



**Haifa** Pioneering the Future

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## MC Agri Juvenile

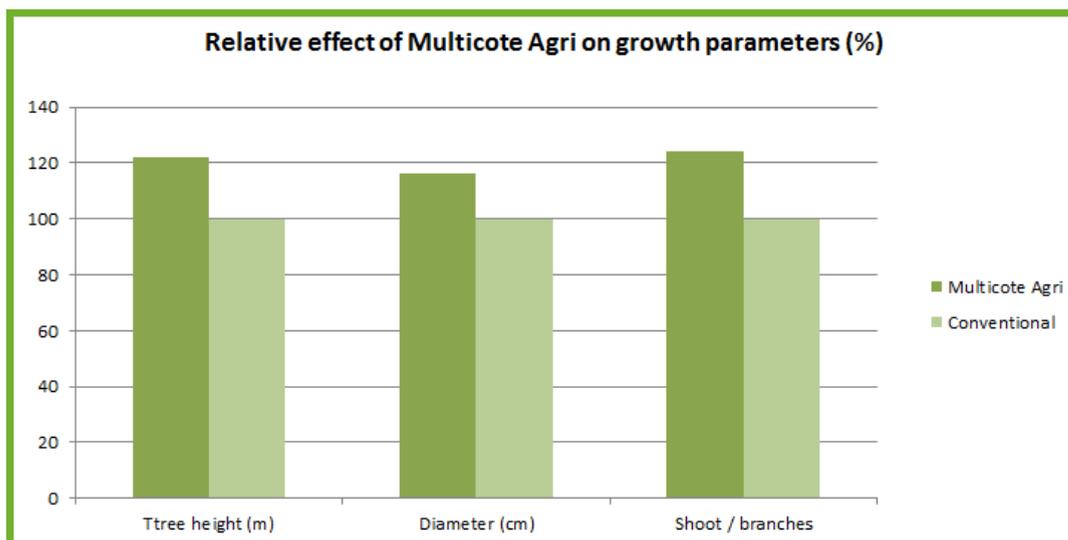
### Multicote® Agri (8) Juvenile

The solution for growing new orchards.

Multicote™ Agri (8) Juvenile is carefully formulated to nourish non-bearing fruit trees, offering

- Adequate nutrition over months
- Best fertilizer use efficiency
- No groundwater contamination ; no salinity build-up in the soil

Measured results on a 3 year old apple orchard in the Western Cape have shown that with just a single application of MCA (8) Juvenile (MCA = Multicote Agri) in year 1, there is still, on average, 20% better stem diameter, tree height and number of branches than the conventionally fertilized trees. Had the grower continued with Multicote in year 2 and 3 rather than reverting to conventional fertilizers these results may have been even more dramatic.



MCA (8) Juvenile



Conventional

In other trials on citrus trees the Multicote trees had grown sufficiently to fill out their area and bear the 1<sup>st</sup> commercial crop in year 3, a full 2 years ahead of the conventionally fertilized orchards. The Multicote trees followed the traditional yield curve, increasing in years 4, 5 and 6 as expected.

### Non bearing citrus - Limpopo



#### MCA (8) Juvenile

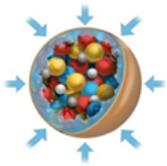
- 18 months after planting
- 12 months after applying MCA
- 1 app



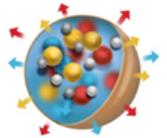
#### Conventional

- 18 months after planting
- fertilizer applied monthly
- 8 apps

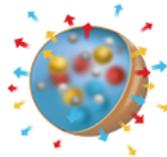
#### How Multicote® works?



1. Moisture penetrates the polymer capsule



2. The moisture dissolves the nutrients in the capsule

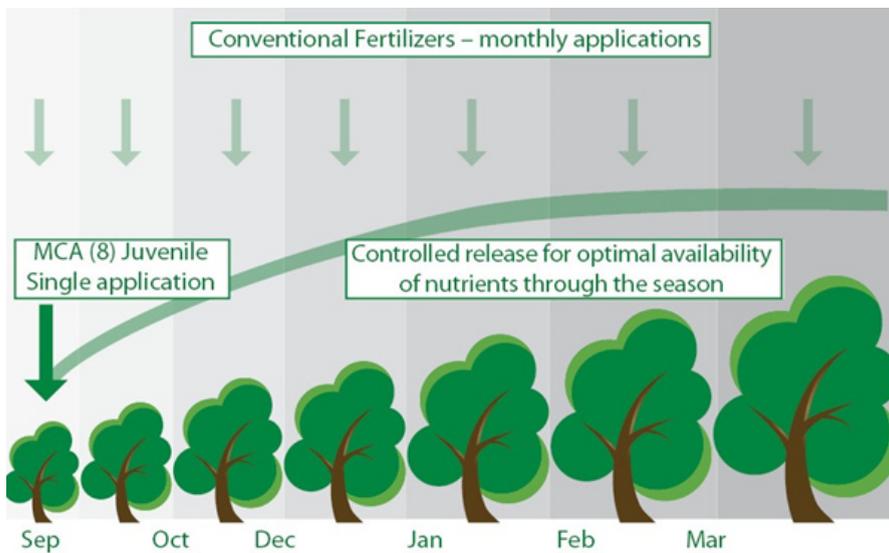


3. Nutrients are released into the soil by diffusion. Soil temperature controls the rate of release.

Multicote® Agri Juvenile is based on Multicote® technology that involves plant nutrients being encapsulated by a semi permeable polymer coating. Once applied the granule starts absorbing moisture from the soil, which dissolves the soluble nutrient core. Through this process, the nutrient solution is released into the rooting zone via a controlled diffusion process. The only factor affecting the release rate is the soil temperature. Thus, the warmer the soil, the faster the release rate of the nutrients and a cooler soil temperature will result in a slower nutrient release rate. The soil type, pH, water content or microbial life has no effect on the release rate. A single application of Multicote® Agri provides a continuous release of nutrients throughout the crop's growth cycle. The polymer coating is bio-degradable and disintegrates over time leaving no residues.



MCA (8) Juvenile is therefore specifically formulated to match the plants growth curve and nutrient demand from budbreak in spring through to dormancy in autumn. It is advised to apply the MCA after planting to ensure that it is not incorrectly applied in the planting hole, see guidelines below. To ensure that the Multicote release rate matches the plant's nutrient demand curve, the product should be applied to coincide with budbreak, earliest up to 2 weeks before and latest 2 weeks after. Usually this will be applied in early spring, with the peak release / demand expected in early summer. Release will slow down significantly by the end of the summer, stopping new vegetative growth, giving the plant time to harden off in early autumn and build its reserves for the winter. Correct timing of the application is therefore essential; as is the selection of the correct product, consult with your local qualified agronomist to ensure you select the right product for your circumstances.



#### Application guidelines

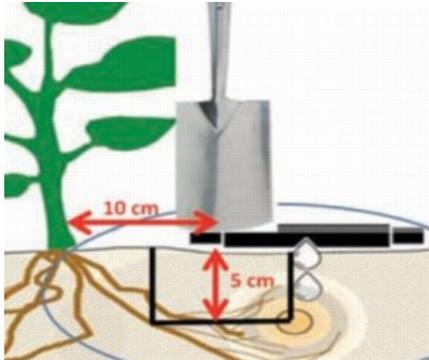
The application rates of Multicote® Agri (8) Juvenile (Reg. Nr. K8834 - Act 36 of 1947) should be determined by a qualified Agronomist, considering soil analysis, vigour of the plants, growing conditions etc. (Normally we apply approx. 70% of conventional N)

The correct application of any Multicote® product is extremely important and the following guidelines should be followed closely:

- To ensure a steady release of nutrients, Multicote® should always be placed below the soil surface or at least covered with a mulch.
- It is advisable to distribute the fertilizer dose in 2-4 slots, 20 to 30 cm long, radiating outwards from the base of the plant, like the spokes of a wheel.
- Place the fertilizer granules at a depth of  $\pm 5$  cm (or deeper, in very warm areas), 5-10 cm away from the plant stem (nearly touching the roots).
- Preferably no more than 100 g per slot.
- Multicote should always be placed in the irrigated zone, under the drip area (canopy) around each plant.

Factors to consider when determining the depth of placement:

- Active root depth (Multicote should be in the upper 3rd of the rootzone)
- Expected soil temperature during growing season. If very hot, place the Multicote deeper, up to 25 cm if needed. This will coincide with the active root depth normally attained.
- If any form of mechanical weeding is to be done during growing season apply the Multicote below the working depth of weeder.
- Where using drip irrigation, place the Multicote® in the wet zone between the nearest drippers and the plant, but not directly below the dripper.
- Using a spade or other suitable implement make a slot, 25 cm long, in the soil into which the Multicote® can be placed. Tread lightly to close the slot after application.
- **Avoid applying Multicote® in blobs directly against the roots or stems.**
- **Avoid applying Multicote directly in the planting hole, rather apply after planting as described above and shown below.**



A major advantage to using Multicote® fertilizers is that all the plants are very uniform, growing evenly all season long.

#### Available Multicote Agri Product range for fruit trees and vines:

Although MCA (8) Juvenile is the product developed specifically for growing orchards, some alternative products have also been formulated to meet specific agronomic needs, based on soil conditions in particular regions and also on some specific crop requirements. Consult your local qualified agronomist for advice on the best product for your situation. Some of the prescription blends available are:

- MCA (8) Juvenile +Zn&B
- MCA (8) Juvenile +Fe
- MCA (4) Juvenile
- MCA (4) Juvenile Kem

#### Your nearest South African distributor:

Please contact (new details for Terason to be given shortly, they announce their new name next week) to locate the distributor closest to you, or contact Haifa South Africa at details provided.