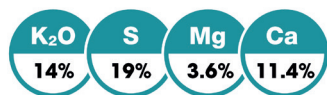




An Anglo American Product



Potato

response to Anglo American's POLY4®

Trial focus

Evaluate the potato yield response to standard practice compared to the POLY4 program.

Overview

- Standard practice is to apply potassium (K), sulfur (S) and magnesium (Mg) to ensure a balanced fertilizer plan for potato crop. Where potassium demand is high, MOP is substituted with SOP to limit chloride.
- POLY4, as a source of sulfate sulfur as well as potassium (K), magnesium (Mg) and calcium (Ca), offers a sustained nutrient delivery ensuring a continuous supply of nutrients throughout the growing season, increased nutrient uptake and higher yields.
- Due to its low chloride levels, POLY4 can also help to increase the dry matter content and improve tuber quality.

Treatments applied

- N and P application rates varied from site to site*.
- 300 lb of POLY4 was applied per acre to complement standard practice.
- POLY4 was applied pre-planting in six trials and at hilling in the rest.

Average nutrients applied (lb acre⁻¹)

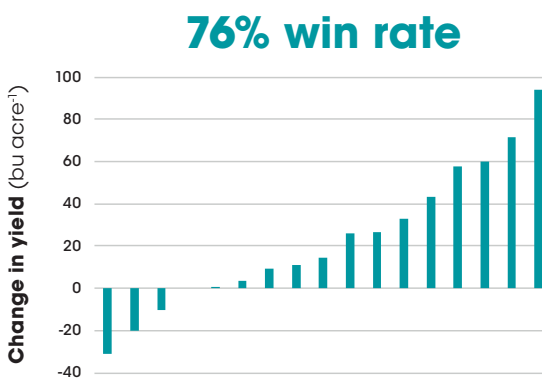
	K ₂ O	S	Mg	Ca
MOP-K+Mg+S	250	53	25	0
MOP-K+Mg+S + POLY4	250 + 42	53 + 57	25 + 18	51

Trial locations



Results

Change in yield with POLY4.



Conclusion

- The combination of low-chloride nutrients supplied by POLY4 increased yield: POLY4 S ensures efficient use of N, Mg results in larger tubers with greater starch and protein contents, and Ca strengthens cell structure, which improves potato skin.
- Across 17 sites, POLY4 consistently outperformed standard practice increasing potato marketable yield by 4.4% (13 CWT/acre).

Crop:

Potato

Years:

2019–2020

Locations:

17 on-farm demonstration trials on Prince Edward Island, Canada.

Data source:

Field studies conducted by third-party, independent researchers.

13
CWT/ac

increased yield with POLY4 over MOP-K+Mg+S

Notes: *NPK standard rates varied from site to site, but were approximately 165 lb N acre⁻¹ split over 2–3 applications, 143 lb P acre⁻¹ and 250 lb K₂O acre⁻¹; 25 lb MgO acre⁻¹ from KMag; Average yield of standard practice was 287 CWT/acre. All calculated yield results are median.