



PRO-NATURA
INTERNATIONAL

Innovation towards Sustainable Development

MEMBER OF IUCN, THE INTERNATIONAL UNION FOR CONSERVATION OF NATURE

5 WEEKS TO BEGIN TO END HUNGER

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A BIOCHAR-ENRICHED SUPER GARDEN OF ONLY 60 M² PROVIDES NUTRITIOUS FOOD FOR A FAMILY OF 10 WITH 80% LESS WATER

Pro-Natura International, in association with the social enterprise JTS Semences¹ has developed the innovative, ecological and highly productive Super Garden, originally designed for Africa. It is a combination of the Improved Tropical Garden of JTS Semences and Pro-Natura's biochar.

The result of 15 years of research and 30 years of field experience, designed for tropical climates, the Super Garden is a mode of intensive and ecological vegetable cultivation that yields up to one and half tonne of vegetables per year on only 60 m², providing families of 10 people with a nutritious diet. The corresponding kit includes non-GMO high-yielding seeds, soil amendments, adapted irrigation devices together with innovative equipment (covering veils, tools, etc.).

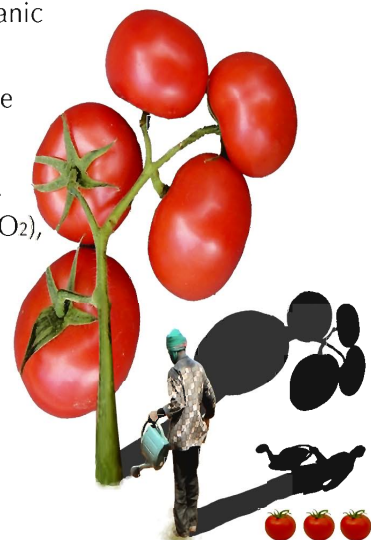
The production is constant throughout the year, irrespective of seasons, in approximately 5 weeks for short cycle vegetables. The system allows a reduction in water consumption by over 80% and reduces the labour required to two hours per day.



-  The Super Garden has many innovations notably biochar produced with Pro-Natura's green charcoal technology. Soil fertilisation using charcoal dust (biochar) is an ancient practice employed more than 7,000 years ago by pre-Columbian Indians in the Amazon regions. The exceptional properties of these soils have been preserved until today, and are being discovered by the scientific community which is now showing great interest in biochar.
-  Pro-Natura's biochar avoids environmental problems associated with charcoal production since it involves green charcoal produced exclusively from renewable biomass (unused agricultural or forestry residues, invasive plants, etc.). It is the product of a continuous carbonisation, both efficient and ecological, using the Pyro-6F machine, now manufactured by the French company Green Charcoal International.. Complementary fertilisers are limited to organic products such as compost and manure.
-  This technique allows to significantly increase the productivity of agricultural land, once the soil has been enriched by incorporating once and for all one kilogramme of biochar per m². In addition to improving soil fertility, biochar also acts as a sustainable carbon sink by sequestering carbon from atmospheric CO₂ (one tonne of biochar being equivalent to around 2.7 tonnes of CO₂), thus mitigating long-term climate change.

OUR BIOCHAR SUPER GARDENS ARE ALREADY PRESENT IN AFRICA, LATIN AMERICA, EUROPE AND ASIA. WE NEED ALL POSSIBLE DONATIONS TO FIGHT AGAINST HUNGER AND MALNUTRITION.

¹ <http://www.jtssemences.com/>



Pro-Natura International

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International Charity (Loi de 1901 J.O. 23.09.92 N° 39)



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The kit includes



Plastic lining: This allows for limiting the plot size and the restriction of work to a single place (like a flower pot) resulting in subsoil enrichment and pest control, as well as controlling water and wind erosion. Plastic lining constitutes the basis of the technique. Its installation leads to deeper work on the soil, and therefore both deeper rooting and better lateral growth of plants;



Organic fertiliser: This very important for regenerating soil fertility and contributes to healthy plant growth;



Crop veils: they help counter water evaporation by at least 2/3, limit the time when the stomata (foliar cells of the plant indispensable for photosynthesis) remain closed during the hottest hours of the day thus increasing the photosynthesis period, create a barrier to flying insects and form a protection against sand storms as well as heavy rain;



Nursery veils: These guarantee the same effect as production veils over small surface areas characteristic of nurseries;



Fine-nozzled watering-can: Allows for regular, non-aggressive plant watering and prevents soil compacting;



Dibble: Indispensable for transplanting;



Alignment cord: Delimits the planting area and facilitation plants in a straight line;



The JTS seeds: are the fruit of more than 15 years of GMO-free agronomic research done by the social venture JTS Semences. The packaging is waterproof and a germination verified by the JTS Semences laboratory and providing an optimum rate. The production and conservation of local seeds is to be encouraged.

Adaptation work for Mediterranean and tropical humid climates is taking place.

A specific practical nutrition guide for families and trainers is available now. The culinary advices are aiming at improving the nutritive qualities of meals, at economising energy and cooking water.



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