

GrowBox

Planting Manual



OPCOM[®] Farm[®]

Table 1. Available seeds approved by OPCOMFarm for GrowBox can be purchased on OPCOMFarm website.

No.	Name	Chinese Name
1	Camomile	洋甘菊
2	Sunflower	小熊向日葵
3	Basil	甜罗勒
4	Oregano Origanum vulgave	奥勒岗
5	Parsley Petroselinium crispum	欧芹 (意大利欧芹)
6	Perilla frutescens	紫苏/紫苏花
7	Lemon Balm	香蜂草
8	Mint	胡椒薄荷
9	Boston Lettuce	波士顿莴苣
10	Lettuce Green Romance	绿萝蔓莴苣
11	Red Lettuce	红叶莴苣
12	Lettuce	翠妹莴苣
13	Amaranth	白苋菜
14	Tomato	樱桃(红珍珠) 观赏西红柿
15	Cucumber	小黄瓜-翠娘
16	Hot Pepper	墨西哥辣椒(青军)
17	Sweet Pepper	甜椒-金苹
18	Hot Pepper	朝天椒
19	Okra	红秋葵

● **Leafy vegetables also you can try:**

Arugula, Endive, Spinach, Tatsoi, Pak Choy, Chinese Mustard, baby Salad leaf.

Herbs: Spring onion, Celery, Coriander, Thyme, Chive...etc.

Planting Manual for leafy vegetables

A. Sowing Stage

1. Application appropriate volume of water into the seedling tray
2. Soak the sponges containing seeds into water until the sponges fill in with water. (If using seeds purchased yourself, place seeds into sponges and seal the remain seeds in bag tightly, store in the refrigerator).
3. You can cover the seedling tray with a black cloth to keep it in dark until seed germinate. In general, the seeds will germinate within 3-7 days (depends on the specification of seeds).
4. Remove the black cover once the seeds germinated.
5. Prepare the nutrition solution recommended by OPCOMFarm. Add appropriate volume of water to dissolve the powder.
Nutrition solution: Make sure that E.C. is 0.8-2.0 mS/cm and pH 5.5-6.5.
OPCOM Farm SUGGESTION: Nutrition solution may be used by OANT001
6. Transfer the plants to GrowBox2, power on machine and press LED and PUMP "ON".

B. Seedling Stage

1. Keep the healthiest and strongest seedling on each sponge will be suggested. Remove extra or weak seedlings on sponges carefully.
2. Fill the empty growing tray with sponges to reduce the algae growth effectively.
3. Adjust LED lights and keep distance to make sure that LED cover all plants.
4. Set the LED "on" and PUMP "on" during this stage.



Figure , Seedlings of Purple rape on GrowBox

C. Growing stage

1. When the seedlings grow to 3-4 inches height, change control box to AUTO mode.
2. Measure the E.C. and pH at least once a week, adjust to optimal growth condition for better result.
3. Some plants, such as cucumber, peas or beans, you can plant next to the posts and twist the plant along with it carefully during the growing stages. (once a week)



Figure . Harvesting stages of Purple rape

D. Harvest

1. In general, you can expect to harvest the leafy crop within 4-6 weeks after sowing the seeds.
2. Some crops, such as coriander, basil, can continue growing after harvesting, there is no necessary to grow after each harvesting.

Planting Manual for Grass Flowers

A. Sowing Stage (Otherwise you can also use cutting instead of skipping this step)

1. Application appropriate volume of water into the seedling tray.
2. Soak the sponges containing seeds into water until the sponges fill in with water. (If using seeds purchased yourself, place seeds into sponges and seal the remain seeds in bag tightly, store in the refrigerator).
3. You can cover the seedling tray with a black cloth to keep it in dark until seed germinate. In general, the seeds will germinate within 3-14 days (depends on the specification of seeds).
4. Remove the black cover once the seeds germinated.
5. Prepare the nutrition solution recommended by OPCOMFarm. Add appropriate volume of water to dissolve the powder.
Nutrition solution: Make sure that E.C. is 0.8-2.0 mS/cm and pH 5.5-6.5.
OPCOM Farm SUGGESTION: Nutrition solution may be used by ONAT001.
6. Transfer the plants to GrowBox2, power on machine and press LED and PUMP "ON".

B. Seedling Stage

1. Keep the healthiest and strongest seedling on each sponge will be suggested. Remove extra or weak seedlings on sponges carefully.
2. Fill the empty growing tray with sponges to reduce the algae growth effectively.
3. Adjust LED lights and keep distance to make sure that LED cover all plants.
4. Set the LED "on" and PUMP "on" during this stage.

C. Growing stage

1. When the seedlings grow to 1-2 inches height, change control box to AUTO mode.
2. Measure the E.C. and pH at least once a week, adjust to optimal growth condition for better result.
3. Some plants, such as cucumber, peas or beans, you can plant next to the posts and twist the plant along with it carefully during the growing stages. (once a week)

D. Harvest

1. In general, you will expect to harvest the grass flowers within varying weeks from 2-4 months after sowing the seeds according to the species.

Planting Manual for Tomato

A. Sowing Stage (Otherwise you can also skip this and instead by cutting)

1. Application appropriate volume of water into the seedling tray.
2. Soak the sponges containing seeds into water until the sponges fill in with water. (If using seeds purchased yourself, place seeds into sponges and seal the remain seeds in bag tightly, store in the refrigerator).
3. You can cover the seedling tray with a black cloth to keep it in dark until seed germinate. In general, the seeds will germinate within 3-14 days (depends on the specification of seeds).
4. Remove the black cover once the seeds germinated.
5. Prepare the nutrition solution recommended by OPCOMFarm. Add appropriate volume of water to dissolve the powder.
Nutrition solution: Make sure that E.C. is 1.8-2.5 mS/cm and pH 5.5-6.5.
OPCOM Farm SUGGESTION: Nutrition solution may be used by ONAT002.
6. Transfer the plants to GrowBox2, power on machine and press LED and PUMP "ON".

B. Seedling Stage

1. Keep the healthiest and strongest seedling on each sponge will be suggested. Remove extra or weak seedlings on sponges carefully.
2. Fill the empty growing tray with sponges to reduce the algae growth effectively.
3. Adjust LED lights and keep distance to make sure that LED cover all plants.
4. Set the LED "on" and PUMP "on" during this stage.

C. Growing stage

1. When the seedlings grow to 3-4 inches height, change control box to AUTO mode.
2. Measure the E.C. and pH at least once a week, adjust to optimal growth condition for better result.



Figure , Growing stage of Tomato on GrowBox

3. You should start pruning tomato plants a when they get to be about 1 – 2 feet tall. Any smaller than this, the tomato may not recover from the shock of being pruned. By the time your tomato plant gets to be this size, the plant will have branches coming off the main stem. This is called a tomato sucker. Using a sharp, clean pair of pruning shears, snip these small sucker branches off.



4. Growing tomatoes on strings is a relatively new method that has seen increased popularity in small farming operations. It involves tying the tomato at the base of the plant and then to an overhead crossbar. The tomato plant is then trained up the string as it grows. Otherwise, set up a vertical grow net and fix tomato plant by clamp is also a good choice.
5. During flowering stage, application of OANT009 supplied by OPCOMFarm is recommended to get good tomatoes.

D. Harvest

1. In general, you can expect to harvest the leafy crop within 3-4 months after sowing the seeds.



Figure . Harvesting stages of Tomato