

Corn

response to Anglo American's POLY4[®]

Trial focus

Evaluate the yield response of corn to MOP + AMS and POLY4 program.

Overview

- 14.2 billion bushels of corn were produced in the USA in 2020.
- Standard practice for corn in the USA is to apply N, P and K according to crop need and soil testing.
- Potassium (K) fertilizer for corn is MOP. Corn crops also often receive sulfur (S) commonly supplied by AMS.

Treatments applied

- All treatments received standard N and P application rates.
- POLY4, MOP and AMS were spring applied.
- On average 146 lb acre⁻¹ of POLY4 was applied, the remainder of K₂O has been applied from MOP.

Average nutrients applied (lb acre⁻¹)

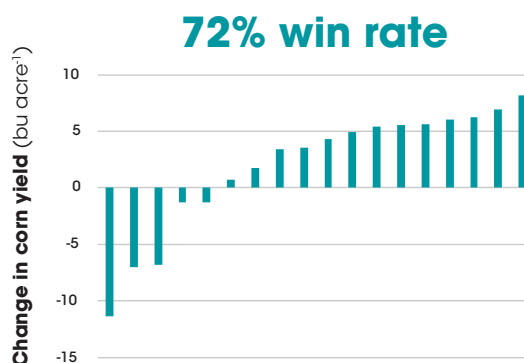
	K₂O	S	Mg	Ca
MOP + AMS	77	28	0	0
POLY4 program	77	28	5.3	18

Trial locations



Results

POLY4 program versus MOP + AMS



Conclusion

- Yields with the POLY4 program were higher than MOP + AMS: in 11 trials POLY4 yield outperformed MOP + AMS by at least 3.4 bushels per acre; in seven trials by at least 5 bushels per acre.
- POLY4 supplies plant-available S in sulfate form as well as K, Mg and Ca.
- The results demonstrate that POLY4 offers the benefits of a balanced, season-long crop nutrition helping to increase yield potential.

Crop:

Corn

Years:

2015–2020

Locations:

18 trials in Illinois, Iowa, Minnesota, North Dakota, South Dakota, Tennessee, Virginia.

Data source:

Trials conducted by third-party, independent researchers.

3.9
bu/ac

**POLY4 program
average yield
advantage over
MOP + AMS**

Notes: Median yield with standard practice was 167 bu/ac.