



## SOYBEAN

# MicroEssentials® S10® vs. DAP

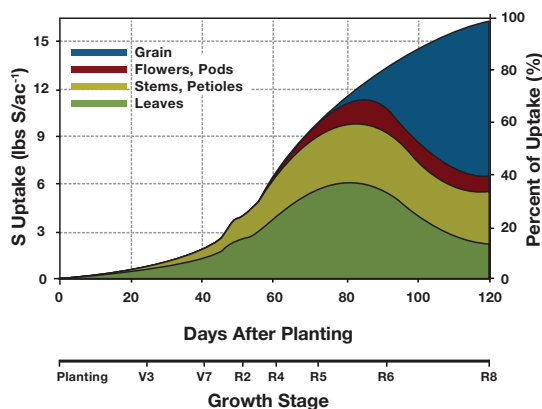
## Objective

- Evaluate the yield response of soybean to DAP (18-46-0), DAP + AS (21-0-0-24S) and MicroEssentials® S10® (12-40-0-10S).

## Overview

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

Figure 1: Sulfur Uptake in Soybean - 60 bu/ac



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

## Trial Details

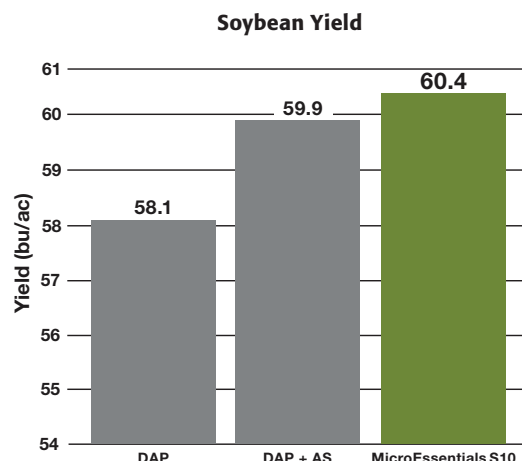
### Locations and Crop Management:

- CROP:** Soybean (*Glycine max*)
- YEARS:** 2017-2019
- LOCATIONS:** 19 trials - AR, IL, IN, MI, OH, ON, 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 DAP (18-46-0) or MicroEssentials S10 (12-40-0-10S)
- S Rate:** 10 lbs S/ac from AS or MicroEssentials S10
- K Rate:** As required by soil test
- Application Timing:** Spring Preplant
- Application Method:** Broadcast Incorporated

## Results



MicroEssentials®

2.3  
bu/ac

MicroEssentials S10 over DAP



©2020 The Mosaic Company. All rights reserved. AgriFacts, S10 and MicroEssentials are registered trademarks of The Mosaic Company.

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](http://MicroEssentials.com).

SoybFRP\_17-19

## Summary

- Soybean yields increased with the addition of S.
- Averaged across 19 trials from 2017-19, MicroEssentials S10 increased soybean yield by 2.3 bu/ac over DAP and 0.5 bu/ac over DAP+AS.
- Higher soybean yields achieved by using MicroEssentials S10 demonstrates the value of uniform nutrient distribution, increased nutrient uptake, and season-long S availability (sulfate + elemental).
- Access additional yield data, ROI calculators, and resources at [MicroEssentials.com/Performance](http://MicroEssentials.com/Performance)