

OFG003-3C planting manual: Please refer to the following instructions for your planting at each stage.

There are four planting stages:

First stage- Germinating:

1. Place the seed sponges into the nursery trays(each sponge should contain 2-3 seeds positioned 5mm into the cross in the center).
2. Slightly damp the sponges with water, then add 25~35°C of warm water into the tray until the water level reaches half the height of the sponges(best to utilize RO water or drinking water)(any nutrient implement are forbidden at this stage)
3. Cover the nursery tray with black-out cloths or shading panels(high relative humidity and shading are essential in germination. Please keep the temperature at 25~35°C to speed up the sprouting process).
4. Once the germination rate exceeds 70%, proceed to the instructions of the second stage(please avoid germinating for too long to prevent excessive growth).

Second stage- Growing:

1. Place the sponge with spouts into a planting basket, and set them in the planting slot(#1)
2. Switch the light setting to "S" Mode. Distance the light tubes from the plants by 10cm, then set the lighting\ time to "LOW" Mode.
3. Once the height of the plants reaches 3-5cm(1-2 in.), proceed to the instructions of the third stage.
#1 The growing stage is critical for the plant's health. This stage can also be performed in the nursery tray(a moisture-retaining cover is optional):
 - Add the nutrients in the water tank, then place the tray 10cm under the light tube in S Mode. Place the sponges into the planting slot once this stage is completed(this method would be more space-saving).

Third Stage- Thriving (instructions separated for two different plant species):

- A. For herbage crops(i.e. lettuce), switch the light setting to L Mode
- B. For micro green leafy(i.e. Bean sprouts, herbs, etc.), switch the light setting to G Mode.
 1. Please constantly distance the plant from the lighting tube by 5~10cm, then set the lighting time to HI Mode.
 2. Monitor the pH level at 6.0 ± 0.5 and the EC level at 1.2-1.6 (recheck every week).
 3. Harvest at any size and time according to your needs.

Fourth stage- Flowering/Harvesting:

1. Refresh the tank with nutritions for flowers and fruits according to your plant species
2. Monitor the pH level at 6.0 ± 0.5 and the EC level at 1.2-1.6 (recheck every week).
3. Switch the lighting time to HI Mode. Be sure to pollinate the flowers once they bloom(OFG003-3C is best suited to plant herbage crops. We recommend GrowTanks for fruits and florals).

Side Notes:

1. The best plantation temperature is around $25\pm 5^{\circ}\text{C}$ with the humidity at $60\pm 10\%\text{RH}$.
2. Recheck the pH and EC level once in a week (adjust the pH level before EC).
3. Adjust the light tubes to ensure the light covers all of the plants. At the same time, be attentive in controlling the distance between the plants and the tubes at each stages.
4. If excessive growth occurs due to a lack of lighting, please switch the lighting time to HI Mode or ON Mode.
5. It requires legal licenses to adjust nutrients for use. Please buy legal nutrients that best suits your plant at your country.

Every legal plant nutrients would be labeled with its NPK levels(herbage crops requires more nitrogen; florals requires more phosphorus; growing stage and fruiting plants requires more potassium).

Additional supplement of trace elements like calcium and magnesium are allowed.OPCOM utilizes food-grade citric acids and baking soda to adjust the pH level, as well as special salts for the EC level of the water solution.

6. OPCOM recommends planting herbage crops of the local species with OFG003-3C, as local species sprouts and thrives better than those imported.
7. Stop the nutrient to the leafy planting two days before harvest. Set the lighting to ON mode for 24hours lighting completely.
8. After harvesting, please clean up the water tank and renew the nutrients(clearing the nutrient residues are essential to prevent them from disturbing the NPK ratio of the new plants, as this product operates by completely reusing water for each round of plantation).
9. Each plant has its own suitable plantation weather. The stage of germination requires complete caress in temperature and humidity(a shielding cover could help maintain the moisture and temperature). If it's summer when the sprouts are moved to the planting slots, be attentive to ventilation and plant cooling. Since plants grow slower in winter, be sure to monitor the temperature and humidity of the plantation environment. Plants generally grow well in indoor spaces that are suitable for humans to reside in. When planting indoors, we recommend planting near windows or glass walls to increase the lighting of the plants.