



# Spring Wheat Response to MicroEssentials® SZ™

## Objective

 Evaluate the yield response of spring wheat to MAP (11-52-0) + MOP (0-0-60) and MicroEssentials® SZ™ (12-40-0-10S-1Zn) + MOP.

## Introduction

- Spring wheat is typically grown in the Northern Great Plains and Western Prairie Provinces of Canada.
- MAP is a common phosphorus (P) fertilizer applied to spring wheat.
- MicroEssentials SZ is a premium P fertilizer that provides uniform nutrient distribution of nitrogen (N), phosphorus (P), sulfur (S) and zinc (Zn), which includes a season-long supply of sulfur.
- In addition to N, P, S and Zn, spring wheat may benefit from applications of potassium (K).

#### Trial Details

#### **Locations and Crop Management:**

CROP: Spring Wheat (Triticum aestivum)

YEARS: 2014-2015

LOCATIONS: 11 trials across the U.S and Canada.

United States: ID, MN, MT, ND, SD

Canada: AB and SK

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

**EXPERIMENTAL DESIGN: Small-plot RCBD** 

with 4 replications.

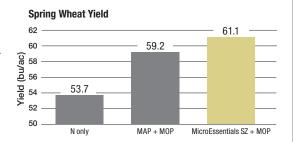
#### **CROPPING CONDITIONS:**

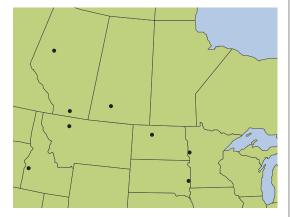
P Rate: 40 lbs P<sub>2</sub>O<sub>5</sub>/ac
K Rate: 30 lbs K<sub>2</sub>O/ac

Application Timing: Preplant

Application Method: Broadcast incorporate

### Results





# Summary

- MAP + MOP treatments showed a 5.5 bu/ac yield advantage over N only.
- MicroEssentials SZ + MOP increased yield by 7.4 bu/ac over N only and 1.9 bu/ac (3.2%) over MAP + MOP.
- This research demonstrates the benefits of not only P and K fertilization in spring wheat, but also the yield increase with a season-long supply of S and micronutrient (Zn) provided from MicroEssentials SZ.



1.9 bu/ac

MicroEssentials SZ + MOP yield increase over MAP + MOP



©2016 The Mosaic Company. All rights reserved. SZ is a trademark and *AgriFacts* 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**.

SWhtFRT-4056