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.