systems. Organic management conditions were used for the trial at PCDF, although the site is not certified organic.

Materials & Methods

Experimental Design Random Complete Block Design

Entries 25 varieties
Seeding May 15
Harvest Sept 8

Table 1: Varieties included at Roblin 2018

11P05-AV	11P14-AF	11P21A-280	11P06-AU	11P14-AX
11P12-AL	Summit	AC Morgan	AAC Oravena	11P09A-257
CDC Dancer	11P03-AV	11P18A-141	SA120157	11P13-AX
11P01-AZ	07P16-BT	11P14A-136	09P10-OA091	AAC Kongsore
11P08-AR	07P16-BV	11P13-BB	11P22A-177	11P18-AM

Data collected	Date collected
Emergence	May 26 - 29
Heading	Jul 7-10
Maturity	Aug 19-25
Height	Aug 2
Yield	Sept 8
Moisture	Sept 8

Agronomic info

Previous 2 years crop Oat barley silage Soil Type Erickson Loam Clay

Landscape Rolling with trees to the east

Seedbed preparation Tillage day of seeding

Table 2: Spring 2018 Soil Test

	Available
N	54 lb/ac
Р	13 ppm
K	228 ppm
S	118 lb/ac

References

[1] Reid, T., Yang, R.-C., Salmon, D. and Spaner, D. (2009). Should spring wheat breeding for organically managed systems be conducted on organically managed land? Euphytica 169:239-252.

[2] Dalhousie University, Organic Agriculture Centre of Canada. The crafting of organic oats. https://www.dal.ca/faculty/agriculture/oacc/en-home/about/about-oacc/documents/newpaper-articles/newsarticles-2012/newsarticles-2012-fetch.html