TRIAL RESULTS

TOMATOES

FLORIDA (2014)
TRIAL OBJECTIVE
To determine the response of POLY4 (straights and blends) on tomatoes against MOP, SOP and blend options.

HIGHLIGHTS
UP TO 56% IMPROVED K UPTAKE INTO LEAVES COMPARED TO STRAIGHTS OR BLENDS
LOWER DISEASE INCIDENCE THROUGHOUT GROWTH
UP TO 53% HIGHER TOTAL YIELD WITH STRAIGHTS
74% IMPROVEMENT IN TOTAL YIELDS IN BLENDS
HIGHER PULP:JUICE RATIO IN BOTH STRAIGHTS AND BLENDS

TREATMENT TABLES

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<th>T12 TRIAL</th>
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POLY4 as a potassium source is supportive of significantly greater tissue levels of K than MOP indicating a greater fertilizer use efficiency at the same application rate.

Despite adequate soil supply POLY4 fertilizers encourage a significant increase in calcium.

TOMATO LEAF SPOT INCIDENCE (No. of incidents)

Tomatoes fed by POLY4 blends and straights have significantly lower early and final disease incidence.

POLY4 appears to help the crop combat disease infection throughout the crop’s life.

Supporting a healthy crop with the broad spectrum of nutrients available from POLY4 contributes towards disease defence enabling the plant to use vital resources to build yield.
TOMATO YIELD (t ha\(^{-1}\))^3-6

- Additional nutrients from POLY4 lift the ceiling on the K\(_2\)O rate-yield response.
- Market target for this variety are large/extra large fruit categories.
- POLY4 shows improvements of 39% over straight MOP and 60% improvement over MOP-T12 for the large/extra large fruit categories.
- The additional nutrients of POLY4 consistently improve total yields over MOP or SOP based treatments by up to 74%.

TOMATO QUALITY (pulp:juice ratio)^3-6

- Crop fed on a POLY4 straight or blend results equally in a significantly greater pulp:juice ratio.
- Pulp is indicative of longer shelf life and greater suitability for pasta sauce processing.
- The overall result is a premium due to yield and quality making a very positive impact on farmer economics.

Notes: 1) FAOSTAT 2017; 2) Roland Berger 2011 data; 3) GENSTAT mean; 4) Straight treatments received 220 kg N ha\(^{-1}\) and 168 P\(_2\)O\(_5\) ha\(^{-1}\) from urea and TSP; 5) MOP Triple 12 blends were made with urea, TSP and MOP; 6) POLY4 Triple 12 blends were made with urea, TSP, MOP and POLY4; 7) Disease causal organism by Xanthomonas campestris pv. vesicatoria and early blight caused by Alternaria solani. Initial soil analysis pH 7.3, P 92.8 mg kg\(^{-1}\), K 102.6 mg kg\(^{-1}\), Ca 21123 mg kg\(^{-1}\), Mg 177 mg kg\(^{-1}\), SO\(_4\) 31 mg kg\(^{-1}\), EC 98uS/cm.

Sources: University of Florida (2014) 1000-UOF-1016-13