Mosaic®

AgriFacts®

CORN

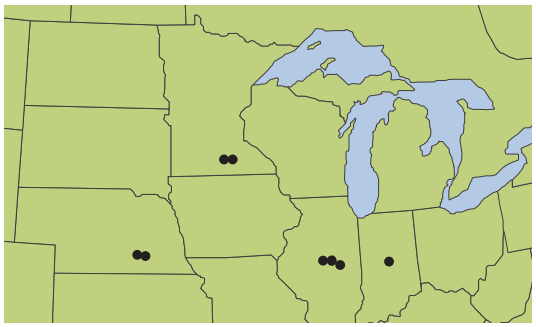
MicroEssentials® SZ™ Corn Fall vs. Spring Banded

Objective

- Evaluate the yield response of MicroEssentials® SZ™ (12-40-0-10S-1Zn) in fall and spring banded applications compared to MAP (11-52-0).

Overview

- MAP is commonly used as a phosphorus (P) source in corn-growing regions of North America.
- Fall applications of MAP may be preferred in certain cropping systems to evenly distribute seasonal workload, but spring applications are also a common practice in the Midwest.
- Recent environmental concerns have highlighted the need to better understand the yield performance of dry granular fertilizer applications in banded situations.
- Banded fertilizer applications have been shown to increase fertilizer efficiency and yields while reducing environmental P losses.
- MicroEssentials SZ contains four nutrients fused into one nutritionally balanced granule to promote uniform nutrient distribution, improved nutrient uptake and increased yield.



LOCATIONS: 9 trials across the U.S.
United States – IL, IN, MN, NE

Trial Details

Locations and Crop Management:

CROP: Corn (*Zea mays*)

YEARS: 2015–2016

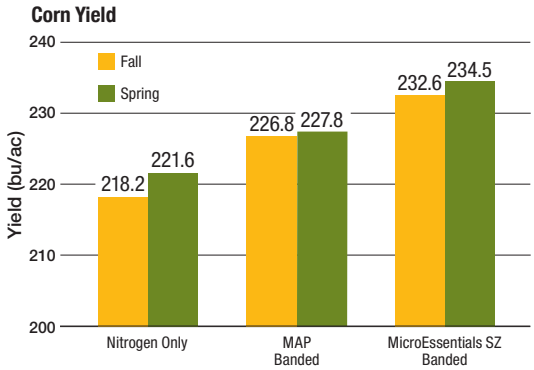
DATA SOURCE: Field studies conducted by third-party, independent researchers.

EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

CROPPING CONDITIONS:

- **N Rate**: Fall treatments received partial nitrogen (N) in the fall to balance for phosphate applications, with the remaining N applied in the spring. (Total N rates were based on local recommendation.)
- **P Sources:** MAP, MicroEssentials SZ
- **P Rate:** 80 lbs P_2O_5/ac
- **K Rate:** As required by soil test
- **Application Timing:** Fall or spring preplant
- **Application Method:** Banded 4"-6"

Results



Summary

- MicroEssentials SZ had the highest yield in both fall and spring applications.
- MicroEssentials SZ yields were 5.8 bu/ac (2.6%) higher than MAP with the fall application.
- MicroEssentials SZ yields were 6.7 bu/ac (2.9%) higher than MAP with the spring application.
- Regardless of fall or spring application, a banded application of MicroEssentials SZ is a superior technology for improving nutrient use efficiency.

MicroEssentials®

6.7 bu/ac

Increase with MicroEssentials SZ over MAP in the spring application

5.8 bu/ac

Increase with MicroEssentials SZ over MAP in the fall application

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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 **MicroEssentials.com**

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