

PRODUCT DESCRIPTION

Soil K-BIO™ is a liquid biological amendment containing soil health enhancing bacteria. Soil K-BIO™ acts upon a plants rhizosphere to solubilize organic Potassium for easier uptake by plants.

TREATMENT APPLICATIONS

* In orchards and groves 1-2 pints per planted acre on initial application and then 1 pint per planted acre 4 weeks later. For more intense treatment, apply every 4 weeks until 4 weeks before harvest.

* In other crops 1-2 pints on initial application and then 1 pint per acre 4 weeks later. For more intense treatment, apply every 4 weeks until 4 weeks before harvest.

* Shake well before use and store in a cool, dry location and away from direct sunlight.

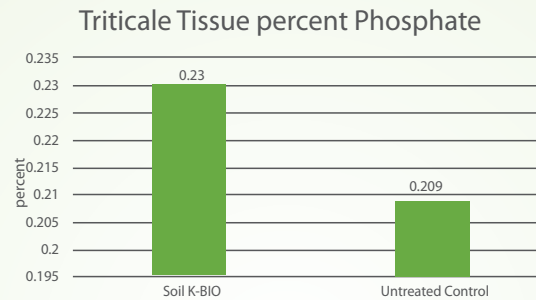
* Keep cap closed when not in use.

* Soil K-BIO™ can be blended with liquid fertilizers and soil amendments to be used in spray rigs, hose end sprayers, drip irrigation and other fertigation devices.

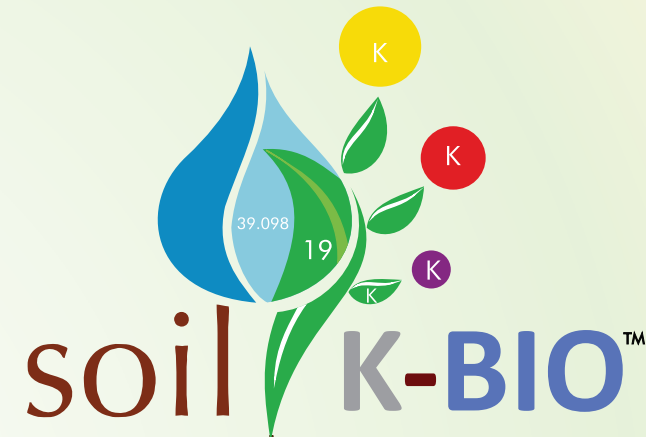
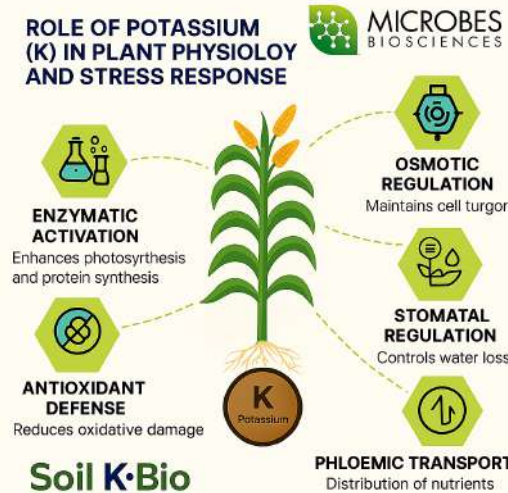
GUARANTEED ANALYSIS

CONTAINS NON-PLANT FOOD INGREDIENTS:

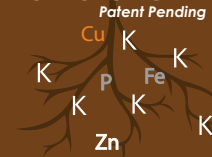
Contains over 11 Billion colony forming units (CFU) Per 2.5 gallons (4.24x10⁹ CFU/Gallon)



ROLE OF POTASSIUM (K) IN PLANT PHYSIOLOGY AND STRESS RESPONSE



LIQUID BIOLOGICAL AMENDMENT



Soil-K BIO is an eco-friendly liquid microbial amendment that supports soil and plant health.

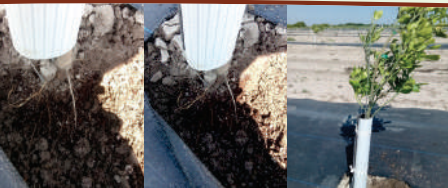


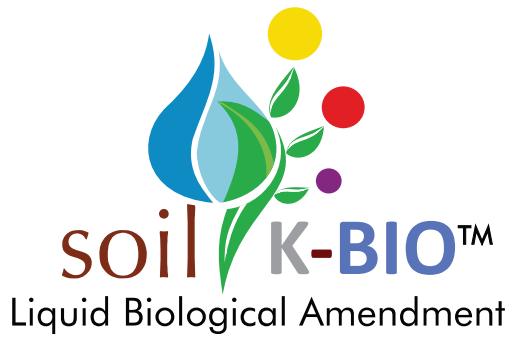
Microbes INC. 1544 Sawdust Road,
Ste 505, The Woodlands, Texas
77380 281.367.7500



← TREATED UNTREATED →

Commercial Application 2022
Edinburg Citrus Association



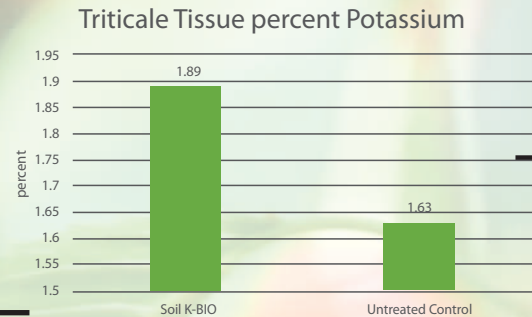


Microbes Biosciences has developed a series of products that positively impact soil conditions in general, providing specific and effective solutions for a large number of crops through understanding the needs of plants and the environment.

Soil K-BIO™

Advanced technology that assists in mineralization and solubilization, plant availability, and uptake of potassium and other nutrients. Includes bacteria species that perform important roles in other aspects of plant nutrition and health.

PRODUCT HIGHLIGHTS



Abiotic Stress Impact

- * Triggers plant metabolism
- * Buffers the effects of climatic stress
- * Increases root exudates by the production of metabolites such as IAA

Bio- Stimulant Impact

- * Root hair promoting peptides
- * Promoter of the plants' own defense mechanisms
- * Supports regulating ethylene production
- * Increases root and shoot lengths

Fertilizer Impact

- * Improved nutrient uptake through hormonal interactions
- * Nitrogen Fixation
- * Mineralization and Solubilization
- * Improve rhizosphere microorganisms
- * Promotes better cation exchange



HOW IT PERFORMS

Microbial decomposition of organic materials also produces ammonia and hydrogen sulfide that can be oxidized in soil to form the strong acids such as nitric acid and sulfuric acid. Hydrogen ions from these acids displace K^+ , Mg^{2+} , Ca^{2+} , and Mn^{2+} from the cation-exchange complex in a soil. Microbial biofilms accelerate the

weathering process but also regulate denudation losses by acting as a protective layer covering the mineral-water-hyphal/root hair interface in the mycorrhizosphere and rhizosphere of vascular plants.

The bacteria can also have a role in providing Potassium for plants by increasing root exudates by production of metabolites such as IAA.