



A SPOON FULL OF SUGAR MAKES THE NUTRITION GO DOWN

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|------------|---|-------------|---|
| *ZincMax | m/m 10% Zn, 0.5% B m/v 130 g/l Zn, 6.5 g/l B | **K-Max | m/m 9% K, 11% K ₂ O m/v 115 g/l K, 139 g/l K ₂ O |
| *Cu-Max | m/m 4% Cu m/v 50 g/l Cu | **DoubleMax | m/m 6.3% Ca, 1.16% Mg, 0.5% B m/v 80 g/l Ca, 15 g/l Mg, 6.3 g/l B |
| **CalciMax | m/m 8% Ca, 0.5% B m/v 100 g/l Ca, 6.5 g/l B | **MagMax | m/m 5.8% Mg, 0.5% B m/v 75 g/l Mg, 6.5 g/l B |
| *FerroMax | m/m 4% Fe m/v 50 g/l Fe | *ManMax | m/m 6% Mn, 0.5% B m/v 75 g/l Mn, 6.5 g/l B |



Plaaskem

Tel: (+27 11) 823 8000
www.plaaskem.co.za



Tel: (+27 21) 868 4063
www.uap.co.za



* Certified for use in organic farming
by Ecocert SA F-32600, according
to EC regulation 2092/91

WHEN YOU NEED TO BE SURE ****SGS**

The Max range of chelated micro-elements A QUALITY PLAASKEM PRODUCT RANGE

Plaaskem has a full range of chelated microelements which are sophisticated foliar feeds. This range includes Calcimax, Manmax, FerroMax, Magmax, Cu-Max, Zincmax and K-Max. A valuable addition to the standard Max range is DoubleMax, which contains both calcium and magnesium in the correct proportions to each other (4:1), so that both elements will remain available to the plant.

The principle of chelates is that metal ions are "foreign" to the surface of a leaf. Therefore, they are not easily taken up through the leaves into the plant. However, carbohydrates, as found in the Max range, are not foreign to a plant and are therefore easily taken up by the leaves. By chelating the metal iron, the chelate is taken up into the plant, transported within the plant and the nutrient deficiency is effectively addressed.

Nutrient deficiencies in agricultural crops and orchard trees are common. Such deficiencies are not always easily identified visually, and often chemical leaf analyses are required. An independent study conducted recently at Lisbon Citrus Estate in Mpumalanga, was conducted in an orchard where citrus trees had been neglected and no microelements had been administered for a long time. Trees therefore showed various microelement deficiency symptoms, notably copper, zinc and manganese. A trial was performed on Valencia's, limes and lemons in order to correct these micronutrient deficiencies. The first step taken was a detailed leaf analysis. Based on the results of the leaf analysis, 8 different copper products were chosen for the trial. One of these was Cu-Max. All of the products were tested for copper (Cu) content before spraying, and Cu-Max was found to be perfectly within the claimed copper content range. Other products in the trial delivered only 1/3 of the Cu claimed on the label. The same tests were conducted on FerroMax, ManMax and ZincMax, all of which were found to be within spec of the claimed label content.

Cu-Max was sprayed on Valencia's and limes and increased the Cu content of the lime tree leaves from 3.1 mg/kg to 17.8

mg/kg after 12 days (Figure 1). At six days the Cu content of the leaves peaked at 18.5 mg/kg. Some of the other products in the trial only managed to increase Cu content to 4.5 mg/kg after 12 days. On Valencia's the pattern with regards to Cu-Max was the same, with the Cu content increasing from 4.4 mg/kg to 11.2 mg/kg after 12 days, peaking at 16.4 mg/kg after 2 days.

ManMax was sprayed on limes only, where the manganese (Mn) content was increased from 33.6 mg/kg to 84.1 mg/kg after 12 days (Figure 2), peaking at 92.3 mg/kg after 2 days. ZincMax was sprayed on lemons, limes and Valencia's. On Valencia's an increase in zinc (Zn) content from 22.4 mg/kg to 103.2 mg/kg was observed over 12 days (Figure 3), while on lemons an increase from 23.6 mg/kg to 104.1 mg/kg was seen. The increase on Zn content in limes over 12 days was from 22.6 to 104.1 mg/kg.

These independent results showed once again that the Max range consists of quality products that are readily taken up into the plant over a short period of time, effectively correcting the nutrient deficiency.

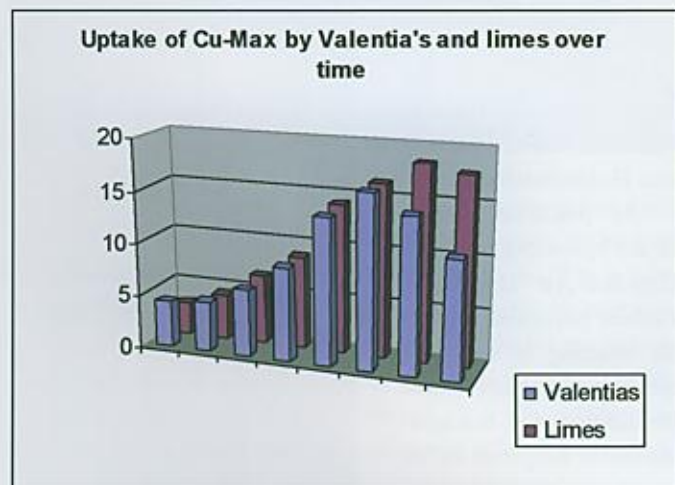


Fig 1. Uptake of Cu-Max by Valencia's and limes over time.

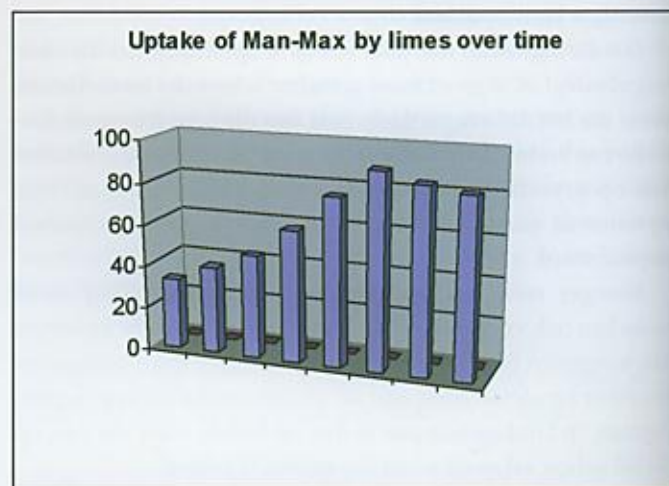


Fig 2. Uptake of Man-Max by limes over time.

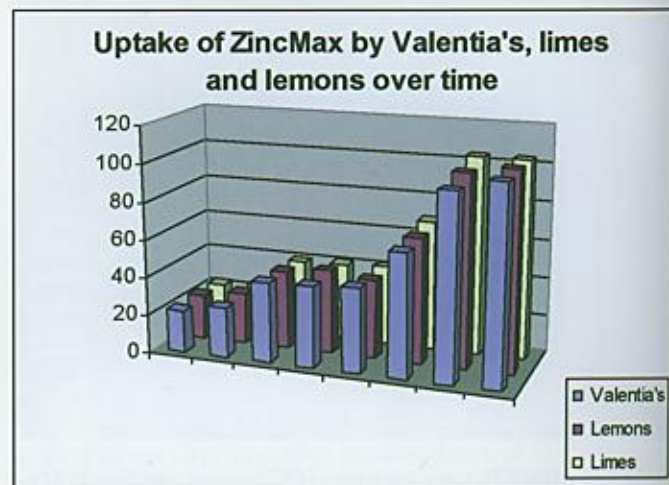


Fig 3. Uptake of ZincMax by Valencia's, limes and lemons over time.