

A close-up photograph of a terracotta pot filled with soil and various types of microgreens. On the left, there are small, round, light green leaves. In the center and right, there are tall, thin, bright green sprouts. The background is slightly blurred, focusing attention on the plants.

# HOW TO GROW MICROGREENS

## THE BEGINNER'S GUIDE



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## THE BEGINNERS GUIDE

### Should I grow microgreens?

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Unless you've been living inside the greenhouse for years, you've probably heard of microgreens and the insane growth that this tiny little type of crop has had over the past 4-5 years. Chefs are using them in dishes across the country and they're even showing up in farmers markets these days.

They're extremely popular for their flavor and color on the chef's side, but farmers have good reason to love them as well. Their high profit margin can help a farm weather lean harvests in other areas of the farm, or just boost the profitability of the farm as a whole.



*Photo by Peggy Greb*

But how do you know if adding microgreens to your farm's production makes any sense? To answer that question, we need to dig into how they're grown, the economics of the crop, and how you might go about testing your local market. Let's get started.

## The basic economics of microgreens production

Looking at microgreens from the perspective of a farmer, it's no surprise they're a popular crop. When you get into the raw costs of bringing a tray of microgreens to harvest, the margins are absolutely incredible.

First off, you have your fixed costs. The beauty of microgreens is that you can keep these extremely low when testing demand in your local area. The only real fixed cost you'll incur are for 10x20" propagation trays, which run about \$1/unit in bulk.

Now, your variable costs. Seeds, soil, water, and packaging are the big four here.

COSTS		
<b>Fixed Costs</b>	10" x 20" Trays	\$1/Tray
<b>Variable Costs</b>	Seeds	<\$15/lb (\$1/Tray)
	Soil	~ \$1/Tray
	Water	Negligible for small crops
	Packaging	Varies
<b>Total</b>		\$2-4/Tray

- 1. Seeds** - Unless you're growing very rare varieties — and you shouldn't when starting out — most microgreen seeds cost under \$15/lb, with discounts on bulk purchases pushing that number at least 20% lower. For most microgreen varieties, around 1oz of seeds are used per tray, bringing cost per tray down to under \$1. There are special cases (cilantro, radish, sunflower, pea), but this is just a basic overview.
- 2. Soil** - I like to use a 75/25 mix of potting soil and coconut coir, and the cost per tray comes out to around \$1. This can fluctuate depending on how much soil you decide to use per tray. Some growers fill their 10x20x2" tray to the brim, and some only fill it halfway up.
- 3. Water** - So low as to be negligible, at least when starting out.
- 4. Packaging** - This can be a fixed or variable cost, depending on how you work with restaurants. Some prefer disposable packaging, while others are happy to reuse food safe containers over and over again.



## OK, so microgreens have low costs, but how are yields?

So our actual cost of goods sold per tray is at or around \$2-4, depending on the type of green you're growing and your soil and packaging choices. But this number isn't useful to us unless we plug in our yield per tray and what we can sell our micros for at market.

In my experience, most crops yield between 8-12oz per tray. Again, there are exceptions for bigger shoots like peas, sunflowers, and radish, which can reach up to 12-18oz per tray.

REVENUE	
Production	8-12 oz / Tray
Pricing	\$3 / oz
Revenue	\$24 - 48

} Baseline; varies with crop costs and market

*\*Hidden costs: don't forget labor! Harvesting and packaging are time-intensive.*

As far as pricing, while you can price each microgreen variety individually to maximize your profit per green (because some seeds are far more expensive than others), I find it's best to charge a standard price per ounce at around \$3/oz. You can make special exceptions for rare varieties like purple basil, shiso, etc., but this is a good baseline price.

This means that at the worst, your revenue per tray will hit around \$24. At best, your revenue per tray can be up to \$48. Your costs on the other hand are only \$2-4 per tray, plus your time.

And that's where we get into a sticky situation. It can take a lot of time to harvest, wash, and package microgreens, so streamlining that part of your operation will be crucial if you want to make this crop work in your farm.



## How to grow microgreens – grow your first crop to test your market

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While I could go into a wealth of detail on growing microgreens here ([and I have on my site](#)), microgreens are fairly simple to grow. If you're interested in growing some sample trays to test out your market and see if they're a good addition to your farm, here's what I recommend.

1. Pick a few microgreen crops that are universally liked. Basil, arugula, radish, and sunflower are great ones to start out with.
2. Mix your soil, spread it into your 10×20 tray, and make sure you create an even, flat surface without compressing the soil too much.
3. Spread your seeds as evenly as possible, using around 1oz per tray unless you're growing a larger seed like sunflower.
4. Mist your seeds lightly, then cover with another 10×20 tray for a few days
5. Check on your tray and mist daily.
6. A couple of days after your seeds have germinated, take off the blackout dome and expose them to the light. It's time for them to green up.
7. Around a week after you uncover your trays, they should be ready to harvest.
8. Again, this is a simplified guide on how to grow microgreens, and I would direct you to [one of my video guides](#) if you want more in-depth information.



## Testing your market: working with restaurants

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After you've grown a few sample trays, it's time to test the market. Restaurants will always be the best customer to go for when starting out with microgreens, because they'll purchase larger quantities on a reliable schedule. This allows you to streamline your production, because you know you have orders coming in on a weekly basis.

If you already have relationships with restaurants and chefs, the next logical step is to bring over microgreen samples next time you go in for a delivery. Explain to them that you're testing out a new crop for your farm and wanted to drop off samples to see if it's something they were interested in.

Try to lock down a minimum order of \$50 of microgreens. Anything less than that and it's not worth the time to deliver to most restaurants, unless you're already delivering other produce to them.

If you haven't worked with restaurants before, here are some pointers:

- The two best times are from 9-10 am and 2-3 pm. Never visit during service hours, unless you want to make yourself a new enemy.
- Emphasize how fresh and local your produce is. Chances are the micros they're getting (if they're getting any at all) are coming through a distributor and are both more expensive and less fresh.
- Try to speak with the sous chef. They're one step below the executive chef and often make most of the purchasing decisions for the kitchen.

## Go forth and grow microgreens!

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So there you have it: a simple and quick overview of microgreens. If you can make these little shoots a profitable part of your farm, they can go a long way to adding to the bottom line. There are growers out there right now that specialize in microgreens only and make a healthy living for themselves and their family, so the proof is out there — it's time for you to test it for yourself.



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When he's not knee-deep in his garden, he's usually skateboarding, surfing, or reading a book.

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