

Fertilizer Trial: Processing Tomato, variety "331" Lafayette, Indiana

What is Agrocote®?

Agrocote® is a portfolio of coated controlled release fertilizers including homogeneous NPKs and single macro and micronutrients with three distinct coating technologies and longevities ranging from one to 14 months. When it comes to controlled release fertilizer, ICL Specialty Fertilizers is the industry leader. This particular trial focused on the use of Agrocote® (K) and Agrocote® (MAP). Agrocote® products are designed to meter out plant nutrition over time, improving crop nutrient uptake efficiencies and increasing profit for the grower.

Trial Set-Up

Objective: Evaluate the performance of Agrocote® (MAP and K) compared to grower standard practice (GSP) in processing tomato, potentially preventing the leaching of nutrients, obtaining greater yields and ultimately improving gross profit per acre. In addition, evaluate the effect of Agrocote® K on "yellow shoulder", a physiological disorder in tomato.

Crop: Processing Tomato, variety "331"

What: Agrocote® K and Agrocote® MAP was banded ten days after planting at 100% and 75 % rate of total N (66 lb), P (140 lb) and K (285 lb). In addition, 80 lb/acre of urea was added to Agrocote® treatments.

Three applications of GSP: Total N 151 lb, P 184 lb and K 390 lb sourced from conventional dry fertilizers banded at 10, 28 and 42 days after planting.

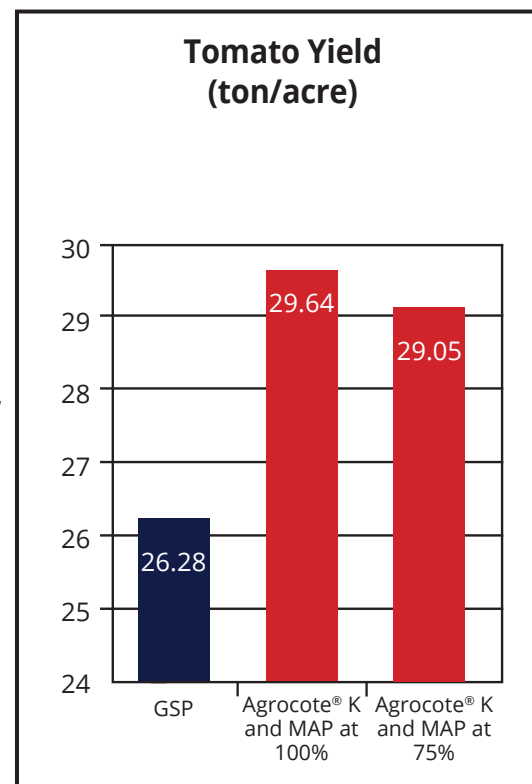
When: Fertilizer applied June 29, 2017

Where: Huffman and Hawbaker Farms, Lafayette, IN

Harvest: October 5, 2017

Soil Type: Sandy loam

Measurements: Marketable Tomato Yield (ton/acre)



Conclusion:

The Agrocote® K and Agrocote® MAP treatment increased marketable yield by 12.8 % compared to the GSP treatment.

The Agrocote® K and Agrocote® MAP treatment increased yield of premium grade tomatoes by 9.4% compared to the GSP treatment.

The Agrocote® K allowed for reduction of total K by 27% compared to GSP, while maintaining adequate amount of K in the leaf tissue, and reducing "yellow shoulder" in tomatoes.

Why Agrocote® Is The Best Solution For Tomato Fertility:

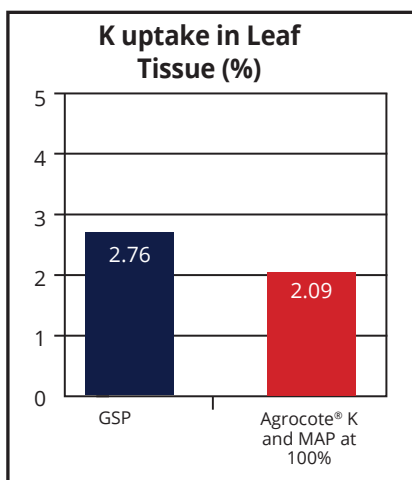
- Nutrients supplied with Agrocote® K and Agrocote® MAP are released consistently across the crop cycle. This results in better crop uptake efficiency, fruit quality and higher yield of fresh tomatoes.
- Conventional uncoated fertilizers are inefficient, often at a level of 25-50%, due to leaching or volatilization. Agrocote® K and Agrocote® MAP meters out all applied nutrients evenly and predictably across crop critical stages, maintaining optimum nitrogen, phosphorus and potassium levels in soil solution, even following heavy rains.
- The number of fertilization applications required is decreased.
- The Agrocote® blend provides less nitrogen and potassium loss due to leaching compared to the conventional fertilizer sources.
- Agrocote® K and Agrocote® MAP resulted in the similar % of Potassium in leaf tissue with 85 lb/acre less applied N, 44 lb/acre less applied P and 172 lb/acre less applied total K₂O compared to GSP.
- Proven performance year after year.



GROWER STANDARD PRACTICE
USING CONVENTIONAL FERTILIZER



CONTROLLED RELEASE FERTILIZER
AGROCOTE® K AND MAP



Attention:

Recommendations in this trial info sheet are based on local soil and/or water analyses. Please contact your local ICL Specialty Fertilizers adviser for your personalized fertilizer recommendation.