

Soybean Potassium Trial

Trial ID: 2017-SK02 – R.M. of Rockwood

Objective: Quantify the agronomic and economic impacts of potassium fertilizer on soybean fields with <150 ppm soil test K in Manitoba. Potash was mid row banded at 60 lbs/ac K₂O and compared to untreated check strips.

TRIAL INFORMATION

Treatment	Mid Row Band – 60 lbs/ac K ₂ O
Rural Municipality	Rockwood
Previous Crop	Soybeans
Soil Description	Calcareous Loamy Till
Tillage	Conventional
Planting Date	May 5, 2017
Variety	NSC Gladstone RR2Y
Row Spacing	10"
Seeding Rate	180,000 seeds/ac
Plant Stand @ V1	176,000 plants/ac
Harvest Date	September 28, 2017

SOIL PROPERTIES[†]

Soil Test Sample Timing	Spring
Soil K Level	235 ppm

[†] Composite soil sample of the trial area before seeding at 0-6" depth

PRECIPITATION[†]

	May	June	July	Aug
Rainfall	24.0	63.6	61.3	32.5
Normal	54.1	90.0	79.5	77.0

[†] Growing season precipitation (mm)

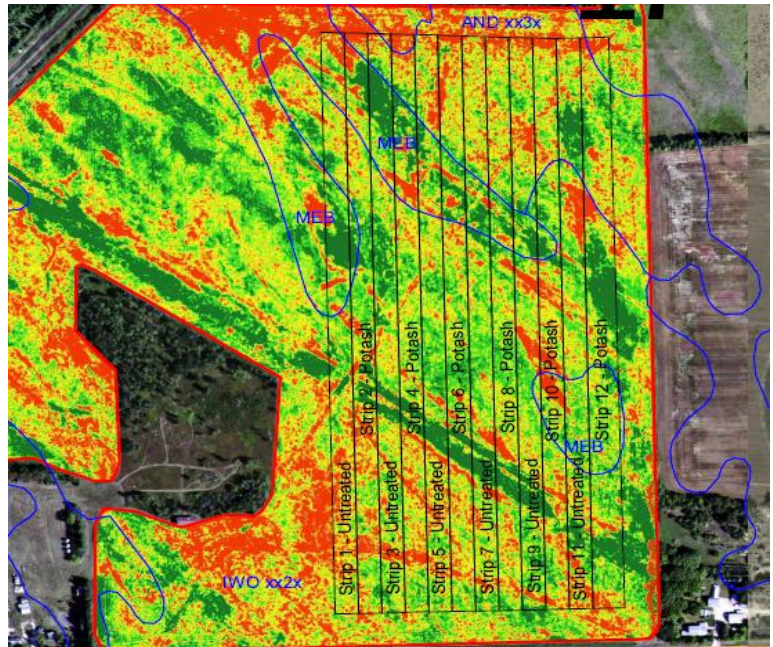
OVERALL YIELD

	Mean (bu/ac)
Midrow Band – 60 lbs/ac Potash	25.2
Untreated	24.8
Yield Difference	0.4
P-Value	0.1472
CV	2.3%
Significance	No

Summary: There was no significant yield difference between potash fertilizer mid row banded at 60 lbs/ac K₂O and untreated check strips. The soil test K level was 235 ppm based on a composite soil sample before seeding. A fall zone sample had at least one zone with a soil test K level of less than 150 ppm. This study is apart of a more detailed University of Manitoba small plot study which compares multiple rates and placements of potash fertilizer in soybeans. Potassium fertilization recommendations will not be made until this study is complete in 2018.

MPSG would like to thank Agrium for providing the Potash for this trial.

FIELD IMAGE – AUG. 20, 2017



STRIP YIELD

