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NONTOX-FULVATE™ AND ABSORPTION OF POTASSIUM

CROP

Novas

TREATMENTS

- Foliar applications at 10 litre per tree at 07:00
  Control
  4000g potassium nitrate per 100 litre water
  4000g potassium nitrate plus 100g Nontox Fulvate™ per 100 litre water
- Five repeats consisting of 5 trees using 3 as data trees.
- Leaf samples were taken two hours after application, washed with water and detergent and then with an organic solvent to remove the outer waxy layer and possible residues.
- The leaves were then submitted for analyses to CAL.

RESULTS

Lettuce of the cultivar Nevada were treated once, at transplanting into gravel beds with Nontox Silica® at a rate of 20mg Si per litre of nutrient solution. Leaves were harvested when they have reached the desirable size, pack in plastic bags and stored in a cold room.

Treatments	***% K in the leaves***
Control	*1,202a*
4% potassium nitrate	*1,606^{ab}*
4% potassium nitrate + 0,1% Nontox Fulvate™	*2,278^{b}*

CONCLUSIONS

The washing process with an organic solvent was introduced by Albrigo to remove residues of pesticides from sprayed leaves. This process removes the waxy layer and all the resdues and deposit on the surface and trapped in the wax. It can therefore be accepted that the concentration of potassium determined by leaf analyses is actually in the leaf lamina and will be available in the physiological processes.

The absorption of potassium by citrus leaves is increased by the addition of Nontox Fulvate™. The addition did not change the pH but apparently modifies the structure of the waxy layer to facilitate absorption. When Nontox Fulvate™ is used, the concentration of potassium can be decreased or the addition can be utilised to improve the potassium status substantially. No damage to the foliage or fruit was observed.

The final concentration of Nontox Fulvate™ in the spray solution is only 100mg per litre or 40mg C per litre, but the resultant increase in the potassium level was almost 90%.

Nontox Fulvate® is available in containers of 5 and 200 litre with a net mass of 5,70kg and 228,0kg respectively.

For technical enquiries contact John Pretorius 083-228 0258 or Hannes Coetzee 082-785 7595.