

FREE MINI-GUIDE



Grow Lettuce in a Mason Jar

The no-pump, no-power Kratky method — a friendly first step into soil-free growing.

No pump

No electricity for the jar

One weekend setup

~30 days to salad

From **The Soil-Free Farming Revolution** by Julia Burgos

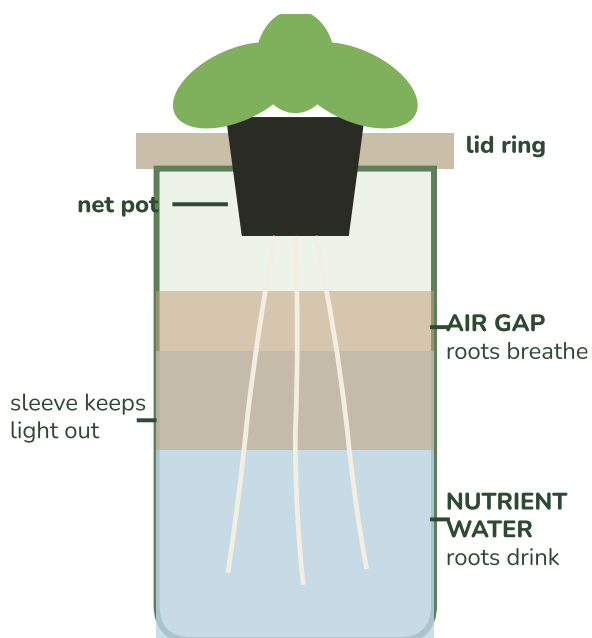
Meet Kratky: the “set it and forget it” method

If you're nervous about gadgets, start here. Kratky is the bicycle of hydroponics — simple, quiet, and hard to mess up.

You set a plant in a little basket (a **net pot**) on top of a jar of nutrient water. The roots grow down into the water and drink. As the plant drinks, the water level slowly drops, leaving an **air gap**.

That gap is the whole secret. The top roots breathe the air, the bottom roots sip the water. No air pump, no bubbler, no timer for the jar itself.

Golden rule: after the first fill, never top the jar back up to the brim. Drowning the air gap is the #1 way beginners “love a plant to death.”



Your mason-jar shopping list

- ☐ **1 wide-mouth quart mason jar** + its metal ring (no flat lid)
- ☐ **1 three-inch net pot** — sits snugly in a wide-mouth ring
- ☐ **Rockwool cube** or a scoop of clay pebbles to hold the seed
- ☐ **Lettuce seeds** — Black Seeded Simpson or Buttercrunch
- ☐ **Hydroponic nutrient** made for leafy greens (a small bottle is plenty)
- ☐ **pH drop test kit** (the fish-tank kind) + a little pH Down
- ☐ **Something to block light:** a sock, paper sleeve, or dark tape
- ☐ **Light:** a bright window, or a “Daylight” 5000–6500K LED

Budget note: if you already have a jar and a sunny window, the rest is a few small purchases — and most of it (nutrients, pH kit, seeds) covers many future jars. Prices vary by store, so shop around.

Seven steps to your first jar

Do these once, then mostly just watch it grow.

- 1 Make it dark.** Wrap the jar in a sleeve, sock, or dark tape. Light in the water grows algae instead of lettuce. Leave a thin peek strip if you want to check the level.
- 2 Prep the water.** Tap water? Let it sit out for 24 hours so most of the chlorine can evaporate (or use filtered water).
- 3 Mix at half strength.** Follow your nutrient's label for leafy greens, then use **half** that amount for the first two weeks. A slightly hungry seedling beats a burnt one.
- 4 Check pH.** Aim for **5.5–6.5**. Too blue/purple on your drop test means too alkaline — add pH Down a drop at a time and re-test.
- 5 Fill to the basket.** Pour until the water just touches the bottom of the net pot. This is the only time you fill it this high.
- 6 Plant 2–3 seeds.** Soak the rockwool cube in your pH-adjusted water, tuck 2–3 seeds in the top, and set it in the net pot inside the ring.
- 7 Give it light.** Bright window, or an LED 6–12 inches above the plant for 14–16 hours a day. A \$5 plug-in timer makes this automatic.



Keep it cool: roots like “cool feet.” Water above about 75°F (24°C) holds less oxygen and invites root rot. Set the jar on a lower shelf or the floor, away from hot windows.

Seeds first, light second: seeds don't need light to sprout. Turn your light on as soon as you see green.

The mason-jar mini calendar

About five minutes a day. Timing varies with light and temperature — let the plant set the pace.

When	What to do	What you're aiming for
Day 1	Set up the jar, half-strength nutrients, pH 5.5–6.5, seeds in.	Hydration
Days 2–4	Keep the cube moist and dim. Lights on the moment you see green.	Sprouts
Day 8	Snip the two smallest seedlings with scissors; keep the strongest one.	One strong plant
Days 10–12	Check pH. Lower your light to about 6 inches above the leaves.	Short, bushy growth
Day 14	Switch to full-strength nutrients for any top-up from here on.	Fuel for growth
Days 15–20	Peek at the roots: white and fuzzy is perfect. A small fan nearby helps sturdy stems.	Healthy roots
Day 21+	Start “cut and come again” — snip a few outer leaves, never more than about a third.	First nibbles
~Day 30	Harvest your first real salad, or keep picking outer leaves.	Salad day!

Quick fixes

Pale yellow leaves

Check pH first. If pH is fine, the plant may have used up its food — top up with fresh solution.

Brown, crispy tips

Often tip burn from still air. A gentle fan breeze usually helps.

Tall & floppy

It's stretching for light. Move the light closer or find a brighter spot.

Brown, slimy roots

Too warm or not enough air. Cool the jar and lower the water to widen the gap.

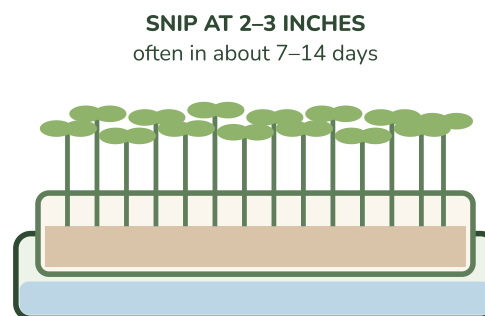
Can't wait 30 days? Try microgreens

A tray of microgreens can be ready in about 7 to 14 days: a perfect side project while your jar grows.

Microgreens are the young seedlings of everyday vegetables like radish, broccoli, peas, and sunflower. You snip them when they're just 2–3 inches tall, and they taste like a little, bright version of the grown-up plant: peppery radish, sweet pea, nutty sunflower.

They're not sprouts. Sprouts are eaten whole, seed and root, after a few days in water. Microgreens grow a bit longer in a tray under light, and you cut just the stems and leaves.

Simple and safe: no nutrients needed for a first harvest, just water, a tray, and light. Use seeds sold for sprouting or microgreens (not treated garden seed) and clean trays.



TRAY WITH HOLES
sits in a solid tray of water below

Easy first picks

Radish

Peppery and fast.
Often ready in about a week and a half.

Broccoli

Mild and fresh. Great on sandwiches and eggs.

Pea shoots

Sweet like fresh peas. Soak the seeds first.

Sunflower

Nutty and crunchy. A fun one to grow with kids.

Free bonus in the full guide

Microgreens: Your 10-Day Harvest

Every copy of **The Soil-Free Farming Revolution** comes with this free bonus chapter, with everything you need for your first tray:

- ✓ Budget starter kit (trays, grow mats or coir, light)
- ✓ Step-by-step first tray, from soak to snip
- ✓ 7–14 day harvest calendar
- ✓ Easy varieties table with days to harvest
- ✓ Mold vs. root hairs, and other quick fixes
- ✓ Simple food-safety habits for raw greens

Topping up the right way

A quart jar can run low before a big head of lettuce is done. That's normal. When the water drops far below the roots, add fresh nutrient water — but only **partway**, so the top roots stay in the air.

Think “a drink,” not “a bath.” If you ever see the plant wilt right after a big refill, the air gap got flooded: pour a little out.

Start the next jar now. Plant a new jar every week or two and you'll have a small, steady rotation instead of everything ready at once. That's succession planting — and it's where home growing gets fun.

Loved your first jar?

Get the full guide: The Soil-Free Farming Revolution

Julia Burgos's complete beginner guide takes you from one jar to a little home farm, in the same plain-spoken style, plus a **free bonus chapter on microgreens**.

- ✓ Kratky, DWC (bubbler bucket) and NFT systems explained
- ✓ Under-\$50 budget shopping list for your first system
- ✓ Lettuce, basil and bok choy — the easy starter crops
- ✓ Succession planting for a steady harvest
- ✓ The full 30-day “First Harvest” calendar
- ✓ Lighting, water, pH and nutrient mixing made simple
- ✓ Using an EC/PPM meter to check nutrient strength
- ✓ Growing Hydroponics in Texas Heat chapter

Get the full guide → [FULL-GUIDE-LINK]

Harvest like a pro

Snip outer leaves first and leave the center growing. Rinse, pat dry, and chill.

Done with the jar?

Pour leftover water on outdoor flower beds, wash the jar with a little vinegar and water, and start fresh.

Try basil next

Genovese basil is a thirsty herb that loves a jar. Same setup, same air-gap rule.

This mini-guide is for general home-gardening education. Follow the safety directions on your nutrient and pH products and keep them away from kids and pets. Results vary with light, temperature, and seeds.

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