

## CITRUS *Citrus* ssp. (RUTACEAE)

An important fruit such as oranges, grapefruit, lemons, limes, and tangerines.



# PLANTaGLOBE is your partner in citrus business

### Uses

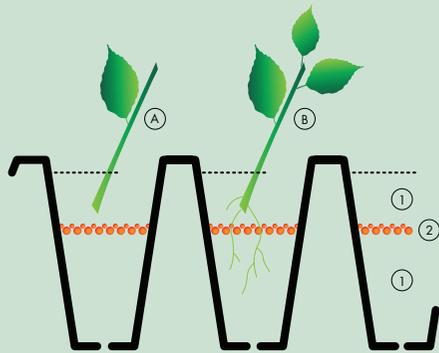
Citrus fruits are consumed fresh or utilized as processed citrus products and citrus by-products. Approximately one third of total citrus production is utilized for processing. This proportion is higher in the case of oranges (40% of globally produced oranges are utilized for processing). The proportion of grapefruit utilization for processing is similar to that of orange. In contrast, nearly all small citrus fruits of the tangerine type are intended for consumption on the fresh market. Lemons and limes are somehow different since they are normally consumed accompanying other food products. They are grown mainly for the fresh market and their juice is used primarily as flavouring in beverages.

### Ecology & Planting

Seeds have good germination rate, usually sown on a bed of sand or vermiculite and transplanted two or three weeks later, when the first true leaf is fully expanded. Seed germination is enhanced if part of the seed coat is removed. Four to five months later, the bigger seedlings are transplanted into larger pots until they are ready for grafting. The total growing time for the single transplanting procedure is 15 – 18 months. Double transplanting takes 20 – 24 months. The annual average temperature should range between 20°C and 28°C. A climate with low rainfall and plenty of sunshine is favourable for citrus trees. It promotes good flower differentiation, flower and fruit development, and fruit quality. Soils usually require application of compost and other organic fertilizers.

### Mycorrhiza & Bio-fertilizers

Citruses are dependent on mycorrhiza. Application may be done at nursery stage when plants are propagated or application of Symbivit® inoculum together with Conavit® biofertilizer may be performed at field planting by placing products into the planting hole. Long term effects can be expected for this species increasing sustainability of plantation and enhancement of yield about 15%. Mycorrhiza should reduce transplantation shock, decrease mortality at planting and support early growth of the tree.



- Ⓐ newly placed cutting;
- Ⓑ roots growing through the layer of Symbivit®

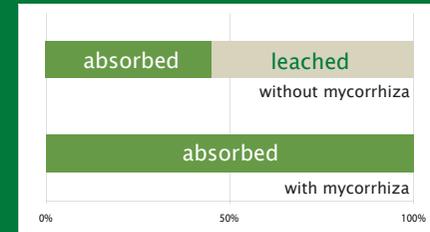
- ① substrate
- ② layer of Symbivit®

Application of Conavit within outplanting in the field.

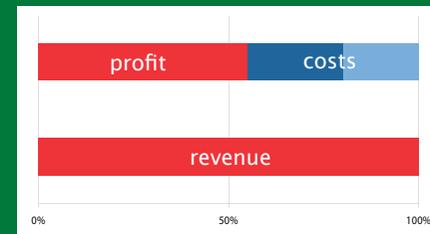


your current yield

potential yield with the use of mycorrhiza



potential efficiency of conventional fertilizers



potential profit and costs of bio-products

potential revenue

## Make new progress in your citrus business

Products store in a cool, dry place; can be used for 2 years from production date if stored properly. Contains occurring fungi and is not toxic or harmful to the environment. Does not contain genetically engineered organisms, does not leave toxic residue in the soil. Recommendation is to refrain from using systemic fungicides within 3 following mycorrhizal inoculations. Majority of conventional herbicides, insecticides and non systemic fungicides do not inhibit development of mycorrhiza. Excessive application of superphosphates can reduce mycorrhiza efficacy.

**PLANTaGLOBE®**

*Learn from Nature, be part of it*

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[info@plantaglobe.com](mailto:info@plantaglobe.com)

### Recommended products:

**Symbivit®** - is an inoculating product improving growth and yield of majority of plant species. It is based on endomycorrhizal (arbuscular) fungi.

**Conavit®** - is ecological, long term, slow release fertilizer composed 100% natural components. Its high calcium content predestines the fertilizer to be used particularly in acid soils.