



POTATO

K-Mag® Potato Study - PEI

Objective

- Evaluate potato yield response to MOP (0-0-60), MOP + AS (21-0-0-24S), MOP + K-Mag® Premium (0-0-21.5-10.5Mg-21S).

Overview

- Along with Phosphorus (P), Potassium (K), Magnesium (Mg), and Sulfur (S) are macronutrients needed for a balanced crop nutrition program in potatoes.
- Magnesium is critical for disease resistance, skin quality, increased dry matter and starch levels.
- Ensuring K, Mg, and S availability through bulking can be difficult on coarse, well-drained sandy soils.
- K-Mag is a unique 3-in-1 nutrient source that features low chloride, water soluble nutrient, and does not affect soil pH; regardless of application rate.

Trial Details

Locations and Crop Management:

CROP: Potato (*Solanum tuberosum*)

YEARS: 2018-2019

LOCATIONS: 2 trials on Prince Edward Island

DATA SOURCE: Field studies conducted by independent third-party researchers.

EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

Cultivar: Russet Burbank

CROPPING CONDITIONS:

N Rate: Followed local practice with 50% at preplant and the rest applied in-season.

P Rate: 160-200 lbs P₂O₅/ac applied as DAP

K Rate: 240 lbs K₂O/ac as MOP
210 lbs K₂O/ac as MOP + 30 lbs K₂O/ac as K-Mag

S Rate: 30 lbs S/ac as AS or K-Mag

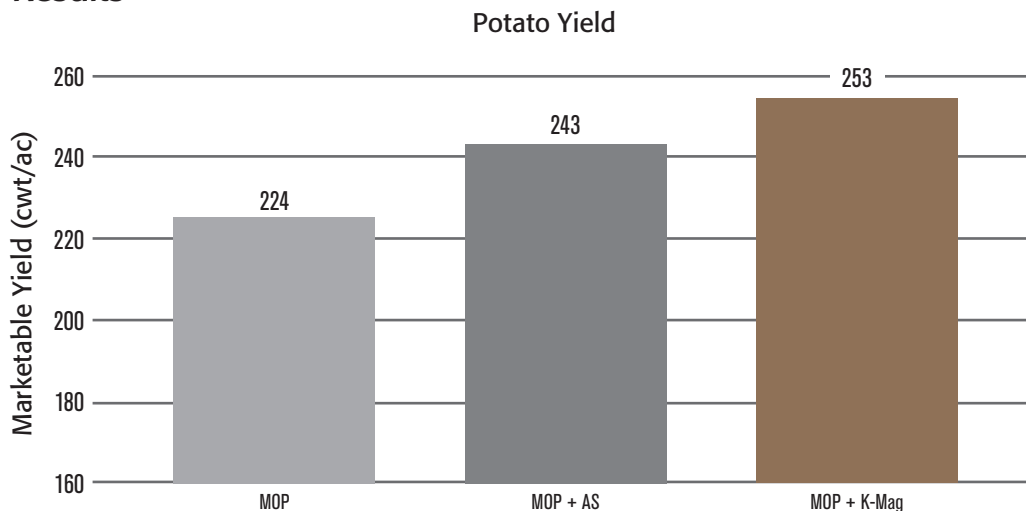
Application Timing and Method: Preplant broadcast and incorporated



29
cwt/ac

Increased yield with a small amount of K-Mag in the blend

Results



Summary

- The addition of S as AS increased yield by 19 cwt/ac over MOP.
- Compared to a treatment with only K (MOP) and S (AS), the addition of Mg from K-Mag increased yield 10 cwt/ac.
- Replacing a small amount of MOP with K-Mag increased yield by 29 cwt/ac over MOP alone.
- The K, Mg, and S found in K-Mag provide a great source of necessary macronutrients (primary and secondary) to provide a balanced crop nutrition program in potatoes.



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Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

For more information, go to Kmag.com

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