

Instructions for the system of irrigation

1. Presentation

The Irrigasc irrigation semi-permeable pipe is a sleeve or shaft, a sort of « sock » in plastic (polypropylene) vertically positioned in the ground, next to the plant.

It consists of two parts : a tank of a capacity of 1 liter and a shaft with thin walls opening of several holes (microperforations) only in one side.

The shaft measures 9 centimeter of diameter. The length changes according to needs (market gardening (0.45 m) or cultivation of trees (0.9 m)).

2. Functioning

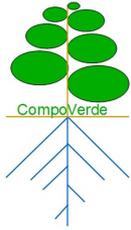
This system carries water and nutriments in-depth, directly to roots.

More precisely the irrigation shaft has effect :

- to stimulate the growth of roots in bringing plant water and nutrients.
- to favour storage of reserves in roots.
- to lead roots to deep ground where temperature is constant and allows so a better growth of roots, even while the bad saison.
- to produce plants more resistant, because roots are less exposed to unfavorable factors in deep ground.

This system avoids the water loss by evaporation, because water directly sinks in the ground.

It allows so to save 90% of water and 90% of fertilizer.



3. Plantation

a) Equipment:

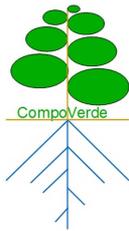
- A manual or motor auger
- Irrigasc shafts of the desired length
- Fertilizer (ripe compost, wormscompost, etc...)
- Sand to fill the shaft if the soil is too clayey
- Plants must be the younger as possible (1 or 2 years old) with straight and healthy roots
- A watering can or equivalent and a water point
- A fence if man must protect plants against the herbivores

Comment:

This irrigation equipment is very light and economic comparison to irrigation conventional technics. It is possible to combine this system with a dripping system.

b) Planting phases

- 1) Dig a hole vertically with a auger (bit of 100mm diameter) either manual if the soil is light, or motor if the soil is compact ou hard. The depth of hole depend on the length of the shaft.
- 2) Fill the shaft with the soil of the hole to the tank. If the soil is too clayey, add a substrate more porous to the soil (for example sand).
- 3) Bury in one third the tank with perforations towards the plant. The shaft wall must be well stretched to be efficient, if not microperforations can be filled.
- 4) Fill the empty space between the soil and shaft with unpacked soil.
- 5) Plant at a distance of about 7 cm (wide of a hand) in the side of perforations (side of logo « Arrow ») in making a mix of two thirds of soil and one third of compost.
- 6) Pack slightly at three places around roots so as to fix the plant in the soil.
- 7) Put a organic fertilizer dose appropriate for the plant in the shaft.
- 8) Fill the tank with water until the level stay stabilized.
- 9) Water copiously the plant (everyday while the first week if necessary).



4. Watering and maintenance

Water three times per week with 1 liter in the tank, preferably at evening.

5. Lenght of the mantle

Meanwhile the lenght can be changed very easily in two different ways :

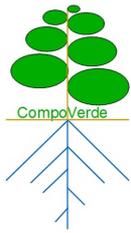
First way : you made a knot in your shaft

Second way : you take off the tape, cut the shaft as long you want and put back carefully the tape (warning it must be watertight !)

Make sure that the perforations are lined up with the logo (on the tank)

6. Questions et pictures

Questions and pictures: www.compoverde.com



7. Pictures

