



CORN

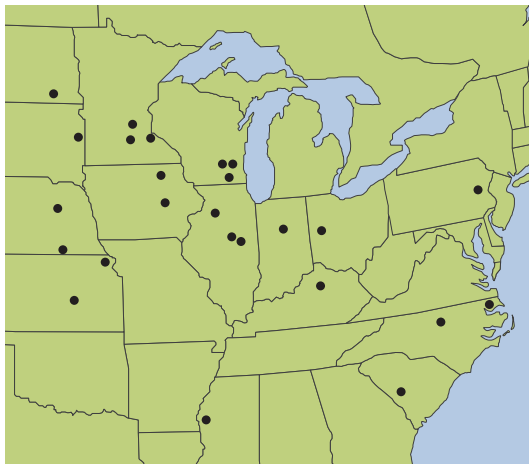
# K-Mag® Blend Study

## Objective

- Evaluate corn yield response to MOP (0-0-60) and K-Mag® Premium (0-0-21.5-10.5Mg-21S).

## Overview

- Muriate of Potash (MOP) is a common potassium (K) fertilizer used in corn production.
- Higher corn yields combined with lower atmospheric sulfur (S) deposition has accelerated the need for S on corn.
- Soluble magnesium (Mg) has been documented to improve photosynthesis, enzyme activation, root growth and grain yield.
- K-Mag is a unique 3-in-1 nutrient source that features low chloride, water soluble nutrients, and does not affect soil pH; regardless of application rate.



**LOCATIONS:** 46 trials across the following states - IA, IL, IN, KS, KY, MN, MS, NC, ND, NE, OH, PA, SC, SD, WI

## Trial Details

### Locations and Crop Management:

**CROP:** Corn (*Zea mays*)

**YEARS:** 2018-2022

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

**EXPERIMENTAL DESIGN:** Small-plot RCBD with 4 replications.

### Cropping conditions:

All trials conformed to local cropping practices

**N Rate:** Applied according to local recommendations

**P Rate:** 80 lbs P<sub>2</sub>O<sub>5</sub>/ac applied as DAP (18-46-0) or MAP (11-52-0)

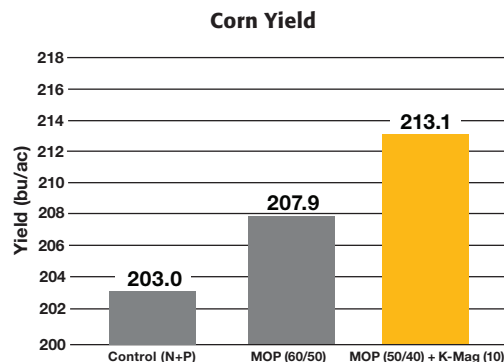
### K Rate:

- 2018-2021: 60 lbs K<sub>2</sub>O/ac applied as either MOP or a blend of MOP (50 lbs K<sub>2</sub>O/ac) + K-Mag (10 lbs K<sub>2</sub>O/ac)
- 2022: 50 lbs K<sub>2</sub>O/ac applied as either MOP or a blend of MOP (40 lbs K<sub>2</sub>O/ac) + K-Mag (10 lbs K<sub>2</sub>O/ac)

**Application Timing:** Preplant

**Application Method:** Broadcast Incorporated

## Results



## Summary

- Addition of MOP increased corn yield 4.9 bu/ac compared to the control (N+P).
- Replacing a small amount of MOP with K-Mag increased corn yield by 5.2 bu/ac over MOP averaged across 46 trials (2018 – 2022).
- These results demonstrate the value of K, Mg, and S for current yield levels and corn production systems.
- Access additional yield data, technical information, and resources at [KMag.com/Performance](https://KMag.com/Performance).



**5.2**  
 bu/ac

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



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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](https://Kmag.com).