

Garden Tower Growing Instructions

These instructions are intended to assist you with running the Garden Tower after it has been built. This is a summary sheet with some extra tips. Note that much of this information is in the official growing guide.

Getting the Tower Ready

- Fill the tower reservoir with water (to within 3" of the top)
- Add 200 ml each of the Tower Tonic A and B. Shake containers before pouring. Mix thoroughly in reservoir. Wear gloves!
- Test the pH with the tester kit. The ideal range is 5.5 to 6.5. If you need to adjust pH add one teaspoon of pH+ or pH- at a time.
- Set up the timers:
 - The lights should be on for 14 hours (e.g. 6 AM to 8 PM). Set the timer on the main power bar for this. Make sure you plug the lights in on the side of that power bar that is controlled by the timer.
 - The water pump should be on for 15 minutes of every hour. Set the second timer for this. Make sure to plug it in on the side of the power bar that is NOT controlled by the timer you set for the lights.
- Plug in the pump and the lights and ensure everything works. You can control the pumps pressure with the dial on it. Leave it on the lowest pressure unless you need more for water to come out through the shower cap nozzle.
- Cover ALL empty ports on the tower once you start operating it. Otherwise algae will grow inside it. You can use aluminum foil or the supplied neoprene inserts.

Growing the Plants

- Keep seedlings covered in the dark until first shoots emerge. Then immediately place close to windows or place them on the tower base (and have the lights on for 14 hours per day).
- If the tower is ready with nutrients in the water, add that water to keep up to ¼" of water in the seedling tray. Otherwise use tap water.
- Place seedlings that are ready into the tower ports. Seedlings are ready when you can see roots emerging and they are about 3" tall. Use a label to mark which student's plant grows in each port.

Regular Maintenance

- Check the water level and pH weekly.
 - When adding water, **mix 20 ml of Tower Tonic A and B per 1 gallon (4 litres) of water** in a bucket. Then add to the tower reservoir.
- Check that the shower cap holes are clear of debris.
- Trim any roots that are growing into the reservoir.
- Clean the pump filter monthly. Pull it out through the port and remove cover to clean any debris.
- Replace the water in the reservoir every 2 or 3 months. To do so attach the clear hose to the tip of the shower cap nozzle and point into a sink or container. Turn on the pump the flush water out.