The Complete Guide to Growing Microgreens

Gardenary

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IT'S TIME TO MEET

Your Garden Coach

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I am the owner and founder of Gardenary Co.,an online kitchen gardening education and resource company. I'm so excited to share with you the magic of growing microgreens indoors. This is the simplest way for every single person to get started gardening, and you don't even need very many supplies!

In this ebook, I'll walk you step by step through the process of growing your own sprouts and microgreens. By the end, you'll feel like an indoor gardening expert.

Guidebook Outline

01 Supplies to Grow Microgreens

02 Best Varieties to Grow

03 How to Plant Microgreens

04 How to Tend Microgreens

05 How to Harvest Microgreens

BONUS How to Grow Sprouts

Welcome

Microgreens rank among the simplest, smallest, and yet most nutritious and delicious plants you can grow in the garden. There are many rewarding aspects to starting these quick-growing plants for yourself, but perhaps the best thing about microgreens is how easy they are to grow at home. Not just at home but indoors, even right next to your kitchen sink.

When I first started gardening, I didn't know about microgreens. I didn't know that the best way to start was **small and simple**. I planted my first garden in a field with a rototiller. Go big or go home, right?

Needless to say, that first experience led to many failures, lots of frustration, and very little food to show for all of our efforts.

I wish someone had told me that the best way to start is indoors, with a simple setup of seeds, soil, water, artificial light, and trays.

By the time I discovered the joy of gardening in a tiny space, I'd already been gardening for five or six years. It was on a whim that I grabbed a container and tried my hand at growing some microgreens. Watching those little seeds sprout and produce leaves after just a few days indoors was thrilling.

It occurred to me then that I'd been spending all this time and effort and money on big gardens outdoors. And while those gardens have tons of benefits and produce many things to enjoy, I had been missing such a simple aspect of growing my own food.

So, here are all the things I wished I had known from the start about growing microgreens.

Five Reasons to Grow Microgreens at Home

NUMBER 1: MICROGREENS ARE FAST

Growing a plant for its leaves means you get to harvest so much sooner than you would if you're waiting for a strong root to swell underground, a flower to form, or a fruit to ripen. That's especially true for microgreens, when we catch the plant at the very outset of its life.

These tiny greens grow to harvest size within a matter of days after the seeds germinate. You'll be able to harvest your first batch in as little as seven days, with the max time you might have to wait for a microgreens harvest being 21 days.

Microgreens really give a new meaning to fast food!

NUMBER 2: MICROGREENS DON'T REQURE A LOT OF SPACE

I delayed starting any kind of garden for the longest time because I believed I just didn't have the space. For years, I felt envious of people who were growing a little bit of their own food and believed gardening was only for people with huge backyards.

I wish someone had told me that I could be growing microgreens even in the smallest of the apartments I lived in.

You can grow loads of microgreens—enough to harvest one to two salad bowls every single day for an entire week—in a space much smaller than your kitchen table.

This type of gardening can work for all of us. If you've got even a square foot of counter space to spare, you have room to set up and start growing your own microgreens at home.

(And growing sprouts requires even less countertop real estate!)

NUMBER 3: MICROGREENS ARE INCREDIBLY NUTRITIOUS

A seed contains all the vitamins and minerals that the seedling will need to advance through its initial stages of growth. Eating a green just a few days after it has sprouted from the seed, therefore, means a much higher density of nutrition—just a few leaves hold the same amount of good stuff that would have eventually spread out to dozens of leaves and flowers and pieces of fruit—than eating the plant's mature counterpart.

In short, you can enjoy all the nutrients you'd expect to find in a huge bowl of salad and raw veggies, but in just a few bites.

Eating microgreens is a great way to get more vitamins without having to take a pill or daily vitamin.

NUMBER 4: MICROGREENS ARE SUPER EXPENSIVE AT THE STORE

This past summer I was working with my photographer on pictures for my new book, **Leaves, Roots & Fruit**. I wanted to take pictures of microgreens, but I'd been really busy with all four kids home from school and hadn't started any seeds in the last couple of weeks.

I dashed to the farmers' market and searched desperately for a stall selling microgreens, so relieved to finally find one that I pulled out my wallet and handed over $30 for three little trays I could have grown in less than a week in my own basement.

Growing your own microgreens means much larger harvests for a fraction of the cost.

NUMBER 5: MICROGREENS CAN BE GROWN YEAR ROUND

You don't have to wait for a spring thaw. You don't have to wait for the oppressive heat of summer to pass. You can grow them at any time of year—whether the weather forecast says there's still a chance of frost outside or not—because you grow microgreens indoors. That means they're not affected by the weather. The only thing that matters is the environment you create for them.

This is great news for those of us who live up north where it's bitterly cold in the winter. I have to say, growing microgreens helped me through many a dark Chicago winter when there was nothing green outside, no fruits to look forward to harvesting.

They also sustained me when I was living in the south during ridiculously hot summers. Houston temps climb too high to grow salad greens outside (at least ones that don't taste bitter), so growing microgreens gave me that garden-fresh flavor when I really needed it.

You can be starting and growing your own microgreens right now, no matter where you live.

The Downsides of Growing Your Own Microgreens

Even with something as simple and easy to grow as microgreens, there are still some negatives to be aware of before you begin.

The first downside is that there is a bit of leg work you've got to do at the beginning to get your microgreens set up correctly. (Don’t worry, I’ll give you the rundown in Lesson One.)

Some people start with an overly simplistic setup—maybe a regular plastic container set in the windowsill of their kitchen or something—and when they don't see fantastic results, they give up, believing that growing your own microgreens at home just isn't worth it.

I'm all about just getting started. In fact, I love to say, “You don't have to get it perfect. You just got to get it going.” And while microgreens are incredibly forgiving of less-than-ideal conditions, you'll see much more success if you take the time to make sure your supplies are right for growing microgreens indoors.

The second downside is that microgreens need your daily attention. If you're someone who's always jet-setting or traveling for work without a moment's notice, microgreens might not be the plants for you. If you're someone who hates performing a task on the daily, microgreens might not be the plants for you.

Microgreens ask that you spend one, two, maybe five minutes a day taking care of them. (By taking care, I mean watering them and making sure they have good airflow around them.) It's nothing difficult, but it is something that needs to happen each and every day to find success.

Lastly, microgreens can only be harvested once. These plants are a single-use deal, a one-and-done crop.

Many of us gardeners grow accustomed to dealing with herbs and lettuce plants that are cut-and-come-again or tomato plants that give us clusters of ripening fruit for weeks. Those plants only produce more for us after we harvest from them. The idea, then, of cutting plants at the beginning of their lives and preventing any future growth can be a little disturbing, maybe even heartbreaking.

We're drawn to plants that we can keep alive for a long period of time, plants whose entire life cycles we can enjoy… and microgreens are not those plants. After I harvest from my microgreens tray, I dump the soil and spent microgreens seeds into my compost pile and start fresh with a new batch.

All that being said, I personally believe that the pros far outweigh the cons for growing microgreens.

And you don't have to grow trays and trays at a time to reap those microgreens benefits. You can achieve rewards from growing a couple of trays every month, and along the way, you'll learn more about a plant's life cycle, you'll boost the nutritional storehouses in your body, and you'll train yourself to care for plants regularly.

You know, the definition of a gardener is someone who tends the garden. If you're only growing plants outside that take months and months to produce for you, it's easy to lose the daily practice of gardening while you're waiting for *something* to happen.

Microgreens don't let that happen. You'll be able to see changes every single day, and these little plants just might enchant you. When you're harvesting something constantly from within your own kitchen, it's hard not to be hooked.

So let’s dive in. Within these pages, you’ll find everything you need to know about growing microgreens, and soon, you’ll be harvesting delicious greens right from your kitchen table.

01

Supplies You'll Need to Grow Your Own Microgreens

The first time I grew microgreens, I grabbed a Tupperware container from the jumbled mess under my kitchen sink, filled it with regular garden soil, and sprinkled some pea seeds on top. I gave it water and left it on a windowsill. The results weren't stellar, but at least I'd gotten started. We're looking for momentum as gardeners, not perfection.

Think of the supplies below as individual components that will combine to give you a great setup for your microgreens and very consistent results. You can begin with a simplified version and eventually graduate to something a bit more sophisticated to increase your production and keep your baby plants happier.

MICROGREENS SUPPLY LIST


a wide tray with drainage holes


a wide tray without drainage holes


lots and lots of seeds


organic seed starting mix


water source


LED light


plant tags or labels


scissors


mycorrhizae (optional)


hand rake or small hoe


a small fan

Now, let's look at these items more specifically.

MICROGREENS TRAYS

If it's your first time growing microgreens, you can start with materials you probably already have hanging out in a cabinet or junk drawer: simple plastic containers (just be ready to poke some holes in one of them for drainage).

Once you've fallen in love with microgreens and are determined to grow them every week, it's worth it to invest in trays designed for microgreens.

You'll need two trays: one with drainage holes and one without. Drainage holes are ideal because these seedlings really don't want their roots to be sitting in water for a long period of time.

The **tray with drainage holes** will be the top tray that holds the growing medium. Because microgreens have shallow roots, this tray only needs to be one to two inches deep. If you look at the trays I use, you might think they're too shallow to grow much of anything, but I've found that microgreens can thrive with just a little bit of soil. Also, you won't be able to reuse the soil you put in these trays (until after it has broken down in your composter), so shallow trays limit your soil usage to just what's needed.

Growing microgreens is more worth your effort if your tray is at least the size of a dinner plate. Many standard trays are 10in x 20in.

The top tray will be placed inside the **non-draining bottom tray** (the tray without drainage holes, often called a flat) so that it can hold water.

ORGANIC SEED STARTING MIX

You'll fill your top tray with growing medium. People recommend all kinds of different growing mediums for microgreens, everything from perlite to small rocks to normal potting soil; I use a simple **organic seed starting mix**, which is lighter and easier for young roots to push into than regular potting soil. It's also easy to find at the store.

I try to avoid using non-renewable resources as much as possible in my garden. Most seed starting mixes

I've found at the store have a peat moss base, which is not ideal. Other mixes have coco coir. There's some debate over which is more sustainable (peat moss or coco coir). Do your research and try to find the most eco-friendly mix available in your area.

As I mentioned before, you will start over with fresh seed starting mix for each batch of microgreens. Your spent soil can be composted and used later as nutrient-dense organic matter for your salad greens or vegetable garden.

WATER SOURCE

We don't need anything fancy or complicated to water our little plant babies. I use a simple pitcher that I keep filled with water and then set aside to settle and become room temperature. You can also use a **small watering can** or a **spray bottle**. I recommend using your water source only for watering your microgreens.

MICROGREENS SEEDS

There are many big companies that sell packets labeled to be grown as microgreens. Let me clarify that there's nothing special about microgreens seeds. In other words, these are the same seeds you would buy to grow into a full-size plant. The only difference is that they'll sell you way more seeds in a packet marked for microgreens.

When you're growing microgreens, each seed represents one small green that you will harvest. This is not like a tomato plant that will produce dozens of fruit from one seed. It's a simple one-to-one ratio. So, if you buy a package with only 15 seeds inside, you're going to grow enough microgreens for a really sad little bowl. I recommend buying in bulk (it's also more cost-effective).

If you're a serial seed buyer like me and you find seeds you'd intended to plant in your kitchen garden that are now a couple of years old, you might not want to risk them failing to germinate in your garden. Planting them in your microgreens tray is a low-stakes way to give these seeds a second chance to grow (assuming they're safe to consume as microgreens).

You can also source your microgreens by saving seeds yourself from your outdoor garden. Dill, for example, produces about a gazillion seeds on every single plant.

Many different leafy greens and vegetables can be grown as microgreens. I'll recommend the top plants to grow as microgreens in Lesson Two. Experiment with different seeds for flavor or look for packs with a variety mix of seeds, like the bulk mixes from Rainbow Heirloom Seed Co. They're non-GMO, heirloom seeds, and they come in resealable bags from Amazon. Here are some I've enjoyed:

- **Eastern Sun Asian Microgreens Seed Mix** (mizuna, pak choi, cabbage, mustard, and radish seeds)
- **Superfood Microgreens Seed Mix** (purple kohlrabi, collard, radish, turnip, and broccoli seeds)
- **Sulforaphane Microgreens Seed Mix** (kale, cabbage, turnip, and broccoli seeds)

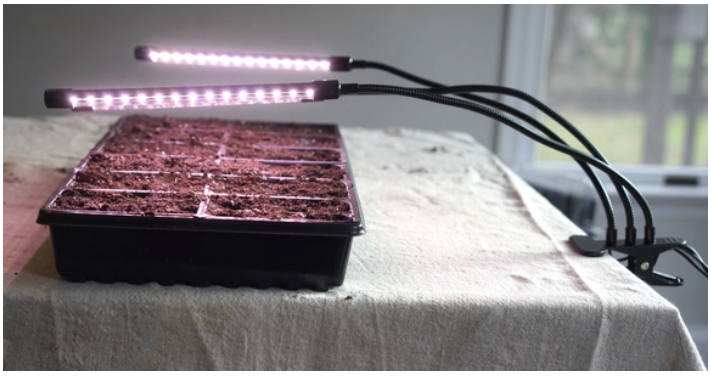
LED LIGHT

Microgreens need at least four hours of strong, direct light per day to thrive.

Ambient light from a kitchen window works okay for growing microgreens, but it won't produce as consistent or reliable of results as an artificial light source. Microgreens want the light near to them and tend to grow leggier when the light is further away. To grow leggy means the plant produces a long central shoot with the intent of trying to reach as close to the light source as possible. While leggy greens are still edible, they're not as well developed or productive.

The best lighting situation for your microgreens is an LED light that can be raised or lowered toward the tray. Look for a full-spectrum light that can hang from a shelving unit or be clipped to the side of a table or shelf. I've found that **wand lights on wire coils** allow for easy maneuverability over the growing trays.

You can create your own light setup (I've seen some really functional uses of bar carts with added growing lights), but know that there are plenty of easy and relatively inexpensive **done-for-you-systems** to take advantage of.



ADDITIONAL SUPPLIES

A **small hand rake** or gardening hoe will help you level the soil before scattering your microgreens seeds. You could also use a rolling pin.

You'll need some **plant tags** to help you remember which type of seed you planted where, especially if you're growing multiple varieties. You can buy plant tags, write on popsicle sticks, or label painter's tape and stick it to the side of the tray.

Have a clean pair of kitchen scissors ready for the fun part—harvesting your baby greens.

Adding **mycorrhizae** to your organic seed starting mix is optional. The fungal hyphae inside mycorrhizae aid the growing plant's ability to obtain water and nutrients from the surrounding soil.

Finally, if you're growing your microgreens in a close space (for me, it's the basement), place a small fan nearby to increase airflow and prevent rot.

(Explore our full **microgreens supply list on Amazon**.)

Those are the supplies you'll need to find the most success growing your own microgreens. Remember, you can always start small and add supplies once you're hooked on growing these little nutritional powerhouses.

Let's look now at the plants you can grow as microgreens.

02

The Best Varieties of Microgreens to Grow

Incredibly, microgreens taste like the mature plant itself. The flavor profile of microgreens includes spicy, peppery, earthy, sweet, nutty, and summery (like basil). Use microgreens as you would herbs to add your favorite garden flavors to your meals.

The most important thing to remember when picking seeds to grow as microgreens is going with something you actually want to eat! If you don't like the taste of cilantro, you're not going to like that flavor coming from much smaller cilantro leaves sprinkled all over your plate.

You will be tending these little guys every single day, so make sure you're working toward growing flavors you can't wait to consume.

I like to experiment in the garden, so I've grown tons of different plants as microgreens over the years to determine which give me that garden-fresh flavor I crave. If you're ready to grow your own, I recommend experimenting with different families so you can figure out for yourself which ones you love the most.

The plants I recommend below are proven winners. I've vetted all of them myself and know that they'll give you good production for your efforts. Let's take a look at what's possible to plant in your growing trays.

Plants in the Brassica Family

Members of this super nutritious family include kale, mustard, radish, arugula, broccoli, cauliflower, and kohlrabi, all of which can be grown indoors as microgreens. That means no more waiting for the right weather outside to start your dark leafy greens.

Some of my favorites within this family include kohlrabi, which will give you microgreens with a beautiful purple-tinged color, and kale, that good ol' nutritional powerhouse, which also happens to be very productive as a microgreen.

Radishes and arugula are praised for their quick time-to-harvest in the garden, but guess what? You can harvest them even faster if you grow them as microgreens. (You'll obviously be growing radishes for their greens, not their roots, in this case.)

It might surprise you to learn that broccoli and cauliflower can be grown as microgreens. Many gardeners are intimidated by the time required to grow a full head of broccoli in the garden, but you can grow broccoli sprouts and cauliflower sprouts just as quickly as other plants in your microgreens tray.

Plants in the Amaranth (Spinach) Family

This family is so good for you and easy to grow. Microgreens varieties in this family include spinach, beets, and swiss chard.

These seeds tend to be a little slower to germinate than seeds from the Brassica family, but they grow very well for you once they sprout. There are even packets you can buy that are marketed as "baby greens" in this family, meaning they're intended to be grown a little bit bigger than your typical microgreen. You'll end up with larger leaves that you could use in a smoothie or salad.

The healthiest microgreens come from the brassica and amaranth families, both known for housing incredibly nutrient-dense plants.

Plants in the Aster (Lettuce) Family

Lettuce plants are easy to grow as microgreens thanks to lettuce seeds sprouting and growing very quickly (as long as you keep them nice and moist).

Lettuce plants that can be grown as microgreens include buttercrunch and romaine, but really, you can grow any of your favorite leafy greens from this family as much smaller leafy greens.

The other plant from this family that can be grown as a microgreen might be a surprise to you since it's something we normally associate with its beautiful flowers and tasty seeds—the sunflower. Sunflowers make fantastic microgreens since they grow very quickly and fill up a tray with leaves. I love the crunchy texture and nutty flavor they bring to my dishes as microgreens. The large size of sunflower seeds also makes them easier to sow in a tray.

Lettuce microgreens aren't quite as nutritious as plants in the brassica or amaranth families. Since lettuce plants grow and are ready to harvest so quickly outdoors, I usually don't plant as many lettuce seeds to grow as microgreens as I do seeds from the brassica and amaranth families. To me, microgreens from the aster family are also not quite as tasty (with the exception of sunflowers).

Plants in the Apiaceae (Carrot) Family

You can grow carrots, cilantro, parsley, and dill as microgreens. I have grown carrots as microgreens, but my preference tends to be cilantro, dill, and parsley.

Seeds in this family are slower to germinate than your brassica and aster family seeds, so you're looking at 15, if not 30, days before you can harvest microgreens from this family. If you can practice a bit more patience to grow these guys, you'll be rewarded with incredible flavors to sprinkle over your dishes. I love tossing cilantro microgreens into tacos during the winter when I'm really missing garden-fresh flavors.

Plants in the Fabaceae (Pea) Family

Pea varieties from this family like sugar snaps and snow peas can be grown as microgreens. These grow really well and give you a lot of plant mass for the space. You can actually turn these into a side dish on their own, instead of just sprinkling them on a sandwich or pizza.

While the leaves of beans are also edible, you might find them a little too fibrous for your liking.

And One Plant in the Lamiaceae (Mint) Family

Basil only thrives in warmer weather, but you can grow basil as a microgreen all year long if you love this herb's incredible taste. Basil sprouts quickly from seed, and you'll get a ton of summery flavor from just a couple of leaves.

Which Plants Should *Not* Be Grown as Microgreens

A quick word of caution: You should not grow any plant as a microgreen that has leaves known to be bad for human consumption. Poisonous plants include members of the Solanaceae (nightshade) family, such as tomatoes, potatoes, peppers, and tomatillos, which have a high level of toxic alkaloids in their leaves and stems.

While eating tomato microgreens probably wouldn't kill you, it could definitely make you sick—and who wants that? The whole point of growing microgreens is to grow something fun that's good for your body.

MICROGREENS VARIETIES

 arugula

 basil

 beets

 broccoli

 buttercrunch lettuce

 carrots

 cauliflower

 cilantro

 dill

 kale

 kohlrabi

 mustard

 nasturtiums

 parsley

 peas

 radishes

 romaine lettuce

 spinach

 sunflowers

 swiss chard

Pick a plant (or a mix) you'd like to start growing, and let's explore how to grow them in Lesson Three.

03

How to Plant Microgreens Seeds

The moment you've been waiting for: planting your microgreens seeds. Gather your supplies, and let's get started.

STEP 1: PREPARE YOUR GROWING MEDIUM

Any type of seed starting mix you purchase at the store has been dehydrated so that it will weigh as little as possible for transit. You'll need to moisten it first or it will dry out your seeds.

Pour your mix into a large bowl and then add equal parts water to your seed starting mix. I typically find that one full salad bowl of seed starting mix will give me enough soil to plant out one standard-size tray of microgreens. If I used one salad bowl of mix, I'd need one salad bowl of water, as well.

Mix thoroughly.

Use your hand to feel the mixture. It shouldn't be soaking wet, like mud, just damp to the touch. That's enough water to tell the seeds to wake up and start growing. Without water, your seeds will remain dormant or fail to fully germinate.

Here's a quick way to test your mix: Squeeze some mixture between your fingers. Ideally, you could make a fist and not have any water drip from your hand. The dampened mixture should instead hold together. Add more soil or water until you've achieved the desired consistency.

STEP 2: ADD MIXTURE TO GROWING TRAY

Fill the tray that has draining holes with your dampened seed starting mix.

It might not look like you have enough soil to grow anything, but remember: You only need a couple of inches to grow these shallow-rooted plants. Plus, you'll be tossing this mixture into the compost after you've harvested your microgreens, and a shallow tray doesn't require as much growing medium. Save the rest of your mix for another tray.

Once you've filled your tray, level out your mixture using your hands, a small rake, or a rolling pin. Lift your tray to eye level to ensure you've removed any peaks or dips in the soil. Add more mix as needed. The soil should now be compact and evenly distributed throughout the tray.

STEP 3: SOW YOUR SEEDS

This is my very scientific, highly methodical approach to planting seeds: Take the seeds in your palm and shake your hand to release them as evenly as possible over the tray.

Many of these seeds, particularly seeds from the brassica family, are tiny and dark, which makes them difficult to evenly disperse.

The hardest part is gauging whether you have enough seeds or too many. I don't like to leave blank spots because I find it unsatisfying to grow a full tray of microgreens with one little gap. You want the seeds sprinkled densely over the soil without overlapping. Think: **no gaps and no overlaps**.

This can be hard to manage, especially your first few times planting seeds. You can always use a small hand rake or your hands to spread out the seeds better.

In addition to evenly dispersing seeds, your goal is to ensure every seed is making full contact with the soil. You'll need each seed to absorb as much water from the soil mix as possible, which would be difficult if that seed were on top of another one and not really touching the soil. You can also end up with leggy seedlings if those seeds don't have roots that are settling in due to poor soil contact.

Once you're satisfied with your seed placement, take some soil mixture and sprinkle it on top. These seeds like to feel a little bit of light as they germinate, so you don't need a thick top layer, just enough so that the seeds are no longer visible.

Add plant tags if you're planting more than one type so you know which trays are growing what.

STEP 4: GIVE YOUR SEEDS SOME WATER

Pour a little water into your non-draining tray (the tray that does not have holes). We'll look more closely at how to water your microgreens in our tending lesson, but the idea is to avoid watering your microgreens from above. Instead, you'll water them from below and allow them to slowly take up moisture over the next 24 hours.

Place your newly planted microgreens tray inside the water-filled non-draining tray. Check on your trays in a couple of hours to make sure you didn't add too much water to your bottom tray. The surface of the soil should not be soaking wet; if it is, empty the bottom tray of water and allow the top tray to air out.

If your trays came with a dome, place the dome over the tray to retain moisture.

Give yourself a big, dirt-covered round of applause. You've just started your adventure growing your own nutritious, delicious, and organic microgreens. And that, my friends, is no small feat.

Celebrate your accomplishment before heading to the next lesson to learn how to tend your growing microgreens.

QUICK GUIDE TO PLANTING MICROGREENS

ONE: Pre-moisten seed starting mix.

TWO: Fill up tray & level.

THREE: Scatter seeds evenly.

FOUR: Press seeds down & cover.

FIVE: Add H2O to bottom tray.

SIX: Cover with dome.

04

How to Tend Your Microgreens

You've got your seeds planted and watered in. Little spikes of green have shot up from the soil, ready to turn into beautiful and delicious leaves. Now what?

The great news about growing microgreens is you hardly have to do anything by way of tending them.

The bad news is that you have to do hardly anything **every single day**.

You can't just forget about these greens. They require daily attention, but it's just a little bit of attention. Your tending tasks require you to maintain the light, the water, and the air, and your greens will do the rest.

TENDING TASK NUMBER 1: PROVIDING LIGHT

Even though freshly sown microgreens seeds don't need light to germinate, I begin the habit of switching my artificial lights on and off each day as soon as I plant my baby greens for two reasons.

The first reason is that the heat from the lights warms the soil and speeds up germination.

The second reason is that controlling the lights from day one ensures that checking on my microgreens becomes a part of my daily routine.

If you choose to wait until your seeds have germinated to provide a light source, then you should still be checking on your trays regularly, ready to begin using your artificial lights at the first sign of sprouts.

As with other plants in the garden, learning to grow microgreens requires some experimentation. You may find that just one light source is not sufficient to cover your entire tray while having two or three increases your production.

Unlike when you're growing outside and have to wait several months to see the results of your experiment, you'll learn which lighting scenario is best within a matter of days.

You'll need your light source to be on for 10 to 12 hours a day. I keep my microgreens in the basement, next to the bedroom of one of my children. It has become part of my routine to turn on the lights over my trays in the morning when I wake her, and then off in the evenings when I give her a kiss goodnight.

You can always purchase a timer for your artificial lights or get lights with built-in timers, but you'll still need to check on your microgreens every day. Turning the lights on and off gives you two opportunities each day to catch any problems (such as mildew forming or plants turning yellow) before they worsen.

When your greens are newly sprouted, your light source should be very close to the tray, just a few inches above the soil. You'll raise the lights as the microgreens grow so that the shoots never touch the light source.

TENDING TASK NUMBER 2: CHECKING THE MOISTURE LEVEL

These seeds are growing at a rapid pace in a compact place. All that growth, however, will cease if your seeds dry out. Water is what gets inside the seed coat, forcing it to swell, burst open, and send out its first root and shoot. Without water, your microgreens will either die or, at the very least, not taste very good.

For this reason, some growers like to cover their trays with a clear plastic dome or a piece of fabric, something to lock in the moisture and prevent water in the tray from evaporating while the seeds germinate. I prefer to not use the dome because I've found that doing so invites me to be negligent. I'd rather check on the moisture level as part of my daily tending routine.

If you choose to cover your microgreens, you'll need to check your trays frequently and remove the dome or cloth at the very first sign of the seeds sprouting. The cover will keep in water, but it also keeps out light and air circulation, which your plant babies will not appreciate.

Each day, touch a finger to the soil in the tray to check for moisture. Ideally, you'll maintain the same moisture level as when you planted your seeds. If the soil feels moist, let it be. If it feels dry, add some room-temperature water to the bottom of the non-draining tray.

Have you ever noticed that something just wasn't right and then way-overcompensated while trying to resolve the issue? If you see your little greens wilting, it's tempting to pour an entire pitcher of water into their tray. Resist the temptation.

Once plants have started to dry out, there's only so much new water their roots can take up. Add just the amount of water the roots can handle in the next few hours. I typically add enough water to cover the base of the non-draining tray, before placing the draining tray back inside the non-draining tray.

You can also spritz the top of the soil with a spray bottle filled with water in between bottom-watering if it's looking dry. You just don't want a lot of water falling on the top of your tray and disturbing your tiny seeds.

TENDING TASK NUMBER 3: MAINTAINING TEMPERATURE & AIRFLOW

I've found that a heat mat is not necessary for growing microgreens. The warmth from the artificial lights is enough to encourage germination, and besides, you'll be growing your microgreens inside your home, where the temperature most likely falls within the ideal range for many of the microgreen varieties I listed to start growing (somewhere between 60 and 75 degrees Fahrenheit).

The right airflow is a bit harder to manage indoors than the temperature. If these plants were growing in nature, they'd be blown and buffeted by the wind and exposed to the elements constantly. Plants need to be roughened up a bit. They have to endure trying times because when they do, they push further into the soil and strengthen their roots. Once they've managed that, they strengthen their stems and leaves. (Great analogy for life, right? When you're going through a tough time, you're growing stronger roots.)

Our microgreens—those innocent plant babies growing in their cushy indoor environment—need a little encouragement from us to strengthen their roots and shoots. The best way to simulate strong winds is by running your hands over your growing microgreens to agitate them each day after your check for moisture.

As you're running your hands over your plants, look for signs of mold, mildew, or leaf discoloration (often yellow). To prevent mold or mildew, turn a fan on the lowest setting and aim it near the tray to lightly blow the leaves.

That, my friend, is all you have to do to tend your plants. In summary, you just have to maintain the light, the water, and the air, and your greens will do the rest.

You don’t even need to add fertilizer to your microgreens. There’s so much nutrition inside each seed already, and you're only going to be growing them for a few weeks.

If you’d like to add something, I only recommend two options: mycorrhizae or earthworm castings. Both are granular additions that should be added shortly after your microgreens have sprouted. I wouldn’t wait to add these fertilizers later because they contain bacteria (good bacteria, but still) that will end up on the leaves you’ll soon be eating.

In just a few days, your daily tending tasks will add up to beautiful, delicious greens that are ready to harvest.

05

How to Harvest Your Microgreens

Do you remember just ten or so days ago when you planted your little microgreens seeds? Well, the moment has already come to harvest them.

The biggest issue I've found with growing microgreens is not the seeds failing to germinate; it's waiting too long to harvest. I've had trays ready to go before but waited for the right moment to take a video of my harvest and document the process—and by the time that moment arrived, I'd already missed my window. The microgreens were past their prime, no longer at their peak flavor.

Here's how to tell when your microgreens are ready to be harvested.

First, check the seed package, especially if you bought seeds that were created to be grown as microgreens. The package might say "Ready to harvest in 15 days" or similar. I recommend checking this date when you plant your seeds and noting the specified time on your paper or phone calendar. You could even set yourself a reminder: "Harvest kale microgreens ten days from now." The designated time to harvest might be off by a day or two, but knowing it helps you plan ahead.

After you've made note of the timeframe, pay attention to the growth of your tiny plants. Microgreens are typically harvested once the stem has grown perhaps three to five inches tall, but there are actually three different stages during which you can harvest your microgreens:

1. The first stage is when they produce their cotyledons, or seed leaves. These are not yet the true leaves of the plant; in fact, they often look quite different from the leaves of the mature plant. Some microgreens growers harvest as soon as they see these first two leaves emerge from the seed.

2. The second stage is when the first true leaves appear. Again, the true leaves often vary in shape, size, and even color from the seed leaves.

3. The third stage is when the microgreens become baby greens. The plants by now are much more developed than when they first sprouted and have at least three or four sets of leaves. The stem will be a little crunchier when consumed than on a younger plant.

You get to decide when you want to harvest: stage one, stage two, or stage three. Just don't wait too long after the third stage.

Remember, you've planted these greens very tightly together. If you had planted them in a field to let them reach their full capability, you might have given them a full square foot each of growing space. Plants are intelligent, and they know, almost immediately after they sprout, when their quarters are a bit too cramped for them to mature. Don't give them time to grow stressed and begin to turn yellow or even die.

As you're observing your microgreens to assess their readiness, take a moment to check for legginess. Recall from Lesson One that microgreens that develop a tall central shoot are searching for light. If your microgreens are looking a little spindly, this is a sign you should consider upgrading your lighting setup in the future to achieve more consistent results.

All right, it's time to harvest your microgreens. Grab a clean pair of scissors and a strainer, and let's get started.

Your Step-by-Step Guide to Harvesting

STEP ONE: CUT

All you need is a pair of scissors—nothing fancy. (I've even used my kindergartener's safety scissors before.) Place your scissors right above the soil level and cut, using your other hand to gently hold the stems upright as they're being harvested. Staying just above the soil level helps avoid getting the growing medium on your greens.

You can harvest an entire tray or take a little section from each tray for a mix of flavors. If you leave some sprouts to continue growing, just make sure you return later to harvest them at their peak.

STEP TWO: RINSE

Toss your harvested microgreens into a strainer, a colander, or a salad spinner. Your vessel should have holes large enough to let soil run through but small enough to contain the small plants. Rinse your microgreens.

If you're planning on storing your microgreens in the fridge after washing them, a salad spinner is ideal to ensure your greens are fully dried first. Wet or even slightly moist microgreens can quickly turn into a soggy mess in your produce drawer.

I typically harvest my greens and use them right away.

STEP THREE: ENJOY!

You could fill up an entire bowl with microgreens for a fresh salad. (Pea greens are especially good for serving as a filling base for a delicious mix.) Add a little vinegar, a dash of salt, a sprinkle of oil (EVOO, avocado oil, sunflower oil, or even sesame oil), a squirt of honey or reduced balsamic vinaigrette—and you've got yourself one tasty salad.

There are so many other ways to enjoy your microgreens, too. You could sauté them. You could toss them cooked onto rice or pasta dishes. You could use them raw as a garnish for a little pop of green on your plate. You can add them to wraps or sandwiches to give some crunch.

However you choose to use them, you can't go wrong. This is the freshest, most delicious and nutritious harvest you can experience from the garden. And the best part is you grew them yourself.

STEP FOUR: CLEAN UP

Once you've harvested the entire tray, it's time for some simple cleanup. Dump the seed starting mix and the roots of your harvested microgreens into the compost pile.

One question I hear a lot is whether you can regrow microgreens after cutting them. These are young plants, and many won't be able to handle the shock of having their leaves cut so soon, though some microgreens are better at regrowing than others. In order to regrow, you'd have to leave at least an inch of the shoot (the young stem) and the young plant would have to have established good roots already. Even then, the flavor could be affected and their growth could be slowed.

I find it's best to start fresh with a new batch of seeds each time. It's not a complete wash. In six month's time, they will have become nutrient-dense compost that can be added to your outdoor garden or landscaping.

Wash your trays thoroughly with some white vinegar and water to remove soil. You're ready now to start the whole process again!

You might soon find yourself starting new seeds every few days. When you do this, you're developing a daily practice of tending plants. It'll become part of your everyday routine, just like putting your kid to bed and waking them up in the morning.

And thanks to this practice, you'll find that you've got greens growing from week to week, enough to fill plates and bowls with delicious leaves all year long.

You know everything you need to get started growing your own microgreens now. Buy your first packet of seeds (if you haven't already!), plant them, set the date on your calendar, and decide how you're going to eat and enjoy your first batch of greens.

I'm so excited for you to experience the joys of growing just a little bit of your own food and making the garden an ordinary part of your life.

BONUS

How to Grow Your Own Sprouts

There's an even simpler way to get started growing in the garden—it can, in fact, be done right next to your kitchen sink.

It's growing fresh organic sprouts.

I didn't grow sprouts until after I'd already been gardening for years and started my own garden consulting business. I was unwrapping a present from my husband one Christmas when I encountered my first sprout starter. "Honey," I said, "what is this weird coffee cup?"

His gift introduced me to an aspect of gardening I'd never thought to try. The simple art of growing sprouts from seeds. Something all of us can do, no matter our situation, no matter how much space or time or gardening experience we have. No green thumb required.

Growing sprouts is simply adding a small habit to your everyday schedule, and you only need a couple supplies to get started.

The 4 Key Differences Between Microgreens & Sprouts

Sprouts and microgreens mean different stages of growth

A sprout is the very first stage in a plant's life cycle after the seed germinates. Sprouts consist of the seed leaves and the radical, the first root. Sprouts are typically pale in color because they have not yet begun photosynthesizing and producing chlorophyll.

Once the baby plant grows beyond its first shoot and root, it moves toward the microgreen stage. Microgreens are essentially the mature plant in miniature—they have leaves, stems, and roots.

Sprouts and microgreens take a different amount of time to grow

Sprouts can be grown in as little as two to five days. We only have to wait for the seed to germinate and push out a tiny bit of growth. Microgreens, however, take between 10 and 21 days to grow.

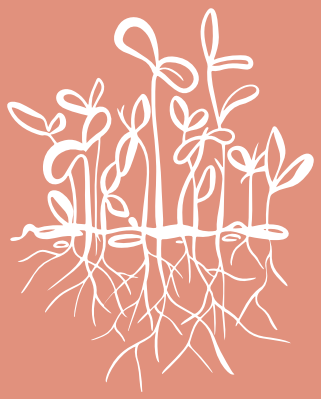
If you were to let your microgreens continue to grow under the right conditions (in other words, you gave them some more space), they could become baby greens after 15 to 40 days (think those small, tender spinach leaves most of us love so much). Eventually, the life cycle would continue until the plant has reached maturity, which could happen after anywhere from 40 to 150 days, depending on the plant.

Sprouts and microgreens are grown differently

Most seeds need water, not light, to germinate. That means that sprouts can be grown without light. They also don't require any extra nutrients to grow because they rely on the good stuff they have stored inside the seed to get started. This is why we can grow sprouts without soil or another growing medium. Give seeds the one thing they need—water—and they will grow into sprouts for you.

For that reason, sprouts can be grown in a jar, a special tray with draining holes, or even just a damp paper towel. The seeds will need to be rinsed frequently and then drained well so that they grow without becoming moldy.

Microgreens, in contrast, will need light to grow once they've germinated. They'll also want extra nutrients to grow and something to hold their roots in place, which they'll need to get from a growing medium like soil or coco coir.



Sprouts and microgreens are harvested and consumed differently

When you "harvest" sprouts (i.e., take them out of their growing place), you'll eat the entire plant, baby roots and leaves and all.

To harvest microgreens, you'll simply cut their stems above the soil line. Unlike with sprouts, we won't eat the entire plant, just the stems and leaves, because the roots will be covered in growing medium.

SUPPLIES TO GROW YOUR OWN SPROUTS

Like with microgreens, you can start with objects you probably already have in your house. As you grow more and more sprouts, you can upgrade your setup however much you'd like.

SPROUTS SUPPLY LIST

a non-draining container

a draining container/ strainer

lots and lots of seeds

water source

Now, let's look at these items more specifically.

A NON-DRAINING CONTAINER

This vessel should hold water without dripping at the bottom. A glass jar, a big bowl or tray, or a Pyrex dish will do.

A DRAINING CONTAINER

This could be a strainer (the type you'd use to drain water from cooked noodles). Small holes in the bottom should allow water to drip through and leave the planting space. This draining container will be set inside the non-draining container.

You can find inexpensive kits for growing sprouts on Amazon, such as **these sprouting jars** that come on their own little stand over a drip tray. There are also **stacking trays** and **specially designed containers**. Botanical Interests has a great **seed sprouter kit**. Since I pretty much always have a batch of seeds sprouting, I love these **stainless steel stackable sprouting trays** that look great on my countertop.

You can find more sprouting container ideas in our **Amazon ideas list**.

SEEDS

Not all seeds you'd buy for the garden can be grown as sprouts. Just like with microgreens, some seeds have leaves and stems that are inedible or even poisonous. Many ordinary seeds, however, can be grown and caught right at the beginning of their growing cycle for safe consumption.

The easiest seeds to use for sprouts are seeds for leafy greens and radishes. Any plant that you would typically see being grown for its leaves in a kitchen garden will likely do well as a sprout, as will things that grow very quickly from seed. So seeds for plants like radishes, arugula, and lettuce basically translate into the perfect seeds for growing sprouts at home.

You'll notice many repeats from the seeds mentioned in Lesson Two, including plants in the brassica family (broccoli, kale, arugula, and radishes), the aster family (lettuces and sunflowers), the amaranth family (spinach, beets, and Swiss chard), and the carrot family (parsley, cilantro, and dill).

Some new plants to add to your growing roster for sprouts are beans from the Fabaceae family and red clover from the clover family. Beans include mung beans, garbanzo beans, alfalfa sprouts, and fenugreek.

Note: Microgreens seeds can typically be grown as sprouts unless specifically marked as not intended for

sprouting. Also, it's a good idea to buy in bulk (like 1 lb. of seeds) since you'll need a lot of seeds to create every delicious leafy bite of sprouts for your sandwich or salad.

If you're weighing the best type of sprouts to eat, start with flavors that you know you enjoy. If you love the spice of a fresh radish, for example, try radish sprouts. They're super easy to grow (and very spicy!). You can also grab a mix of sprouts.

There are lots of sources to buy sprout seeds mixes, but I'm going to highlight just two.

Botanical Interests makes it really easy to get started with their **Sprout Sampler Seed Collection**. I also like the bulk mixes from Rainbow Heirloom Seed Co. They're non-GMO, heirloom seeds, and they come in resealable bags on Amazon. Here are some I've enjoyed or am currently trying out:

- **Spicy Sprouting Mix** (tendergreen, radish, and crimson clover seeds)
- **Super Spicy Greens Seeds Mix** (garden cress, radish, mustard, turnip, and arugula seeds)
- **Rainbow Radish Sprouting Seeds Mix** (triton, daikon, and red arrow radish seeds)

A Quick Note on Food Safety and Sprouts

There is a very small risk of consuming bad bacteria like salmonella along with your sprouts. You can reduce your chances of getting sick by looking for sprout packages certifying that a sample of each seed lottery has been tested by an independent laboratory for safety. Wash your sprouts thoroughly before eating them, store sprouts in the fridge once they're ready, and check that sprouts are still fresh before enjoying them (no musty smell or slimy appearance).

I typically eat sprouts raw, but if you're worried about food-borne pathogens, you can always cook your sprouts or toss them onto dishes near the end of the cooking process to reduce your risk.

SPROUTS VARIETIES


alfalfa


arugula


beets


broccoli


cabbage


cilantro


dill


finugreek


garbanzo bean


kale


kohlrabi


lettuce


mizuna


mung beans


mustard


pak choi


parsley


radishes


red clover


spinach


sunflowers


swiss chard

Once you've gotten your seeds, you only need one more thing to grow sprouts: H_2O. Water is the thing that tells your seeds to wake up from their nap. It swells inside each seed coat until the seed literally bursts open and starts to grow.

Those are the four things you need to grow your own sprouts. Do you feel like something's missing? Something I really emphasized for microgreens. Well, guess what? You don't need light to grow sprouts. That's right. Your seeds do not require any kind of light source, not even ambient light, to turn into sprouts. Most seeds are actually accustomed to germinating in darkness.

All right, let's look at the simple steps to grow your own sprouts.

Steps to Grow Sprouts

STEP ONE: SOAK

Take a tablespoon or two of seeds and soak them in water overnight inside your non-draining container. At this point, you don't want to strain them because you might lose some seeds through the holes of your draining container. You only need to fill your non-draining container with enough water to submerge all seeds, though some will try to float on the surface.

Cover your non-draining container with a cheesecloth, napkin, or washcloth and leave overnight.

STEP TWO: DRAIN

In the morning, while you're having your coffee or tea, strain the seeds through your draining container.

Use your hand to spread them out over your draining container after draining them. Try to evenly distribute the seeds so that they're not overlapping to prevent mildew.

STEP THREE: RINSE

Every time you come to your kitchen sink throughout the day, run the faucet over the seeds in the strainer, spread them back out, cover them, and then let them sit. I find that leaving the seeds next to the sink is the best reminder to give them some water.

Before you go to bed, give your seeds a final rinse for the day and disperse them evenly over the container. Cover for the night.

STEP FOUR: REPEAT

Start the process of rinsing and draining your seeds again the next day. After those first 12 or so hours of soaking your sprouts, make sure you're rinsing them at least twice a day, for the next five to seven days.

These steps are so simple, right? No lights, no soil, no special tools required. And yet, you're gardening. You are a gardener.

Within three to four days, you'll start to see the seeds swell a little bit before a tiny white tail emerges. That tail is the radical, the very first root of the plant. If it was growing in soil, the radical would search for nutrients, light, and water, but since we're just growing these plants as sprouts, it will be content for now with water.

Continue your routine of rinsing and spreading out your seeds each day.

How to Harvest Your Sprouts

Your sprouts will likely be ready to "harvest" in just five or six days. You'll know it's time when you see your sprouts forming their first tiny sets of leaves. These are called the cotyledon, or the seed leaves. Harvest your sprouts within one or two days of seeing the first seed leaves.

Harvesting sprouts simply means removing them from their tray. You can rinse and remove any remaining spent seed coats if you'd like.

Sprouts can be eaten and enjoyed in many different ways. Just one seed package can produce two large trays of sprouts within one week, and you can eat these sprouts all at once or use them over the next couple of days to extend your garden-to-table experience.

I like adding sprouts to wraps, sandwiches, and salads. In the deep winter when nothing outside is green and I'm craving garden-fresh flavors, I make salads from nothing more than sprouts and microgreens.

Growing sprouts will open your eyes to the magic of the garden, and you'll get fresh, delicious, nutritious food right beside your kitchen sink all year long.

Conclusion

I'm sending you a high five right now from one gardener to another. You now know how to set up, plant, grow, tend, and harvest your very own organic microgreens and sprouts the Gardenary way.

Even if you're starting simple with nothing more than some Tupperware containers and soil, the important thing is that you're starting.

And once you cover your first microgreens batch with soil or rinse your first sprouts seeds, you're well on your way to growing your own fresh greens and putting in the work to becoming a daily practitioner in the garden.

If you've already got some gardening experience under your belt and have your own garden outside, that's great. I hope you enjoy growing your own microgreens so much that you add them to your regular kitchen harvests.

If you're just beginning your gardening journey and this is your very first step on the path to garden success, don't stop here.

Once you've mastered microgreens, move on and learn how to grow your own herbs. Herbs are so rewarding and delicious—and growing them is only a little more difficult than growing microgreens. The next step in your Gardenary path to success after herbs is growing salad greens (to their mature size, that is), and from there, every other root, fruit, and flower you might want to grow.

There are so many new things for you to discover and learn as a gardener. Growing microgreens is just the first step.

Congratulations on making it this far, and thanks for helping me bring back the kitchen garden, one small but mighty bowl of greens at a time.

join the movement

Gardenary's mission is to make gardening an ordinary part of life for everyone again through its unique gardening systems and its personalized approach.

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for being part of the
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