MICROGREENS QUICK GUIDE

In this guide, you'll learn what you need to start a test microgreens system, how to grow your first crop, and some helpful tips we've learned over the last 6 months in our own microgreens system!

WHAT YOU NEED

Hemp growing pads

Mesh or solid botton 10 x20" trays

T5 fluoorescent lights

Microgreen seeds

You will also need:

- Spray bottle
- Hydrogen peroxide (3%)
- Seedling cart with flood trays (commercial growers)
- Sharp knife or electric knife
- Food safety & handling gloves
- Packaging materials
- Heating mat

HOW TO GROW MICROGREENS

1. Place growth media in tray
Growers using the commercial kit will have mesh trays to allow irrigation with flood trays.

2. Soak media
Either dunk tray with mesh base in water reservoir or spray media with water until soaked.

3. Spread 1 oz. to 2 oz. of seeds evenly over growth media depending on seed type.
Spray seeds lightly with water or cover with water-saturated paper towels.

Radish:	2 oz / tray
Arugula:	1 oz / tray
Kale:	1.5 oz / tray

4. Cover seeds with solid tray or other light-eliminating cover.
Covering seeds traps humidity around seeds, which aids in germination. A dense layer of paper towels may serve this purpose. If growing in a propagation chamber, or enclosed seedling space, this step is unnecessary.

5. Place trays in a dark, warm area (~70 °F to 80 °F).
A propagation chamber can significantly increase germination rates and yield.

Percent growth of radish microgreens in different locations

Propagation Method	Tray Location after germination	Seed Density (oz/tray)	Harvest Weight (oz./tray)	% Growth
Propagator	Enclosed seedling cart; flood trays	1.5	13.9	827
Covered with tray	Open tray in office	1.5	4.7	213
Covered with paper towels	Enclosed seedling cart; hand watered	1.5	8.1	440

6. Check seeds at least twice per day for watering and seed germination.
The growing mat should be damp, but not soaked. There should be no standing water in the tray.

7. Uncover seeds after ~95% of seeds show germination.
When the seeds have germinated, green or yellow shoots will emerge from seeds.

8. Place tray under T5 lights.

9. Continue to check saturation of growth media at least twice per day.

10. Microgreens are ready for harvest when plants reach 1-2" in height.
Talk to your customers about the size of microgreens they desire.

Light setup:

Use the mounting hardware that comes with your T5 lights to mount lights on a downward facing surface. If using a rack or shelving unit, T5s may be zip-tied or hung from the shelf above your microgreens shelf.

Post-harvest maintenance

To clean trays, scrub them using a solution of 1 Tbsp hydrogen peroxide + 1 gallon of water.
Used hemp media may be composted**.**

For Commercial Microgreens Kits:

Microgreens grow best with a propagator and a seedling cart with flood tables. The Seedling Cart is not included in this kit (available for purchase here).

**If using a Seedling Cart, follow the steps above but make the following

Place trays in Seedling Cart tray with lighting set to be on ~18 hours each day.
Use a timer like this one to automate lighting.

Have the water cycle run twice per day at 5 minutes per cycle.
Run water cycle immediately when you transfer the trays to Seedling Cart.

TIPS FOR GROWING MICROGREENS

Germination:

- Keep germinating seeds moist and at ~75 ˚F . If germinating in an open space or a dry climate, consider checking seeds more than twice each day.
- Using a solid tray as cover helps to retain moisture in the media.
- Heating mats can help keep the seeds at 75 ˚F .
- Soak growth media immediately after transferring tray from the germination stage.
- Ensure seedlings receive near 18 hours of light per day after germination.
- Keep the relative humidity directly around the seeds at minimum at 50% for best texture.
- Lower relative humidity will result in more stiff "crispy" microgreens.
- Ventilation helps maintain balance between healthy humidity and fungal issues.

Mold and fungus issues:

- To avoid mold growth be sure seeds are not bunched on growth media. Spread seeds as evenly in a single layer as possible.
- If mold or fungus is observed simply spray lightly with diluted hydrogen peroxide solution (~1 tsp hydrogen peroxide per gallon of water).

Harvesting:

- Harvest using a sharp blade and wear gloves to avoid cuts/protect produce. Small hedge trimmers or an electric knife may be used to reduce harvest time.

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