

# ZiCAN™ Soil 2-0-0



ADVANCED ZINC FORMULATION COMPATIBLE WITH CALCIUM NITRATE



FBSciences newest product ZiCAN™ Soil brings together the performance and technology of our top selling Zinc product, Zicron® Soil and optimizes it for Yara's powerful YaraLiva® calcium nitrate products, including CAN-17 and CN-9 for outstanding tank compatibility. ZiCAN Soil is optimized to mix perfectly with CAN-17 and CN-9. Together, Zinc, Manganese, Calcium and Nitrogen, pack a powerful punch to support plant health, however, their incompatibility in the tank has always been the challenge for growers. ZiCAN Soil solves this problem with a formulation designed specifically for YaraLiva® liquid calcium nitrate fertilizers. ZiCAN Soil is designed for use on all crops including tree nuts, vineyards, fruit, vegetable, grain, and forage crops.

- Compatible with Calcium Fertilizers
- Resolves Zinc Chlorosis
- Improves Chlorophyll Production
- Resolves Little-Leaf & Rosetting Symptoms
- Improves Leaf Size
- Improves Frost Tolerance
- Increase Fruit Storability
- Balances Zinc with Manganese

## 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)
Check / CAN-17 10 gal/A (x3)	1890	1.7	100.00%
<b>ZiCAN Soil 1 gal/A + CAN-17 10 gal/A (x3)</b>	<b>2090</b>	<b>1.4</b>	<b>103.20%</b>

- 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 Iron & Copper were NOT added, the increased root flush & benefits of FBS Transit included in ZiCAN helped increase other micronutrients mined from the native soil. Specifically +25.6% Mn, +23.4% Zn, +103% Iron, +50% Copper
- 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

YaraLiva® CAN-17 Control



FBSciences ZiCAN Soil + YaraLiva® CAN-17



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## 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 that affects many metabolic processes in the plant. It controls the synthesis of indoleacetic acid, an important plant growth regulator that is crucial for active growing tips and leaf enlargement. Terminal growth areas are affected first when Zinc is deficient. Zinc is also critical in the bud differentiation process. It is therefore 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 Photosynthesis 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.

## ESSENTIAL ON A WIDE VARIETY OF CROPS



## 2-0-0 GUARANTEED ANALYSIS

<b>Total Nitrogen (N)</b> .....	<b>2.0%</b>
<b>0.5% Ammoniacal Nitrogen</b>	
<b>1.5% Nitrate Nitrogen</b>	
<b>Manganese (Mn)</b> .....	<b>1.0%</b>
<b>1.0% Water Soluble Manganese</b>	
<b>Zinc (Zn)</b> .....	<b>6.0%</b>
<b>6.0% Water Soluble Zinc</b>	

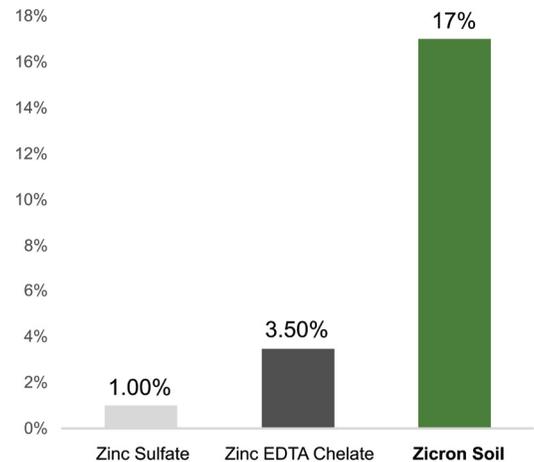
Derived from: Ammonium nitrate, Nitric acid, zinc gluconate, and manganese gluconate.

### Net Weight

10.6 lbs per Gallon @ 68° F

1.3 kgs per Liter @ 20° C

### Zinc Soil Uptake Efficiency (2006 – 2017)



Note: Efficiency numbers for Zinc Sulfate and Zn EDTA are from UC California Cooperative Extension publications for vineyards and orchards.