

Datasheet biodegradable organic Growboxx® plant cocoon Part of the Groasis Ecological Water Saving Technology

Check the video how it works here

The Growboxx® plant cocoon is a safe biodegradable planting technology – developed since 2012 – that enables to plant a tree alone, or in combination with shrubs, flowers or vegetables. You can use the Growboxx® plant cocoon in hot, dry or eroded areas. One year after planting the tree grows independently and does not need irrigation. The Growboxx® plant cocoon is made of recycled paper, mixed with growth stimulating organic material. After half a year the box starts to decompose and functions as fertilizer for the tree. The box has no wick, instead the bottom of the box functions as a capillary separation between the water and the soil. This way the quantity of given water depends on the humidity of the soil. Together with the box you can use the biodegradable or polypropylene Growsafe plant protector.

With a Growboxx® plant cocoon you can plant a tree in the middle of the box in the soil. It has 4 seed pockets in which you can either plant a little plant or sow a seed. The 4 seeds or plants will root hydroponically in the water. After half a year they will penetrate the degrading bottom of the box and establish in the soil. The Growboxx® plant cocoon has a siphon that collects rain and can be used for a refill.. You can use the Growboxx® for 3 different purposes:

- 1 Productive tree in the middle to plant orchards, e.g. vines, olives, etc.
- 1 Productive tree in the middle of the box with 4 vegetables in the seed pockets for planting hydroponically growing vegetables. The vegetables will produce up to 20 kilos which the rural family can sell in the market to make money or eat them. After one year, all costs of the box, the productive tree and the vegetable seeds are paid by the vegetables production. So within a year the family has paid its investment in the productive tree that starts to produce fruits, medicines, oils or wood.
- 5 Trees and plants for ecosystem restoration purposes this offers the opportunity to plant one tree and 4 bushes and/or wildflowers in order to create colonizing micro-ecosystems of pioneer plants to reforest the area. With only 100 Growboxxes the client can plant 500 pioneer plants per hectare, saving enormous amounts of costs compared to traditional methods.



The Groasis Growboxx® plant cocoon (*)

(*) For commercial purposes the design is coloured. In practice the Growboxx has the brown-yellow colour of paper pulp.













Transparent view of Growboxx® plant cocoon with tree not combined with vegetables or plants or bushes



Transparent view of Growboxx® plant cocoon with tree combined with vegetables or plants or bushes





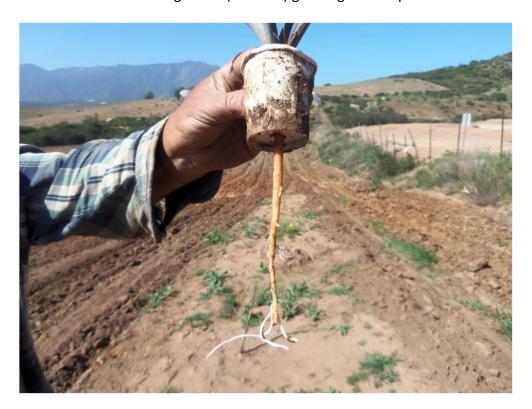








Prosopis (*Mezquite*) in the middle of the soil for carbon production, and Yucca vegetable (*Cassava*) growing in seed pocket



Yucca vegetable (*Cassava*) has grown hydroponically and its roots are already on the bottom of the Growboxx® – after app. 6 months the roots penetrate the bottom of the box and establish in the soil.













Growboxx® plant cocoon with tree tomatoe (= Tamarillo = Cyphomandra betacea) in combination with lettuce (Lactuca sativa)

Growboxx® plant cocoon	
Standard parts	Box - lid with 4 seed pockets – clay ball – anti-evaporation cover
Color of box	Beige
Color of lid	Beige
Color of clay ball	White
Weight of set	550 grams (19.4 oz)
Material	Biodegradable organic recycled paper
Additives water tightness	Food safe additives - no bitumen used
Additives to protect against animals	Food safe additives help prevent attacks from bacteria's - termites - rabbits -hares - goats – sheep. Some termite populations are not sensitive and will still attack
Water transport to tree	No wick - water transport through capillary bottom
Temperature resistance	Between - 40°C to + 80°C (-40°F to +176°F)
Diameter x height	L40 x w 40 x h 20 cm (16 x 16 x 8 inches)
Rainwater harvesting	Yes
	Maximum 750 on pallet 85 x 120 cm (32 x 48 inches) in 40Ft HC sea
Complete sets per pallet	container









Empower nature



Complete sets 40Ft HC	
container	22,500 pieces on 30 pallets
Water gift per day	From 100 millilitres to 500 millilitres per day
Water gift influence	Depending on hygroscopic characteristics of soil
Lid characteristic	Cover has a siphon and surface that is designed to collect rain
Animals	Cover is strong enough to be put below soil against drinking animals
Refill	Siphon in cover allows a quick refill if necessary
Prevention of too deep planting	Box depth only 19 cm in order to establish the roots <i>in</i> the soil and the trunk <i>above</i> the soil
Expected life time	
Growboxx [®]	Box degrades within a year – cover degrades within 5 years
	Cover keeps on covering the soil during 5 years to prevent weeds
Weed control	and avoid evaporation around the tree
Evaporation of water through lid	Zero
Development of algae in	
water	Zero
Experience	5 years with 200,000 Growboxxes in 30 countries
	See this video at 6:00 minutes – how it started with the model 2012
	See this video of the model 2016
Patented	In 113 countries since 2012

Website	www.groasis.com
YouTube channel tree	
planting	https://www.youtube.com/user/Groasiswaterboxx
YouTube channel vegetables	
planting	https://www.youtube.com/user/Groasisvegetables

Download planting manual in our Groasis Growboxx® app in Google or Apple store



The Growboxx® plant cocoon: fix it & forget it!





