

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_2O and compared to an untreated check.

TRIAL INFORMATION Treatment Band application – 60 lbs K₂O/ac **Rural Municipality** Swan River **Previous Crop** Canola **Soil Description** Clay Loam Tillage Conventional **Planting Date** May 15, 2018 Variety Torro R2 12″ **Row Spacing Seeding Rate** ---Plant Stand @ V1 146,000 plants/ac Harvest Date October 19, 2018

SOIL PROPERTIES ^t		
Soil Test Sample Timing	Fall	
Soil K Level	133 ppm	

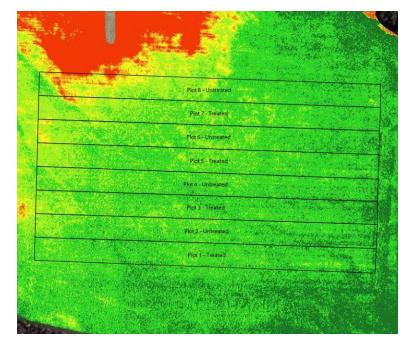
+ Composite soil sample of the trial area before seeding at 0-6" depth

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

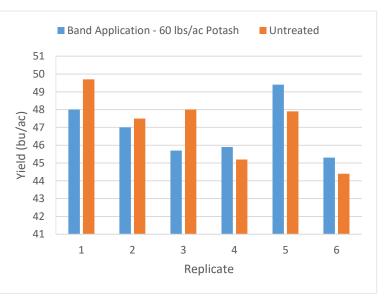
+ Growing season precipitation (mm)

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		

NDVI FIELD IMAGE – AUGUST 15, 2018



STRIP YIELD



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.



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