



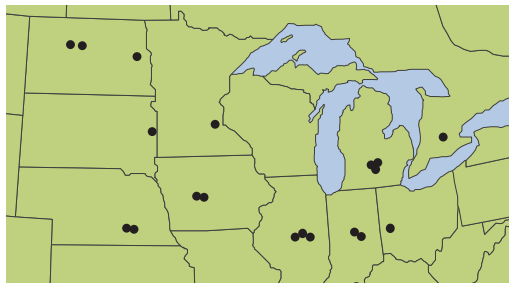
Aspire® Corn – Fall vs. Spring Balanced Crop Nutrition

Objective

- Evaluate the yield response of MAP (11-52-0) + Aspire® (0-0-58-0.5B) and MicroEssentials® SZ™ (12-40-0-10S-1Zn) + Aspire applied in the fall and spring compared to MAP alone.

Overview

- Fall applications of phosphorus (P) and potassium (K) fertilizers may be preferred in certain cropping systems to evenly distribute seasonal workload, but spring applications are also a common practice in the Midwest.
- Research has shown that P and K fertilizers containing micronutrients in a single granule provide improved nutrient distribution and increased crop nutrient uptake compared to conventional fertilizer blends.
- Aspire is the first-of-its-kind micronutrient-enhanced potash fertilizer. Manufactured using Nutriform® technology, Aspire premium potash combines K and boron (B) in each granule to help achieve balanced crop nutrition.
- MicroEssentials SZ uses Fusion® technology to fuse four nutrients into one nutritionally balanced granule. This provides uniform nutrient distribution, increased nutrient uptake and season-long sulfur for maximum yield.



LOCATIONS: 19 trials across the U.S. and Canada
United States – IA, IL, IN, MI, MN, ND, NE, OH, SD
Canada – ON

Summary

- MicroEssentials SZ + Aspire had the highest yield in both fall and spring applications.
- MAP + Aspire yields were 6 bu/ac higher than MAP alone for both the fall and spring applications.
- MicroEssentials SZ + Aspire yields were 12 bu/ac (6.2%) higher than MAP alone with the fall application.
- MicroEssentials SZ + Aspire yields were 10.4 bu/ac (5.3%) higher than MAP alone with the spring application.
- Regardless of fall or spring application, a combined application of Aspire with MicroEssentials SZ is a superior technology for balanced crop nutrition and increased yield.

Trial Details

Locations and Crop Management:

CROP: Corn (*Zea mays*)

YEARS: 2014–2016

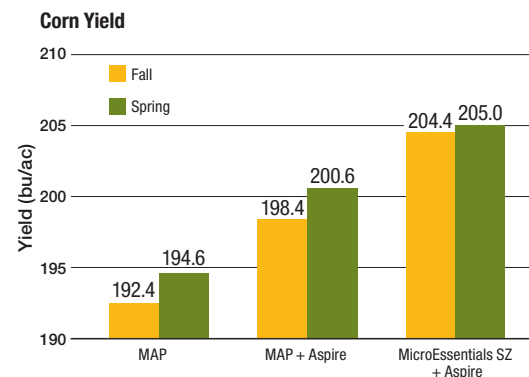
DATA SOURCE: Field studies conducted by third-party, independent researchers.

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.)
- **K Source:** Aspire
- **K Rate:** 60 lbs K₂O/ac
- **P Sources:** MAP, MicroEssentials SZ
- **P Rate:** 80 lbs P₂O₅/ac
- **Application Timing:** Fall or spring preplant
- **Application Method:** Broadcast incorporated

Results



MicroEssentials
Aspire

12
bu/ac

Increase with MicroEssentials SZ + Aspire over MAP in the fall application

10.4
bu/ac

Increase with MicroEssentials SZ + Aspire over MAP in the spring application



©2017 The Mosaic Company. All rights reserved. SZ is a trademark and AgriFacts, Aspire, Fusion, MicroEssentials and Nutriform are registered trademarks of The Mosaic Company.

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.

WARNING: Contains boron. Use of boron may result in crop injury. DO NOT place this product in direct contact with the seed.

For more information, go to AspirePotash.com or MicroEssentials.com

CornBFS-6848