Mosaic® AgriFacts®

SOYBEAN

Aspire® Soybean Boron Fertility

Objectives

- Evaluate the yield response of Aspire® with Boron (0-0-58-0.5B) compared to MOP (0-0-60).
- Compare the yield response of Aspire to a MOP + Boron (B) blend applied at multiple application rates.

Overview

- MOP is commonly used as a potassium (K) source in soybean production.
- Micronutrients such as B are essential for plant growth and are often overlooked for balanced crop nutrition.
- Granular B products can be blended with K, but application of these blends leads to undesirable distribution.
- Aspire is the first-of-its-kind micronutrient-enhanced potash fertilizer. Formed using Nutriform® technology, Aspire combines K and B in each granule to help achieve uniform nutrient distribution.

Trial Details

Locations and Crop Management:

CROP: Soybean (*Glycine max*)

YEARS: 2013–2015

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

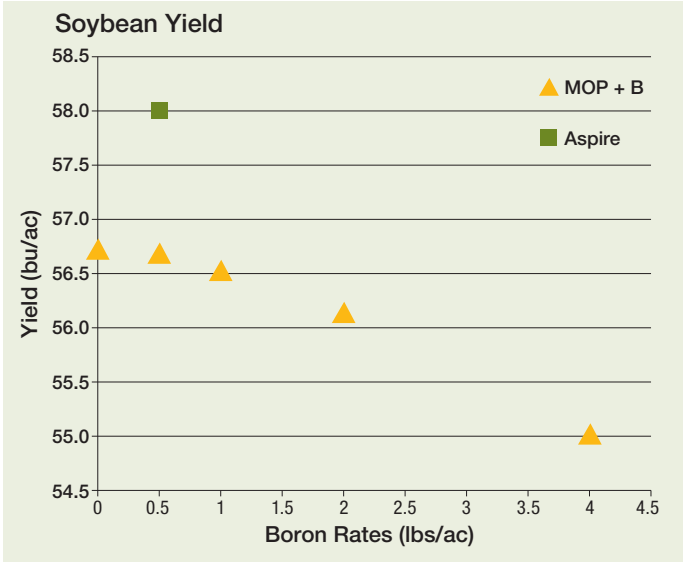
EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

CROPPING CONDITIONS:

- **P Rate:** As required by soil test
- **K Rate:** 60 lbs K_2O/ac
- **B Rate:** 0, 0.5, 1, 2 and 4 lbs B/ac
- **Application Timing and Method:** Preplant broadcast

LOCATIONS: 31 trials across the United States – AL, AR, GA, IA, IL, MN, MO, MS, NC, OH, SC, TN, WI

Results



Granular B 1 lb B/ac

Granular B 2 lb B/ac

Granular B 4 lb B/ac

Boron toxicity and plant stand reduction with increasing rate of granular B

Summary

- Aspire increased yield by 1.3 bu/ac (2.3%) over MOP.
- A preplant application of Aspire at 0.5 lbs B/ac outyielded the MOP + B blend applied at 0.5, 1, 2 and 4 lbs B/ac.
- Increasing the rate of granular B applied increased toxicity symptoms and decreased plant stands, which resulted in lower yields.
- The higher yield with Aspire compared to MOP + granular B demonstrates the advantages of uniform nutrient distribution with a micronutrient-enhanced potash fertilizer.

Aspire®

1.3 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**.

SoybBOR–4169