Aspire® Soybean Fertility

Objective

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

Overview

- MOP is commonly used as a potassium (K) source in soybean production.
- Micronutrients such as boron (B) 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 leads to undesirable distribution.
- Aspire is the first-of-its-kind micronutrient-enhanced potash fertilizer. Formed using Nutriform® technology, Aspire with Boron combines potassium and boron in each granule to help achieve balanced crop nutrition.

Trial Details

Locations and Crop Management:

CROP: Soybean (Glycine max)

YEARS: 2011–2013

LOCATIONS: 43 trials across the U.S. and Canada

- United States – AL, AR, DE, GA, IA, IL, IN, KS, KY, LA, MN, MO, MS, NC, NE, OH, SC, SD, TX, WI
- Canada – MB, ON

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

EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

CROPPING CONDITIONS: Trials conformed to local cropping practices.

- P Rate: As required by soil test
- K Rate: 60 lbs K₂O/ac
- B Rate: 0.5 lb B/ac
- Application Timing: Preplant
- Application Method: Broadcast incorporate

Summary

- Aspire outyielded MOP by 1.1 bu/ac in 2011, 0.8 bu/ac in 2012 and 1.4 bu/ac in 2013.
- Across 43 site-years, Aspire outyielded MOP by 1.1 bu/ac (2.3%) and the MOP + B blend by 0.9 bu/ac (1.9%).
- Averaged across 3 years, Aspire demonstrated a 70% win rate over MOP.
- The higher yield achieved with Aspire shows the value of boron and uniform nutrient distribution.