

# DWC 5 Planter

## Guide to using CityGreen's DWC Kit



## DWC (Deep Water Culture)

In DWC Hydroponics, the roots of the plants are submerged in a thick layer of water at all times.

Due to ready availability of water and nutrients at all times, plants grown in DWC grow at a fast pace and give good yields. However, due to quick growth, the plants use up the available dissolved oxygen (present in nutrient solution) at a quick rate. As such, one needs to re-oxygenate the nutrient solution at regular intervals to maintain the rate of growth and avoid suffocating the roots.

## Set-up Instructions

### \* Step 1 - Seed Germination

- \* Place one seed germination plug in each netpot. Do not remove the outer covering of the germination plug.
- \* Add 30 to 50 ml water to the germination plug. It will expand in size.
- \* Sow 3-4 seeds around 1/2 cm deep in the germination plug.
- \* Place the Netpots in a tray or plate. Keep the tray in a warm and dark place to speed up germination.

### Contents

Food-grade DWC planter

Food-safe Netpots

Air-pump with Air stone

Hydroponic Nutrient

Seed germination plugs

Fly-ash Leca

- \* Keep the germination plug moist by spraying 5ml - 10 ml of water once or twice a day (depending upon the weather in your area).
- \* The seeds will start to germinate in 3 to 7 days time.
- \* Once the seeds have germinated, start exposing them to morning and evening sun for couple of hours a day. Increase the exposure gradually.
- \* Step 2 - Hardening
  - \* Provide 10 - 15 ml of (regular or nutrient) water to the saplings every day.
  - \* Prepare a 500 ml nutrient solution by adding 1 ml each of N, K and P to 500 ml of water. Use this solution, once on alternate days to water your plants. Rest of the times use plain water.
  - \* For next 1 week, keep increasing the sun exposure gradually till the saplings develop 6-8 leaves.
- \* Step 3 - Transplant
  - \* Place the DWC system in an area that gets a good amount of sunlight.
  - \* Insert the transparent air tube through one end of the end-cap of DWC pipe. Attach the air stone to this end of the tube.
    - \* Attach the other end of the tube to the air-pump. Place the air-pump outside the DWC pipe in a dry area.
    - \* Prepare nutrient solution by adding 4 ml of N, K, and P to 2 liters of water. Add the nutrient solution to the DWC pipe. Place the lid.
  - \* Transfer the netpots to the planting spaces in the lid of DWC system.

## Regular Monitoring

1. Turn on the air pump for half an hour twice a day (preferably morning and evening)
2. Check the water levels once a week. Add additional nutrient solution, when needed.

## Common issues to look out for

1. Lack of dissolved oxygen: If you do not operate the air pump regularly - sign - brown coloured roots.
2. High water temperature: plants roots can burn (rot) at high temperature. In hot weather (temperature >30), place the DWC planter indoors near a window.

— If you are facing any difficulties with using our products or need any kind of support, do reach out to us on WhatsApp at +91 843 153 2978, or write to us at [support@citygreens.in](mailto:support@citygreens.in).