




CANOLA

MicroEssentials® S15™ Seed Safety Canola

Objectives

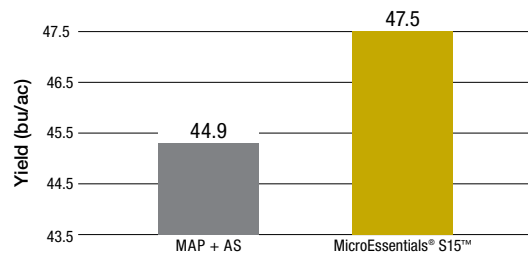
- Evaluate the seed safety of MicroEssentials® S15™ (13-33-0-15S) compared to MAP (11-52-0) + ammonium sulfate (AS, 21-0-0-24S) at different phosphorus (P) rates when applied with the seed.
- Evaluate the yield response of MicroEssentials S15 compared to MAP + AS at different P rates.

Overview

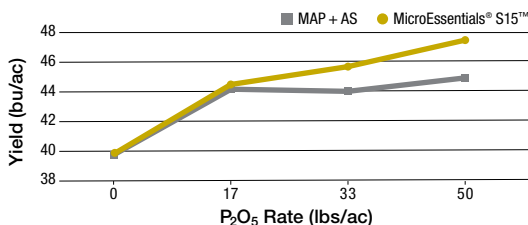
- MAP + AS is a common P and S fertilizer blend used in canola-growing regions of North America.
- Canola is very sensitive to seed placed in close proximity to P and S fertilizers. Conventional P and S fertilizers increase seed damage due to ammonium nitrogen and especially due to the high salt index of AS.
- MicroEssentials S15 contains N, P and S fused into one nutritionally balanced granule, and the estimated salt index is lower (21.1) compared to AS (68.3).

Yield

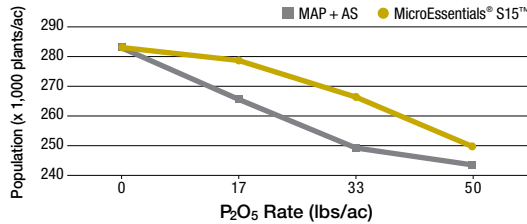
Canola Yield at 50 lbs P₂O₅/ac



Canola Yield Across Different Sources and Rates



Canola Plant Population Across Different Sources and Rates



Trial Details

CROP: Canola (*Brassica rapa* cv. 'canola')

YEARS: 2011–2013

LOCATIONS: 17 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:

- **N Rate:** As recommended and balanced across all treatments.
- **P Rate:** 0, 17, 33 and 50 lbs P₂O₅/ac
- **K Rate:** Applied to entire trial area based on soil test.
- **S Rate:** Balanced at each P₂O₅ rate - 0, 7.7, 15 and 22.7 lbs S/ac.
- **Application Timing and Method:** Fertilizer was applied with the seed at planting.

Summary

- MicroEssentials S15 outyielded MAP + AS by 1.7 bu/ac at 33 lbs and by 2.6 bu/ac at a 50-lb P₂O₅ rate across all locations.
- MAP + AS had statistically significant lower plant populations than MicroEssentials S15 at 17- and 33-lb P₂O₅ rates and numerically lower at the 50-lb P₂O₅ rate.
- MicroEssentials S15 can successfully increase canola yields over MAP + AS when applied at the same P₂O₅ rate.
- These results demonstrated the additional seed safety that can be achieved with MicroEssentials S15.

MicroEssentials

2.6
bu/ac

Increase with MicroEssentials S15 over MAP + AS at 50 lbs P₂O₅/ac

Higher stand counts and increased yields with MicroEssentials S15 over MAP + AS



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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.