K-Mag® Facts

CORN

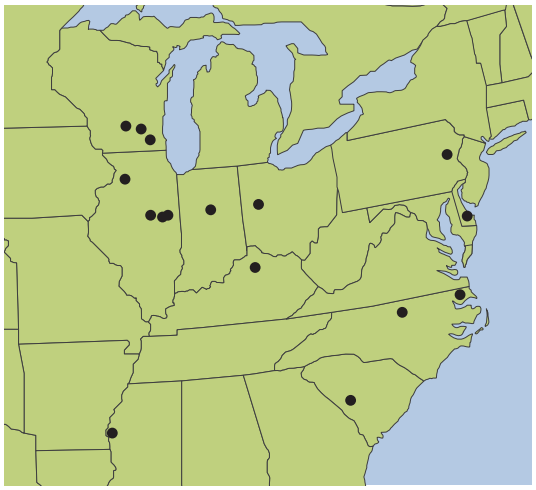
K-Mag® Blend Study

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 deposition has accelerated the need for sulfur (S) on corn.
- Soluble magnesium (Mg) has been documented to improve photosynthesis, enzyme activation, 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 rate.



LOCATIONS: 23 trials across the following states - DE, IL, IN, KY, MS, NC, OH, PA, SC, WI

Trial Details

Locations and Crop Management:

CROP: Corn (*Zea mays*)

YEARS: 2018-2019

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

EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

CROPPING CONDITIONS:

N Rate: Applied according to local recommendations

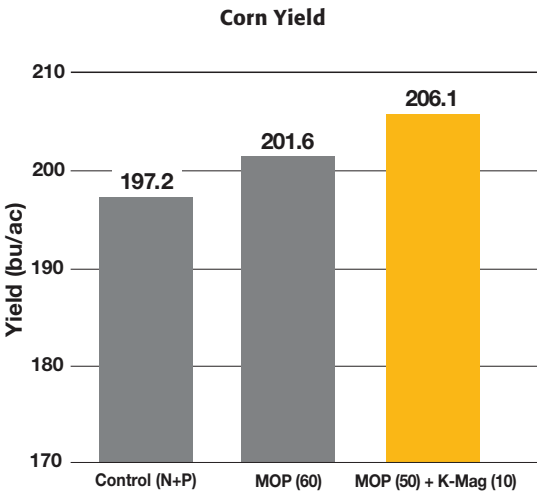
P Rate: 80 lbs P_2O_5/ac applied as DAP (18-46-0) or MAP (11-52-0)

K Rate: 60 lbs K_2O/ac as either MOP or a blend of MOP (50 lbs K_2O/ac) + K-Mag (10 lbs K_2O/ac)

Application Timing: Preplant

Application Method: Broadcast Incorporated

Results



4.5 bu/ac

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

Summary

- Replacing a small amount of MOP with K-Mag increased corn yield by 4.5 bu/ac over MOP when averaged across 23 trials (2018 and 2019).
- These results demonstrate the value of K, Mg, and S for current yield levels and corn production systems.

International Minerals Carlsbad

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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**