

APRIL 2014

CANOLA

MicroEssentials® SZ™ Canola Fertility

Objective

 Evaluate the yield response of canola to MicroEssentials® SZ™ (12-40-0-10S-1Zn) compared to a MAP (11-52-0) + AS (21-0-0-24S) blend.

Introduction

- Proper applications of phosphorus (P) and sulfur (S) are critical for optimum canola yields.
- Blends of MAP + AS (ammonium sulfate) are commonly used as a primary fertilizer source in canola-growing regions of North America.
- MicroEssentials SZ (12-40-0-10S-1Zn) is a proprietary fertilizer that combines nitrogen (N), phosphorus (P), sulfur (S) and zinc (Zn) fused into one nutritionally balanced granule.
- Growing conditions in North Dakota and the Canadian Prairie Provinces varied greatly across 2011, 2012 and 2013.

Trial Details

YEARS: 2011-2013

CROP: Canola (*Brassica napus*)

LOCATIONS: 24 locations across the U.S. and Canada

United States – ND Canada – AB, MB, SK

DATA SOURCE: Field studies conducted by third-party,

independent researchers.

EXPERIMENTAL DESIGN: Small-plot RCBD with

4 replications.

CROPPING CONDITIONS:

• P Rate: 33 lbs P₂O₅/ac

• **S Rate:** • MAP + AS: 15 lbs S/ac

MicroEssentials SZ: 8.25 lbs S/ac

• Zn Rate: 0.825 lb Zn/ac

 Application Timing and Method: Fertilizer was applied with the seed at planting.

Summary

- Across 2011, 2012 and 2013, MicroEssentials SZ increased yield over the MAP+AS blend by 0.6 bu/ac, 0.8 bu/ac and 2.4 bu/ac, respectively.
- •The 2.4 bu/ac (5.1%) yield advantage with MicroEssentials SZ in 2013 demonstrates its superior performance under excellent growing conditions.
- The three-year average across 24 trials shows the statistically significant yield advantage of 1.5 bu/ac with MicroEssentials SZ compared to MAP + AS. This data demonstrates the value of uniform nutrient distribution and season-long sulfur availability provided by MicroEssentials.

Micro**Essentials**

2.4 bu/ac

Yield advantage with MicroEssentials SZ in 2013

1.5 bu/ac

increase with MicroEssentials SZ compared to MAP + AS

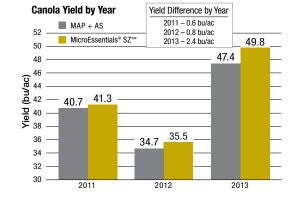
Mosaic

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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**.

Yield



Canola Yield (3-year average) by Fertilizer Source

