Parkland Coop Wheat Variety Evaluation

Project duration: May 2021 – August 2021
Objectives: To evaluate spring wheat varieties for the Parkland Coop
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Background
The Parkland Cooperative wheat trial is conducted across the Prairies as a resource for wheat breeders to generate data in support of registration of new Canada Western Red Spring varieties. Additional samples taken to test for wheat midge were sent away at the end of July.

Results
The average yield for wheat entries is shown in Figure 1. Numbered (coded) entries are provided for reference only. For more information on the Parkland Coop trial, contact Klaus Strenzke, University of Alberta. The results are for one site-year only, and should be interpreted with caution. Consult a seed guide for multi-site-year data for available varieties.

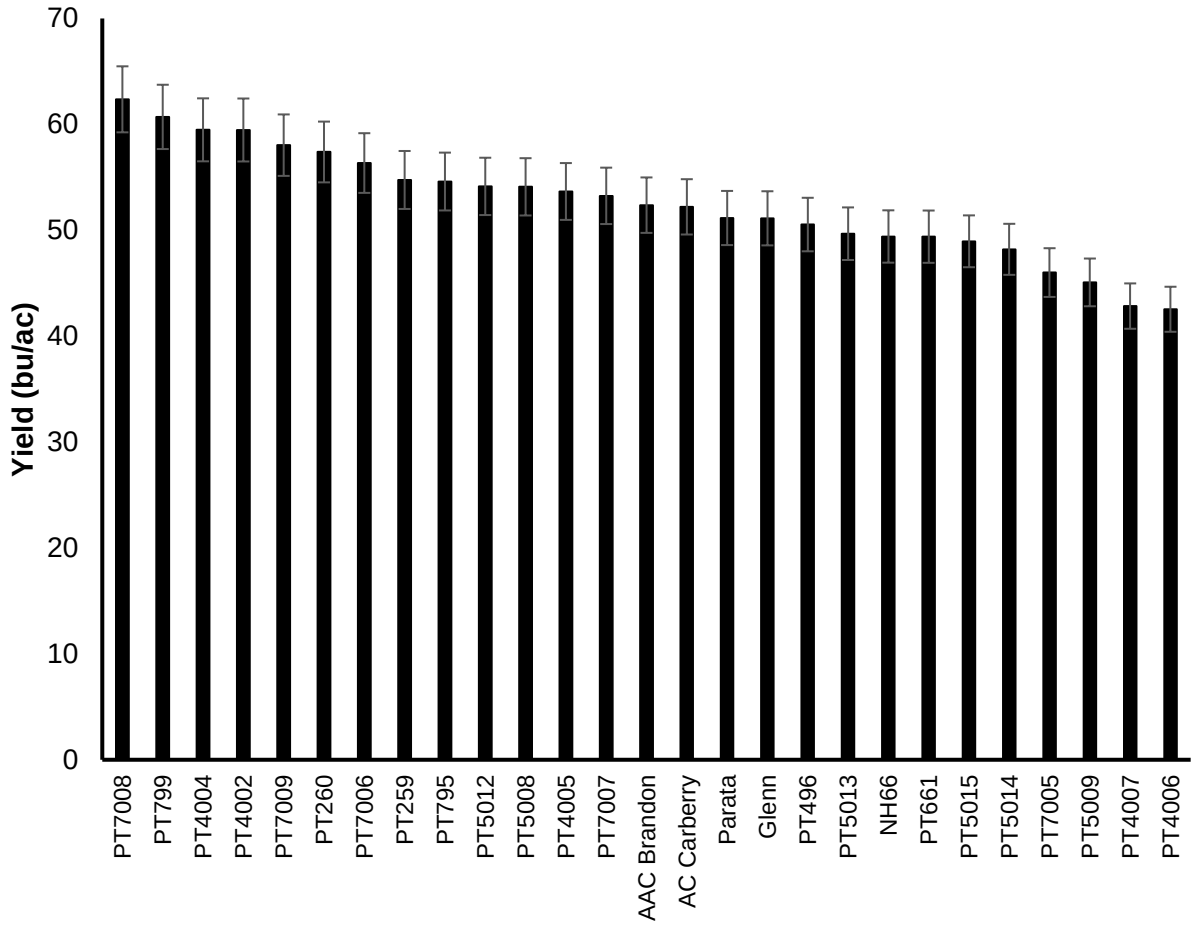

Figure 1: Average yield for wheat entries

Table 1: Comparison of yield means and statistical difference for wheat entries (varieties connected by the same letter are statistically significant)

Variety	Statistical significance for yield									Yield (bu/ac)
PT7008	A									62.36
PT4004	A	B								59.48
PT4002	A	B								59.47
PT7009	A	B	C							58.04
PT260	A	B	C	D						57.39
PT7006	A	B	C	D	E					56.35
PT795	A	B	C	D	E	F				54.77
PT259	A	B	C	D	E	F				54.75
PT5012		B	C	D	E	F				54.14
PT5008		B	C	D	E	F				54.10
PT799		B	C	D	E	F	G			53.80
PT4005		B	C	D	E	F	G			53.66
PT7007		B	C	D	E	F	G			53.25
AAC Brandon		B	C	D	E	F	G	H		52.37
AC Carberry		B	C	D	E	F	G	H		52.21
Parata			C	D	E	F	G	H		51.16
Glenn			C	D	E	F	G	H		51.13
PT496			C	D	E	F	G	H	I	50.54
PT5013				D	E	F	G	H	I	49.68
NH66				D	E	F	G	H	I	49.41
PT661				D	E	F	G	H	I	49.39
PT5015					E	F	G	H	I	48.96
PT5014						F	G	H	I	48.20
PT7005							G	H	I	46.01
PT5009								H	I	45.08
PT4007									I	42.84
PT4006									I	42.54
LSD	**8.04**									
% CV	**12.13**									

Materials and methods

Experimental Design: Rectangular Lattice
Entries: 27 varieties
Repetitions: 3
Seeding: May 6
Harvest: Aug 31

Agronomic information
Previous year's crop: Oat Silage
Soil Type: Erickson Clay Loam
Landscape: Rolling with trees to the east
Seedbed preparation: Vertical tilled

Data collected	Date collected
Height:	Aug 5
Lodging:	Aug 31
Yield:	Aug 31
Moisture:	Aug 31

Table 2: 2021 Fertility Information

	Available	Added	Type
N	93 lb/ac	96 lb/ac	46-0-0
P	46 ppm	15 lb/ac	11-56-0-0
K	709 ppm	-	-

Table 3: Pesticide Application

Crop stage	Date	Product	Rate
Pre-emerge	May 10	Heat LQ	35 ml/ac
		Amigo	750 ml/ac
In-crop	Jun 14	Curtail M	810 ml/ac
		Puma	271 ml/ac