

Soybean Potassium Fertility Trial

Trial ID: 2018-SK02 – R.M. of Grey

Objective: Quantify the agronomic and economic impacts of potassium fertilizer on soybean fields with <150 ppm soil test K in Manitoba. Potash was applied in a band application in the spring at 60 lbs/ac K₂O and compared to an untreated check.

TRIAL INFORMATION

Treatment	Band application – 60 lbs K ₂ O/ac
Rural Municipality	Grey
Previous Crop	Oats
Soil Description	Loamy Fine Sand
Tillage	Reduced Till
Planting Date	May 23, 2018
Variety	P007A90R
Row Spacing	20"
Seeding Rate	180,000 seeds/ac
Plant Stand @ V1	144,000 plants/ac
Harvest Date	October 19, 2018

SOIL PROPERTIES[†]

Soil Test Sample Timing	Spring
Soil K Level	87 ppm

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

PRECIPITATION[†]

	May	June	July	Aug
Rainfall	39	59	56	23
Normal	58	77	77	59

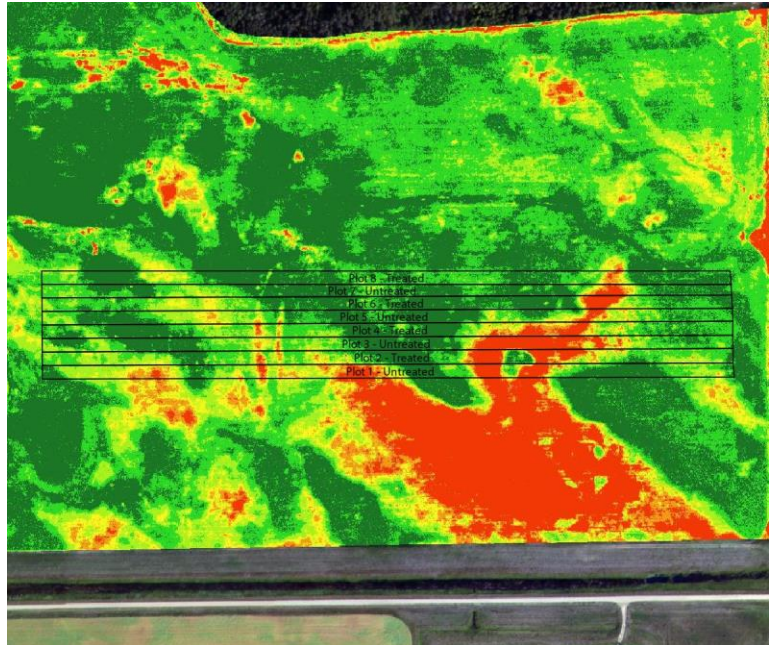
[†] Growing season precipitation (mm)

OVERALL YIELD

	Mean (bu/ac)
Broadcast – 120 lbs/ac Potash	30.8
Untreated	31.7
Yield Difference	-0.9
P-Value	0.0012
CV	3.8%
Significance	Yes

Summary: There was a significant yield difference of -0.9 bu/ac for a band application of potash applied before seeding compared to an untreated check. There were no visual potassium deficiency symptoms observed within this trial. Rainfall was below normal for the entire growing season.

NDVI FIELD IMAGE – AUGUST 13, 2018



STRIP YIELD

