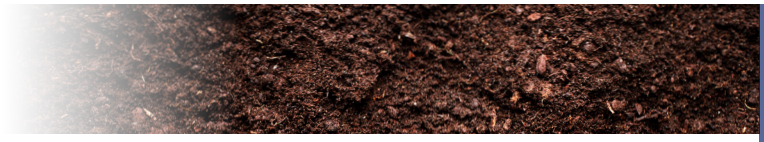
ZiCAN™ Soil



CALCIUM NITRATE COMPATIBLE ZINC NUTRITION

ZiCAN™ Soil provides the performance and technology of our top-performing zinc and manganese product, Zicron® Soil, and optimizes it with calcium nitrate fertilizers, including CAN-17 and CN-9, for outstanding tank compatibility. ZiCAN Soil is formulated with FBS Transit®, our proprietary nutrient use efficiency technology, and strongly protected with natural chelating agents to deliver nutrients that are readily available and mobile in the plant. Together calcium, nitrogen, iron, and manganese pack a powerful punch to support plant health, but their incompatibility in the tank has always been a challenge. This advanced formulation solves this problem enabling these plant available nutrients to mix perfectly for increased flexibility.

- Compatible with Calcium Nitrate Fertilizers
- Strongly Protected with Natural Chelates and Organic Acids for Easy Uptake
- Improves Chlorophyll Production
- Resolves Little-Leaf & Rosetting Symptoms
- Improves Leaf Size, Frost Tolerance, and Fruit Storability
- Resolves Zinc Chlorosis

Almond Research Trial

FBSciences ZiCAN Soil & YaraLiva® CAN-17

Wes Asai Pomology Consulting - Randomized Complete Block Design

Treatments	Yield lb.acre	% Blanks	Nut Size (% of Control)
YaraLiva® CAN-17 Control	1890	1.7	100.0%
FBSciences ZiCAN Soil + YaraLiva® CAN-17	**2090**	**1.4**	**103.2%**

YaraLiva® CAN-17 Control

FBSciences ZiCAN Soil + YaraLiva® CAN-17

- ZiCAN Soil plus CAN-17 picked up a 10.6% yield increase which is 200 lbs/acre. 200 lb x $2.75 = $550/acre increase
- The benefits go beyond just supplying Zn & Mn. Even though Fe & Cu were NOT added, the increased root flush & benefits of FBS Transit included in ZiCAN Soil helped increase other micronutrients mined from the native soil. Specifically +25.6% Mn, +23.4% Zn, +103% Fe, +50% Cu
- It was clear from initial field visits that ZiCAN Soil plus CAN-17 was going to outperform the CAN-17 control
- There were also positive trends for fewer blanks, and 3.2% larger size kernels

fbsciences®

Powered by FBS TRANSIT®

ZiCAN™ Soil

CN COMPATIBLE

TECHNICAL INFORMATION

The nutrient and organic compounds in ZiCAN™ Soil address zinc and manganese deficiencies commonly present in many soils.

Importance of Zinc in Plants
Zinc is an essential constituent of several important enzyme systems and affects many metabolic processes in the plant. Zinc controls the synthesis of the important plant growth regulator indoleacetic acid, which is crucial for active growing tips and leaf enlargement. When zinc is deficient, terminal growth areas are the first areas to be impacted. Zinc is crucial for stress mitigation and a key part of most antioxidant systems in the plant. It combines with copper to create the plant's most effective response to abiotic stresses. Zinc is also critical in bud differentiation, making it important for long-term productivity in vineyard and orchard crops.

Importance of Manganese in Plants
Manganese plays a key role in chlorophyll production. Because it is used to split the water molecule during Photosyntheis it is essential for plant health. Manganese also activates more enzymes than any other nutrient. It is especially important in the production of proteins that are part of the plant's natural defenses against disease.

Root Exudates are naturally produced by the plant in order to absorb soil minerals. Plants may have difficulties producing them under adverse conditions. However, the ZiCAN Soil formulation not only assures the plants' ability to get full use of the zinc and manganese, it also allows the plant to absorb other minerals in the soil such as iron, calcium and potassium.

RECOMMENDATION & COMPATIBILITY

For all other crops apply 1 to 8 quarts per acre any time during the growing season. Repeat as needed.

Can be mixed with CAN-17 or CN-9 at a ratio of 0.25 to 1.0 Gallons per 10 Gallons of liquid calcium fertilizer. Do not mix in concentrated form with any other tank additive without first adding water. Recommended mixing sequence: water, adjuvants, pesticides, FBSciences nutrient products, other fertilizers, balance of water while agitating. A standard jar test is recommended before tank mixing.

See product label for complete Directions For Use.

2-0-0
GUARANTEED ANALYSIS

Total Nitrogen (N) **2.0%**
- **0.5% Ammoniacal Nitrogen**
- **1.5% Nitrate Nitrogen**

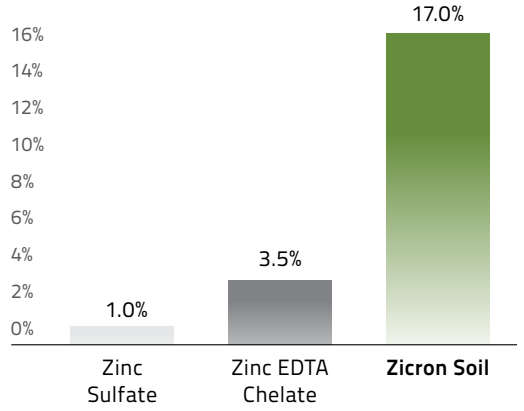
Manganese (Mn) **1.0%**
- **1.0% Water Soluble Manganese**

Zinc (Zn) **6.0%**
- **6.0% Water Soluble Zinc**

Derived from: Ammonium nitrate, Nitric acid, zinc gluconate, and manganese gluconate.

Net Weight
10.6 lbs per Gallon @ 68° F
1.3 kgs per Liter @ 20° C

Zicron® Soil Uptake Efficiency
(2006-2017)



ZiCAN Soil is the CN Compatibleversion of Zicron Soil.

Note: Efficiency numbers for zinc sulfate and zinc EDTA are from UC California Cooperative Extension publications for vineyards and orchards.

ESSENTIAL ON A WIDE VARIETY OF CROPS

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