



WINTER WHEAT

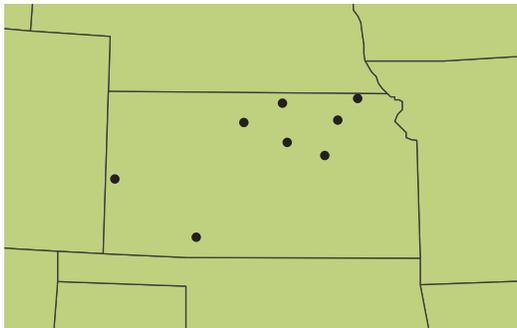
MicroEssentials® SZ® (In-furrow) in Winter Wheat

Objective

- Evaluate the yield response of winter wheat to applications of MAP (11-52-0) and MicroEssentials® SZ® (12-40-0-10S-1Zn) when placed in-furrow with the seed (Air-drill placement).

Overview

- MAP (11-52-0) is commonly used as a phosphorus (P) source and applied with the seed in winter wheat cropping systems.
- In addition to nitrogen (N) and P, other nutrients like sulfur (S) and zinc (Zn) are beneficial to achieve maximum yield.
- MicroEssentials SZ (12-40-0-10S-1Zn) is a dry granular fertilizer that provides uniform nutrient distribution, increased nutrient uptake, and two forms of S (sulfate + elemental) for season-long availability.



LOCATIONS: 9 trials across 8 locations in Kansas.

Trial Details

Locations and Crop Management:

CROP: Wheat (*Triticum Aestivum*)

YEARS: 2017-2019

DATA SOURCE: Field studies conducted at university sites by Kansas State University.

EXPERIMENTAL DESIGN: Small-plot RCBD with 4 replications.

Treatments:

- MAP (11-52-0)
- MicroEssentials SZ (12-40-0-10S-1Zn)

N Rate: Followed local recommendations and was balanced across all treatments.

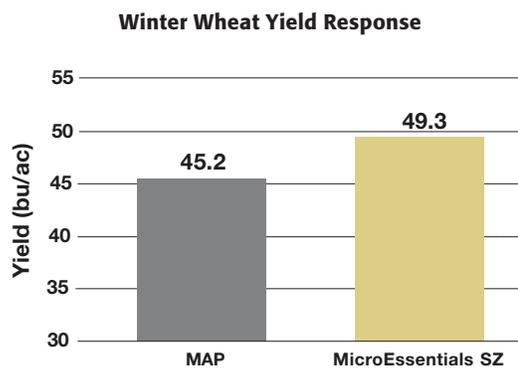
P Rate: 40 lbs P₂O₅/ac as MAP or MicroEssentials SZ.

S Rate: 10 lbs S/ac from MicroEssentials SZ.

Zn Rate: 1 lb Zn/ac from MicroEssentials SZ.

Application Details: Cropping systems followed local practices. Fertilizer was placed in-furrow with the seed to simulate large-scale air-drill applications.

Results



Summary

- Winter wheat yields increased with the addition of sulfur and zinc.
- Averaged across 9 site-years, MicroEssentials SZ applied at 100 lbs product/ac outperformed MAP by +4.1 bu/ac.
- MicroEssentials SZ applied with the seed at planting provides superior performance to the traditional practice of only applying MAP.

MicroEssentials


4.1
bu/ac

MicroEssentials SZ over MAP

Mosaic


©2019 The Mosaic Company. All rights reserved. *AgriFacts*, *SZ*, *MESZ*, *MES* 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.
 WWhtFBA_17-19