



BLOOM Microgreens Cultivation Guide: Full Growing Cycle

STEP 1: DAY 1 — SOWING & GERMINATION SETUP

Prepare the Growing Trays

- Use two trays per unit:
 - **Top tray:** with holes (for drainage and airflow)
 - **Bottom tray:** no holes (to catch water during bottom watering)

Mix and Add Soil

- Mix **1 gallon of organic soil** with **40g of Gaia Green fertilizer**.
- Add water gradually until the soil is moist but not soggy.
- Fill the top tray with about **1–2 inches of soil**, level it evenly.

Weigh and Sow Seeds

- Weigh and sprinkle **10–30g of seeds** (varies by type, e.g., broccoli, radish).
- Distribute seeds **evenly**, avoiding overlaps to prevent mold.

Press and Mist

- Gently press seeds into soil using your hand or another tray.
- Mist the surface with a spray bottle until damp.

Stack and Cover

- Stack trays **up to 6 high**, placing a flat tray or board and light weight on top.
- This dark, compressed environment encourages **root development**.



STEP 2: DAYS 2–4 — GERMINATION PERIOD (DARK PHASE)

Daily Routine

- Unstack trays **once daily** to check moisture.
- Mist gently if soil is dry.
- Re-stack trays with weight after watering.

Conditions to Maintain

- Keep trays in a **dark, warm room (21–28°C)**.
- Ensure no light reaches the trays to avoid premature sprouting.

Learning Emphasis

- Encourage participants to **observe changes**, record daily tasks, and discuss how seeds begin sprouting under pressure.

STEP 3: DAY 5 — TRANSITION TO LIGHT

Unstack Trays and Expose to Light

- When sprouts begin pushing against the weight tray (usually day 4 or 5), **unstack and remove cover trays**.
- Transfer trays to a **rack under LED grow lights**, ensuring **12–16 hours of light per day**.



Begin Bottom Watering

- Pour **2 cups of water** into the bottom tray daily.
- Avoid watering from above to keep leaves dry and prevent mold.

Check Alignment

- Ensure all trays receive **even light** and rotate trays if needed.
- Encourage learners to identify healthy growth: upright stems, green leaves, no signs of mold.

STEP 4: DAYS 6–8 — GROWTH PHASE

Maintain Light and Water Routine

- Lights: 12–16 hours/day, turned off at night.
- Bottom water as needed—soil should stay **moist but not soggy**.

Ensure Proper Air Circulation

- Use a small fan or open windows to reduce humidity and mold risk.
- Monitor **temperature (21–28°C)** and **humidity (40–60%)** daily.

Track Plant Health

- Observe for color, height (ideally 2–3 inches by Day 8), and any irregularities (yellowing, wilting).



Record Keeping

- Track which seed types grow faster or yield more.
- Encourage students to journal the changes, take photos, or graph growth rates.

STEP 5: DAY 9 or 10 — HARVESTING & PACKAGING

Harvesting Microgreens

- Best done **in the morning** before watering.
- Cut microgreens **just above the soil line** using clean scissors.
- Avoid pulling or including soil or roots.

Drying and Cleaning

- If needed, gently blot microgreens with **paper towels**.
- Clean all trays with **mild detergent** and disinfectant (vinegar or peroxide solution).

Packaging

- Weigh and place greens into **clamshells or biodegradable bags**.
- Label each container with:
 - Type of microgreen
 - Harvest date
 - Optional: grower name or school program