Mosaic® AgriFacts®

SOYBEAN

Aspire® Soybean Two-Year Cropping Rotation

Objective

- Evaluate the yield response of fertilizing soybeans in a corn-soybean rotation using Aspire® with Boron (0-0-58-0.5B) and MOP (0-0-60).

Overview

- In a typical Midwestern two-year corn-soybean rotation, fertilizer is applied in a single application prior to planting corn, with the goal of supplying nutrients for both corn and soybean crops.
- However, the seasonal plant nutrient uptake and removal necessitate the need for individual nutrient applications tailored to each crop.
- MOP is commonly used as a potassium (K) source in soybean production.
- In addition to K, micronutrients such as boron (B) are essential for plant growth and are often overlooked in balanced crop nutrition.
- Aspire is the first-of-its-kind micronutrient-enhanced potash fertilizer. Manufactured using Nutriform® technology, Aspire premium potash with Boron combines K and B in each granule to help achieve uniform nutrient distribution.

Trial Details

Locations and Crop Management:

CROP: Soybean (*Glycine max*)

YEARS: 2014–2015

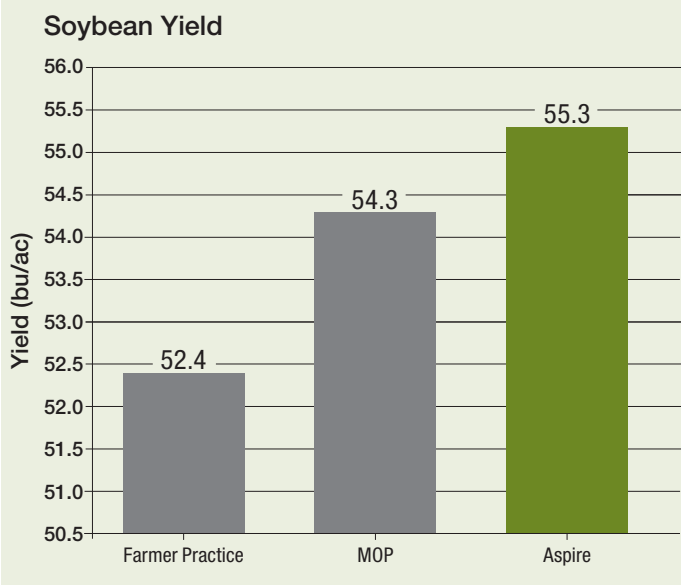
DATA SOURCE: Field studies conducted by third-party, independent researchers.

EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

CROPPING CONDITIONS:

- **Rotation:** Corn-soybean
- **Farmer Practice:** All recommended fertilizer for both a corn and soybean crop was applied before corn planting in 2013 and 2014, and no fertilizer was applied before soybean planting in 2014 and 2015.
- **Additional Fertilizer:** Additional K was applied before soybean planting in the form of MOP or Aspire.
- **K Rate:** 30 lbs K_2O/ac
- **Application Timing:** Preplant
- **Application Method:** Broadcast incorporated

Results



LOCATIONS: 14 trials across the United States – IA, IL, IN, OH

Summary

- Fertilizing soybeans with MOP yielded 1.9 bu/ac over the Farmer Practice.
- Aspire demonstrated a 2.9 bu/ac (5.5%) yield increase over the Farmer Practice and 1.0 bu/ac over MOP.
- The results demonstrate the advantage of applying nutrients annually to each crop.
- Higher yields using Aspire show the benefit of uniform nutrient distribution with a micronutrient-enhanced potash fertilizer.

Aspire®

2.9 bu/ac

Increase with Aspire over Farmer Practice

1.0 bu/ac

Increase with Aspire over MOP

Mosaic®

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**.

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