



## Aspire® Soybean Boron Study

### Objectives

- Evaluate the yield response of Aspire® (0-0-58-0.5B) compared to MOP (0-0-60).
- Compare the yield response of Aspire to an MOP + boron (B) blend and MOP + foliar B (V3 and R1).

### Overview

- MOP is commonly used as a potassium (K) source in soybean production.
- Micronutrients such as boron are essential for plant growth and are often overlooked in efforts to balance 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 potassium and boron in each granule to help achieve uniform nutrient distribution of B.

### Trial Details

**CROP:** Soybeans (*Glycine max*)

**YEARS:** 2013–2014

**LOCATIONS:** 20 trials across the U.S. – AL, AR, GA, IA, IL, MN, MO, MS, NC, OH, SC, WI.

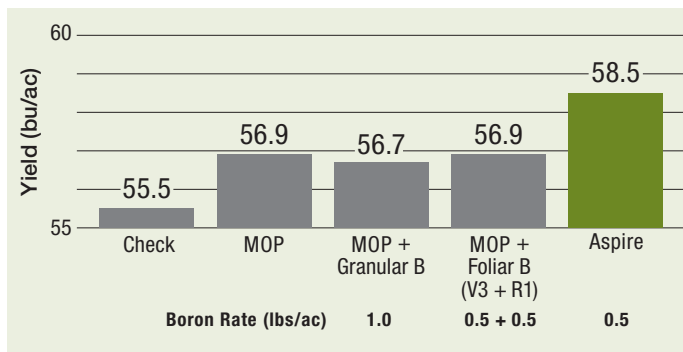
**DATA SOURCE:** Field studies conducted by third-party, independent researchers.

**EXPERIMENTAL DESIGN:** Small-plot RCBD with 4 replications.

**CROPPING CONDITIONS:**

- P Rate: As required by soil test.
- K Rate: 60 lbs K<sub>2</sub>O/ac
- B Rate: 0.5 to 1.0 lb B/ac
- Application Timing and Method:
  - Aspire, MOP and granular B: Preplant broadcast
  - Soluble B: Foliar treatments applied at V3 (3 unfolded trifoliolate leaves) and R1 (beginning of flowering – 1 flower at any node) growth stages.

### Results



### Summary

- Aspire increased yield by 1.6 bu/ac over MOP and 3 bu/ac over the check.
- A preplant application of Aspire at 0.5 lb B/ac (58.5 bu/ac) outyielded the granular B blend applied at 1.0 lb B/ac (56.7 bu/ac).
- Aspire applied at 0.5 lb B/ac outyielded two foliar applications (V3 and R1) of soluble B at 1.0 lb B/ac.
- The higher yield with Aspire compared to other treatments demonstrates the advantages of uniform nutrient distribution with a premium potash fertilizer containing boron.



Boron toxicity with Granular B at 1 lb, 2 lb and 4 lb B/ac, respectively.

**Aspire**®

**1.6**  
 bu/ac

Increase with Aspire over MOP

**Mosaic**®

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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.

**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](http://AspirePotash.com).

SoyBor-1186