

Organic Oats Participatory Plant Breeding

Project duration: May 2020 – October 2020

Objective: To evaluate oat varieties for organic production.

Collaborators: Jennifer Mitchell-Fetch, AAFC Brandon

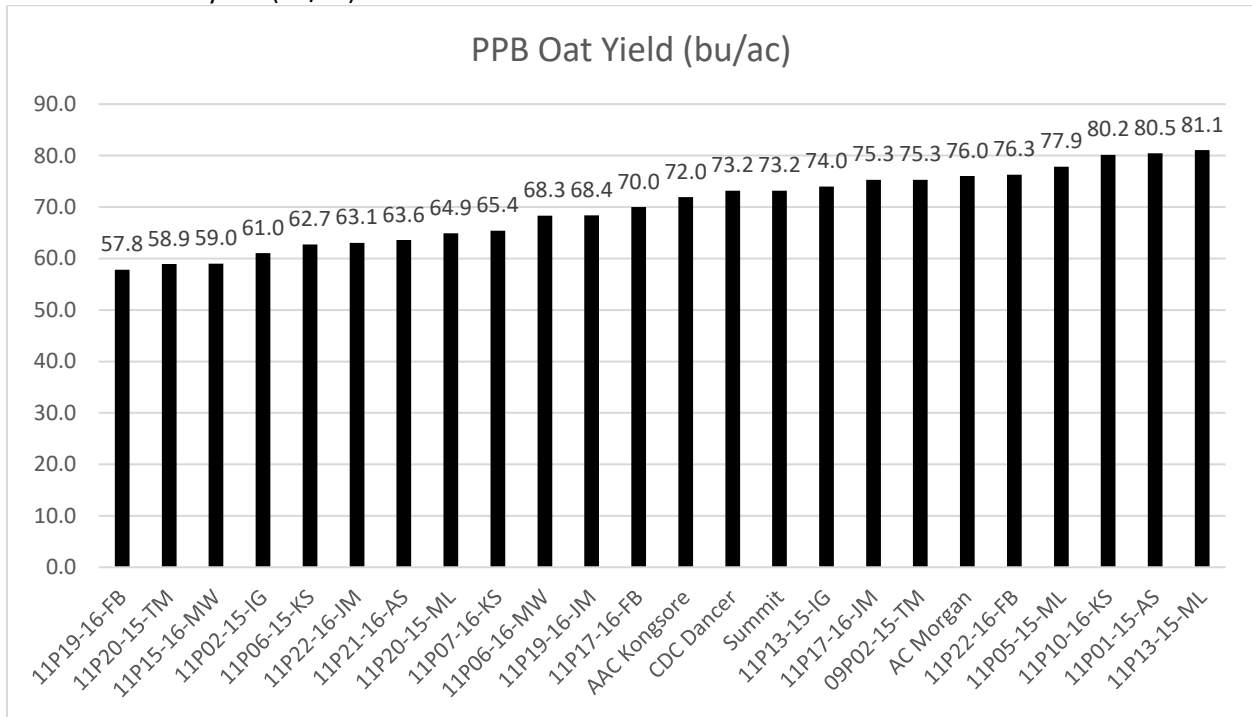
Background

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. The trial was grown on certified organic land belonging to a local organic producer.

Results

The majority of the entries in this test are unregistered varieties. The yield results are shown in Table 1 for reference and to allow interested producers to track the entries in the future.

Table 1: PPB oat yield (bu/ac)



Materials and methods

Experimental Design: Random Complete Block Design

Entries: 25 varieties

Seeding: May 14

Harvest: Sep 2

Table 2: Varieties included at Roblin 2020

11P01-15-AS	11P13-15-IG	11P15-16-MW	11P19-16-FB	AC Morgan
11P21-16-AS	11P02-15-IG	11P06-15-KS	11P17-16-FB	CDC Dancer
11P05-15-ML	11P20-15-TM	11P10-16-KS	11P22-16-JM	Summit
11P13-15-ML	09P02-15-TM	11P07-16-KS	11P19-16-JM	AAC Kongsore
11P20-15-ML	11P06-16-MW	11P22-16-FB	11P17-16-JM	

Data collected Date collected
 Weekly Maturity: Aug 5-29
 Height: Aug 14
 Lodging: Sep 2
 Yield: Sep 2
 Moisture: Sep 2

Agronomic info
 Previous year's crop: Organic wheat
 Soil Type: Erickson Clay Loam
 Landscape: Rolling with trees to the south
 Seedbed preparation: Cultivated and harrowed

Table 3: Spring 2020 Soil Test

	Available
N	73 lb/ac
P	5 ppm
K	168 ppm

(Organic trial: no fertilizer or herbicide applied)