

# Growmanji: Setup Instructions



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## Phase 1 (Germination/Seedling Tray)

1. Take out one brown germination cube and submerge it in water for 30 seconds. Remove cube from water and place in black germination tray. Be sure the hole side is facing up. Save second cube for future growing.
2. Place 1-2 seeds in the hole of the cube that was just moistened. **USE CARE IN OPENING SEED PACKET AS SEEDS ARE SMALL.**
3. Fill bottom of tray with approx.  $\frac{1}{4}$  inch of water.
4. Place lid on top of germination tray. Be sure to snap all four sides of the lid securely.
5. Place tray in a warm, dark and dry place (outdoor closet, shed, garage, etc.) with shade or low light until seedlings begin to sprout. Once seedlings sprout remove lid and move to a sunny location.
6. Prepare nutrients as described in phase 2. Your 1<sup>st</sup> gallon of nutrients can be used to keep your cubes moist during the germination/seedling phase. This will create hardier seedlings. This is done by keeping about  $\frac{1}{2}$  inch of prepared nutrients in the bottom of the tray **at all times. NEVER LET CUBES DRY OUT! Keep remaining nutrients in cool DARK place.**
7. You may keep your seedlings for several weeks in the tray. When they are several inches tall and have a sturdy stem, you are ready for phase 3.

## Phase 2 (Preparing the Nutrients) **USE GLOVES AND PROTECTIVE EYEWEAR**

1. There are two ways to measure out the nutrients, by the spoonful or using a scale. The directions below are to make one gallon of solution.
2. Spoon:
  - i. 1 level scoop of Green dot packet
  - ii. 1 level scoop of Blue dot packet
  - iii.  $\frac{1}{2}$  -1 scoop of Yellow dot packet
  - iv. 1 level scoop of Red dot packet (This packet does not need to be used for refills, only for initial set-up or complete water changes)
- b. Scale:
  - c. 2.4 grams of Green dot packet
  - d. 2.4 grams of Blue dot packet
  - e. 1.2 grams of Yellow dot packet
  - f. 2.4 grams of Red dot packet (This packet does not need to be used for refills, only for initial set-up or complete water changes)
  - g. Place measured nutrients in a plastic one gallon jug with a lid and add at least 8 ounces of warm water. Shake very well to ensure nutrients dissolve. Fill the remainder of the jug with water. Set this mixture to the side, again storing remainder in cool DARK place.
  - h. **DO NOT EAT OR DRINK NUTRIENTS. FLUSH EYES WITH WATER IF NUTRIENTS GET IN YOUR EYES**
3. Test nutrient solution with PH paper. Remove one strip of paper and dip into the solution and compare to the color on the chart in the PH booklet. Ideal PH level is between 5 and 6. The color will be orange to yellow.
4. If the PH is above 6 then you will need to lower the PH using the packet with the black dot. Take 1 level scoop of the powder and mix into the reservoir. Wait at least one minute and repeat PH test. Continue this process of testing and adding a scoop until the desired PH is reached.

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## **PHASE 3 – (Reservoir assembly)**

1. Grab the collapsible reservoir by the handle with one hand and place the other hand inside the bottom of the reservoir. While pushing the bottom, pull up on the handle until the reservoir is completely expanded. **THE CONTAINER WILL NOT BE SMOOTH WHEN FULLY OPEN.**
2. Take the main reservoir frame (2 Large circles) and lay them atop one another with the smooth finished side up.
3. Working clockwise begin inserting the first two support dowels. The dowels should be inserted with the ball like feet on the bottom ring notch. Slide the dowel into the place with the ring lined up with the notch on top ring. Next rotate the dowel so the open ring is facing you. This will lock the dowel into place. Repeat this process with dowel 2. **DO NOT FORCE DOWELS! IF THE DOWEL IS IN THE CORRECT POSITION IT SHOULD SNAP IN WITH LIGHT PRESSURE.**
4. Slide the reservoir into the frame. The top of the reservoir should be flush with the top of the frame.
5. Insert the final 2 support dowels in the same manner as dowels 1 and 2.
6. Pickup the orange insulating neoprene wrap and give it a couple of good stretches from left to right. Insert the wrap around the reservoir, it should be behind the dowels directly on the black reservoir. Slip it behind each dowel as you go around and fasten.
7. Fill your reservoir- Mix a gallon of nutrients as you did in **Phase 2**. Empty the entire gallon of prepared nutrients into your reservoir. Fill with no less than one gallon.

## **PHASE 4 (Growing your Plant)**

1. Remove solar panel/air pump from box and follow the directions within.  
Be sure to install the one-way valve. The one-way (inline check valve) valve prevents water from getting into the pump. Be sure to install valve in correct direction. If correct, bubbles will be seen in water when pump is activated. Cutting tube approximately 10inches from pump. **DO NOT SUBMERGE PUMP IN WATER. PUMP WILL REMAIN ATOP CLAY BEADS.**
2. Thread the tubing through the net pot and attach gray air stone to the bottom/end of the tubing. Be sure this stone is submerged and as close to bottom as possible. This is what gives your plant oxygen and enhances growth.
3. From the germination tray, select the seedling in the cube that you will be using.
4. Leave this seedling in the cube and place the entire cube in the center of the net pot.  
Note: You should only place one cube in the system.
5. Sprinkle the clay beads around the square/cube to secure the seedling and cube.
6. Connect solar panel and turn toward the sun. An adjustable stand is provided for your use. 4-6 hours of bright direct sunlight is sufficient. Depending on your location, place panel in such a position to receive optimal amount of daily sunlight. (A standard electric plug may be purchased separately for continuous aeration and enhanced growth but is not required.)
7. Refill reservoir as needed in order to keep the root tips in the water (about half full is ideal during the later stages of growth not to be confused with initial start-up). Complete water changes are recommended every 3-4 weeks for optimal system performance.  
**DO NOT REFILL RESERVIOR TO THE TOP. THIS WILL REDUCE THE OXYGEN AVAILABLE TO THE PLANT. AN AIR SPACE IS NEEDED IN LATER STAGES OF GROWTH.**

**READY TO GROW AGAIN?** Your reservoir, stones and net pot are all reusable!

\*\* For additional support or complete refill kits, visit [www.Growmanji.com](http://www.Growmanji.com) \*\*



## Growmanji Components List:

- |                             |  |
|-----------------------------|--|
| A. Solar panel              | L. Adjustable solar panel stand                            |
| B. Air pump                 | M. Wall plug for air pump (optional for constant aeration) |
| C. One-way valve            | N. Upper and lower circular reservoir frame (identical)    |
| D. Air stone                | O. Net pot   |
| E. Wire hanger assembly     | P. Expandable reservoir                                    |
| F. Nutrient bags x 5        | Q. Germination tray with lid                               |
| G. Germination cubes x 2    | R. Support dowels x 4                                      |
| H. Measuring spoon          | S. *Seeds in envelope* NOT SHOWN                           |
| I. Insulating neoprene wrap |  |
| J. PH paper                 |  |
| K. Clay beads               |  |

