



## SOYBEAN

# MicroEssentials® S10® Soybean Study

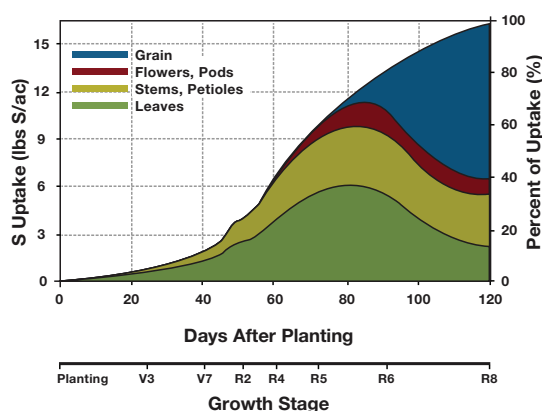
## Objective

- Evaluate soybean yield response to MAP (11-52-0), MAP + AS (21-0-0-24S) and MicroEssentials® S10® (12-40-0-10S).

## Overview

- Monoammonium phosphate (MAP) is a common phosphorus source used in soybean production.
- New university research highlights the need for sulfur (S) management in soybean due to higher grain yields and lower atmospheric deposition. Data also emphasize the need for S during both vegetative and reproductive growth (see Figure 1).
- MicroEssentials S10 supplies multiple nutrients fused into one nutritionally balanced granule, promoting uniform nutrient distribution, increased nutrient uptake, season-long S availability and higher yields.

Figure 1: Sulfur Uptake in Soybean - 60 Bu/Ac



Bender et al., 2015. Better Crops with Plant Food (99:7-10)

## Trial Details

### Locations and Crop Management:

**CROP:** Soybean (*Glycine max*)

**YEARS:** 2018-2020

**LOCATIONS:** 21 trials - AR, IL, MI, OH, ON, TN, WI

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

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

### Cropping conditions:

- All trials conformed to local cropping practices

**P Rate:** 40 lbs P<sub>2</sub>O<sub>5</sub>/ac applied as MAP or MicroEssentials S10

**K Rate:** 60 lbs K<sub>2</sub>O/ac applied across all treatments

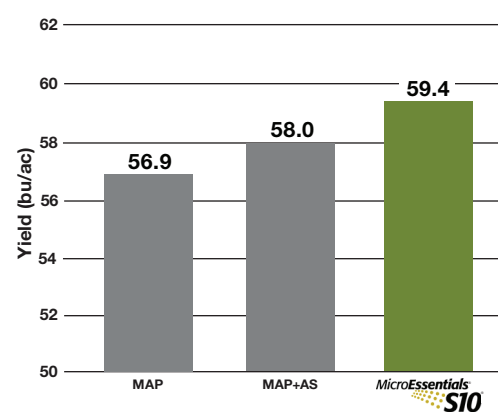
**S Rate:** 10 lbs S/ac applied as AS or MicroEssentials S10

**Application Timing:** Spring Preplant

**Application Method:** Broadcast Incorporated

## Results

### Soybean Yield Response



MicroEssentials®

2.5  
bu/ac

Increased yield with  
MicroEssentials S10 over MAP

1.4  
bu/ac

Increased yield with  
MicroEssentials S10 over MAP + AS

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.

For more information, go to [MicroEssentials.com](https://www.MicroEssentials.com).

SoyFRP18-20

## Summary

- Soybean yield increased with the addition of S.
- Averaged across 21 site-years, MicroEssentials S10 increased soybean yield 2.5 bu/ac over MAP and 1.4 bu/ac over MAP + AS.
- MicroEssentials S10 demonstrates the value of uniform nutrient distribution, increased nutrient uptake, and two forms of S (sulfate and elemental) for season-long S availability.