

Soybean Potassium Trial

Trial ID: 2017-SK05 – R.M. of Dufferin

Objective: Quantify the agronomic and economic impacts of potassium fertilizer on soybean fields with <150 ppm soil test K in Manitoba. Potash was broadcast and incorporated at 120 lbs/ac K₂O and compared to untreated check strips.

TRIAL INFORMATION

Treatment	Broadcast – 120 lbs/ac K ₂ O
Rural Municipality	Dufferin
Previous Crop	Wheat
Soil Description	Sandy Lacustrine
Tillage	Joker 1x
Planting Date	May 12, 2017
Variety	Pride 0027
Row Spacing	7.5"
Seeding Rate	160,000 seeds/ac
Plant Stand @ V1	110,000 plants/ac
Harvest Date	September 14, 2017

SOIL PROPERTIES†

Soil Test Sample Timing	Spring
Soil K Level	88 ppm

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

PRECIPITATION†

	May	June	July	Aug
Rainfall	29.1	65.5	27.4	24.0
Normal	54.4	90.0	78.4	68.3

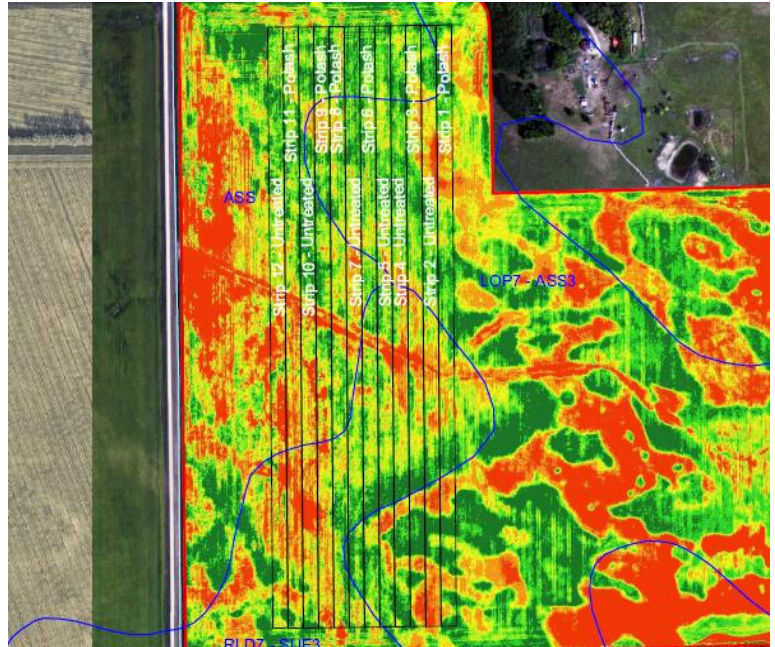
† Growing season precipitation (mm)

OVERALL YIELD

	Mean (bu/ac)
Broadcast – 120 lbs/ac Potash	25.9
Untreated	27.0
Yield Difference	-1.1
P-Value	0.2981
CV	11.6%
Significance	No

Summary: There was no significant yield difference between potash fertilizer broadcast and incorporated at 120 lbs/ac K₂O and untreated check strips. The soil test K level was 130 ppm based on a composite soil sample before seeding. 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.

FIELD IMAGE – AUG. 29, 2017



STRIP YIELD

