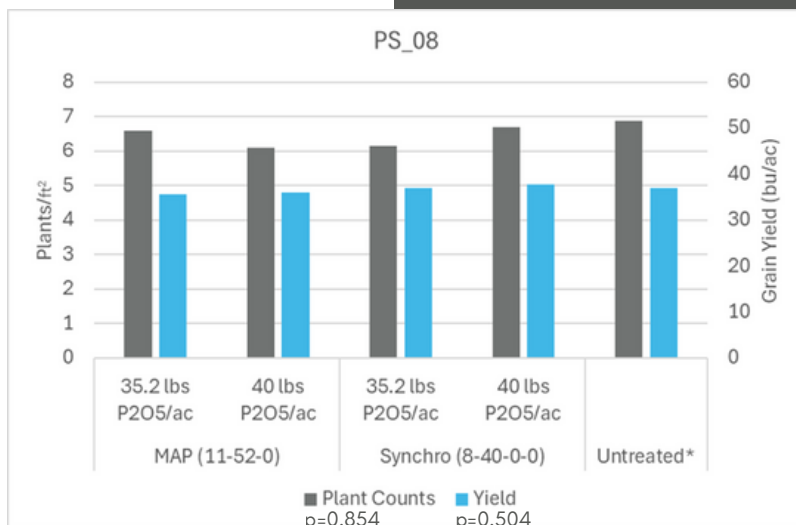


# Phosphorus Source Trial

## PS\_08

### Site Info

**Trial ID:** PS\_08  
**Rural Municipality:** Swan River  
**Seeding Date:** May 23, 2025  
**Soil Residual P (0-6in):** 16 ppm  
**Seeding Equipment:** Bourqualt 3320  
**Opener Type:** Knife  
**Row Spacing:** 10 in  
**Seedbed Utilization:** 7.5  
**Seeding Rate:** 4.5 lb/ac (TKW 4.7)  
**Variety:** L340PC  
**Harvest Date:** September 24, 2025



Within each data type, treatments with different lowercase letters are significantly different at 95% confidence level ( $p < 0.05$ ). Data types with no lowercase letters listed indicate an insignificant treatment effect  
 \*indicates unrepeatd check strip

### Results Summary

**Plant Establishment:** Plant counts at the 4-leaf stage were not significantly different across these P sources and rates.

**P Tissue and Biomass:** The rates and sources of P utilized did not cause significant differences in plant biomass or P tissue content at rosette stage.

**Grain Yield:** P sources and rates had no significant influence on grain yield in this trial.

**Profitability:** Relative to the standard P source and rate, the use of alternative P sources and rates increased costs by \$4/ac to \$9/ac without producing significantly greater yields.

Treatment	Phosphorus Source	Rate	Total P @ Rosette	Grain Moisture
		(lbs. P <sub>2</sub> O <sub>5</sub> /ac)	(%)	(%)
1	MAP (11-52-0-0)	35.2	0.48	8.9
2	MAP (11-52-0-0)	40	0.55	8.9
3	Synchro (8-40-0-0)	35.2	0.58	8.7
4	Synchro (8-40-0-0)	40	0.44	8.6
<i>p-value</i>			0.078	0.076

# Phosphorus Source Trial PS\_08 Continued



## PS\_08 Weather

	Apr	May	June	July	Aug	Sept	Total
Rainfall (mm)	1.8	23.8	48.5	20.8	135	32.5	262.4
Avg Daily Temp (°C)	2.66	12.65	16.07	17.62	19.13	15	

## PS\_08 Economic Analysis

P Source and Rate	Mean yield (bu/ac)	P Fert Cost <sup>1</sup>	Change in Profit from Farm Standard <sup>2</sup>
MAP: 35.2 lb/ac P <sub>2</sub> O <sub>5</sub>	35.64	\$30/ac	-
MAP: 40 lb/ac P <sub>2</sub> O <sub>5</sub>	36.04	\$34/ac	-\$4/ac
Synchro: 35.2 lb/ac P <sub>2</sub> O <sub>5</sub>	36.93	\$35/ac	-\$5/ac
Synchro: 40 lb/ac P <sub>2</sub> O <sub>5</sub>	37.80	\$39/ac	-\$9/ac
P-value	0.504		
CV	4.88		

<sup>1</sup> Based on 2025 MB Cost of Production: estimated cost of MAP ~ \$1,140 / mt P<sub>2</sub>O<sub>5</sub> (\$0.851 / lb P<sub>2</sub>O<sub>5</sub>) and cost of MES15 ~ \$1322 / mt P<sub>2</sub>O<sub>5</sub> (\$0.987 / lb P<sub>2</sub>O<sub>5</sub>)

<sup>2</sup> Change in profit is calculated as the difference in grain sales income (based on estimated canola sale price of \$13.25/bu) and treatment costs, relative to the standard farm practice. Yields were not significantly different in this trial, therefore there are no differences in grain sales income.

Agronomic Support for this Trial  
Provided by:

