

## Soybean Potassium Fertility Trial

Trial ID: 2018-SK07 – R.M. of Swan River

**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 K<sub>2</sub>O and compared to an untreated check.

TRIAL INFORMATION	
Treatment	Band application – 60 lbs K <sub>2</sub> O/ac
Rural Municipality	Swan River
Previous Crop	Canola
Soil Description	Clay Loam
Tillage	Conventional
Planting Date	May 15, 2018
Variety	Torro R2
Row Spacing	12"
Seeding Rate	---
Plant Stand @ V1	146,000 plants/ac
Harvest Date	October 19, 2018

SOIL PROPERTIES <sup>†</sup>	
Soil Test Sample Timing	Fall
Soil K Level	133 ppm

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

PRECIPITATION <sup>†</sup>				
	May	June	July	Aug
Rainfall	60	113	76	47
Normal	45	84	86	68

<sup>†</sup> Growing season precipitation (mm)

OVERALL YIELD	
	Mean (bu/ac)
Broadcast – 120 lbs/ac Potash	46.9
Untreated	47.2
Yield Difference	-0.3
P-Value	0.5769
CV	3.3%
Significance	No

**Summary:** There was no significant yield response to potash applied at seeding and an untreated check. Visual potassium deficiency symptoms were observed in a small area of light textured soils in the northwest corner of the field, but not observed in the majority of the trial area. Rainfall was near normal for the entire growing season.

