

FERTILISER - LIQUID

# Organic-TE

Multi-mix Trace Elements

- **Amino acid chelated trace elements**
- **For use as foliar or via irrigation**
- **100% Soluble Powder**

Organic -TE is a unique soluble powder formulation of amino-acid chelated trace elements. It is designed to address deficiencies as a foliar spray or via irrigation.

The trace elements zinc, boron, manganese, copper and iron are a vital part of enzymes and are extremely important for plant growth. If any of these become deficient or are out of balance, then yields and produce quality will suffer.

Foliar sprays of trace elements are an efficient way of supplementing nutrients available from the soil, particularly soils where nutrients are unavailable or lock-up easily.

## Zinc

Zinc is essential for the transformation of carbohydrates and regulation and consumption of sugar in the plant. A zinc deficient plant will have limited cell functions.

## Manganese

Manganese is essential as an enzyme activator in the growth process. It assists iron in chlorophyll formation (for photosynthesis) and is involved in the utilisation of carbohydrates, nitrogen metabolism and other amino acid compounds formed as part of plant metabolism.

Manganese is needed by the plant very early in the growth process and through-out the growing season.

Manganese deficiencies often occur in high pH soils and low organic matter sandy soils.

## Copper

Copper allows enzymes to work faster (activates them), stimulating root metabolism, chlorophyll formation and increasing sugar content of fruits. It contributes to better colour, flavour and also helps increase storage and shipping qualities (elasticity).

Inadequate copper results in stunting of plants. Deficiencies are mainly found in sandy soils which are low in organic matter.

## Iron

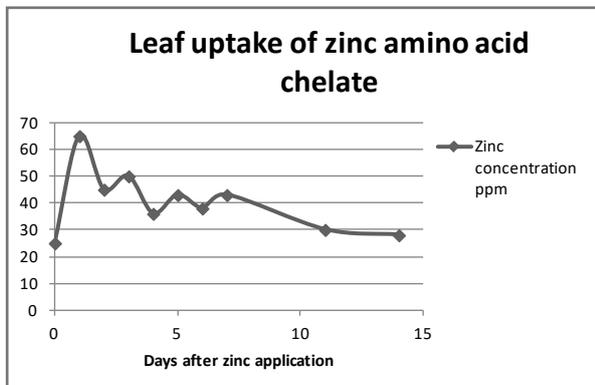
Iron is essential for the formation of chlorophyll and the activation of several enzyme systems. It is also important in respiration, a vital part of the oxygen carrying system.

Iron is generally abundant in the soil, but not always available to the plant. This is particularly relevant in high pH soils and low organic matter sandy soils.

## Boron

Boron has a wide range of functions. It is needed in protein synthesis, for increased cellular activity that promotes translocation of sugars, flowering and fruit set. Calcium cannot perform its vital function without boron.

Boron deficiencies are mainly found in acidic sandy soils and those with low organic matter.



The graph shows immediate plus sustained uptake of nutrients with chelated amino acid zinc over a 14 day period.

# Combination trace elements

## PACK SIZES:

10kg

## DIRECTIONS FOR USE:

Organic-TE is used in a wide variety of agricultural enterprises. It is suitable for use as a foliar spray and via irrigation. When mixing, fill spray tank half full with water and add the required amount of Organic-TE while continuing to fill tank with water. Also add Fish Emulsion as spray oil or surfactant just before tank is full of water. Continue agitation through the spray operation. (JAR TESTS are always recommended for tank mix compatibility).

Re-seal containers after use.

## TYPICAL ANALYSIS:

N - 3.9%	Fe - 2.2%	Mn - 4.5%
Zn - 8.8%	Cu - 2.5%	B - 1.2%

## APPLICATION RATES:

### Foliar:

Do not exceed 0.5% solution in sprays; test spray on a small area prior to use, particularly in low volume sprays.

### Vegetables:

0.5 - 1.0 kg/ha; as required.

### Fruit:

0.5 - 1.0 kg/ha; 2-4 applications from fruit fill.

### Vines:

0.25 - 0.75 kg/ha; pre-flower and post fruit set.

### Broad-acre crops:

1.0 - 2.0 kg/ha; every 14 days early in growing cycle.  
(Cereal Crops: 0.25 - 0.5kg/ha)

### Ornamentals/Nursery:

0.5% solution; every 14 days.

### Via Irrigation:

Apply up to 5kg/ha per application. Repeat as required.

Each farm's situation, processes and practices may differ and therefore necessitate corrections to ensure optimum results. Adjust rates according to tissue analysis and production levels. Repeat as required.

## CLEAN UP PROCEDURE:

Use all mixture in spray and irrigation tanks; purge tanks and lines with clean water; flush irrigation lines. Do not return mix to original drums. Store in original container away from direct sunlight. Do not store in diluted form.

## WARNING:

Nuisance Dust. Read SDS prior to use.

## PRECAUTIONS:

Physically compatible with a wide range of commonly used products. Always mix a small quantity (jar test) and check for physical compatibility before combining with other ingredients.

When applying for the first time, or in combination with other products, a small test area should be sprayed and observed prior to the total spray.

## Why balance nutrients & why add active carbon

When nutrient levels are balanced there is less disease and insect problems.

Liebig showed over 100 years ago that growth and yields of plants are governed by the nutrients in least supply - not by how much NPK is applied. The nutrient in least supply determines the yield.

Although these nutrients do not all behave similarly, there are several common factors that affect their availability. The soil humus acts as a "storehouse" for many of these elements which are subject to losses. As the humus decomposes, the nutrients are released and the humus tends to act as a continuous nutrient supply. Soils that receive regular additions of organic amendments often don't show micronutrient deficiencies.

We recommend adding active carbon in the form of humic/fulvic acid when applying nutrients to improve nutrient availability. Humates provide a charged surface for nutrients to hook onto (multiple studies world-wide).

Humates are the most active component of soil organic matter and cost-effectively provide the benefits of soil organic matter.

OFS has humic/fulvic liquids, soluble powders and pellets which are used extensively throughout