# 5 Compelling Reasons to Purchase Seeds Over Harvesting from Fruits



In the world of gardening, the choice between purchasing seeds and harvesting seeds from fruit can significantly impact the success of your planting season. While harvesting seeds from fruit may seem economical and sustainable, there are several compelling reasons to purchase seeds instead. This approach offers advantages ranging from genetic quality to ease of use, especially for beginner gardeners or those looking to achieve specific gardening outcomes. Here, we explore why purchasing seeds is often a better choice than harvesting seeds from fruit.

## Guaranteed Germination and Purity



One of the primary reasons to purchase seeds from reputable suppliers is the assurance of high germination rates and seed purity. When you harvest seeds from fruit, there's no guarantee that the seeds will germinate, as they might not be mature enough or could have been damaged during extraction. On the other hand, purchased seeds undergo rigorous testing to ensure they meet high standards of germination success and are free from contamination with other plants' seeds. This is crucial for gardeners who want to maximize their planting efforts and ensure that every seed has the potential to flourish into a healthy plant.

## 2. Access to a Wide Variety of

## **Species and Cultivars**



Purchasing seeds allows gardeners access to a broader range of species and cultivars than what might be available through local fruits or even in local markets. Many seed suppliers offer an extensive catalog of options, including heirloom varieties, hybrids, and those suited for specific climates and soil conditions. This diversity enables gardeners to experiment with new types of plants that are not native to their area, or that offer better resistance to local pests and diseases. Additionally, some plants, especially hybrids, do not produce seeds that retain the parent plant's desirable characteristics, making purchased seeds the only way to ensure the quality and traits of what you grow.

#### 3. Disease-Free Assurance



Purchased seeds typically undergo treatments to be disease-free, minimizing the risk of introducing pathogens into your garden that could spread to other plants. When you harvest seeds from fruit, there's always a risk that these seeds carry diseases, which can devastate both new and established gardens. These diseases can remain dormant within the seed and then manifest once the plant begins to grow, potentially leading to widespread infection that can be difficult to control. Buying seeds from a reliable source ensures they have been screened and treated for common pathogens, offering a safer start for your plants.

## 4. Cost-Effectiveness and Time Efficiency



While harvesting seeds from fruit might seem like a costsaving measure, it can often be more time-consuming and less efficient, particularly if the seeds fail to germinate. The process of extracting, cleaning, and storing seeds properly is labor-intensive and requires precise conditions to maintain their viability. Purchased seeds, in contrast, come ready to plant and are packaged in quantities that match gardeners' needs, eliminating the guesswork and inefficiency. This convenience can be particularly beneficial for those with limited time or those new to gardening, allowing them to focus more on the growing process rather than the preliminary steps of seed preparation.

## 5. Supporting Agricultural Biodiversity



By choosing to purchase seeds, particularly those that are organic or heirloom, gardeners can support agricultural biodiversity. Many seed suppliers play a role in preserving rare or endangered plant varieties by encouraging gardeners to cultivate them. This not only helps to maintain genetic diversity within plant species but also supports small and independent seed farmers who rely on the sales of unique and diverse seeds. In contrast, harvesting seeds from commonly available fruits often perpetuates the cultivation of a limited range of plant varieties, which can contribute to genetic erosion over time.

## Purchase Seeds Instead of Harvesting from Fruits



Numerous benefits — including guaranteed germination, access to a wide variety of plant species, disease prevention, costeffectiveness, and the support of agricultural biodiversity — support the decision to purchase seeds rather than harvesting seeds from fruit. These factors make purchasing seeds an appealing option for both novice and experienced gardeners alike, ensuring a more successful and rewarding gardening experience. As the gardening community continues to grow, the choice of seeds will play a pivotal role in shaping the health and diversity of gardens around the world. Whether you're looking to explore new plant varieties or achieve a bountiful harvest, purchasing seeds is a wise investment that can yield significant returns in the long term.

#### Read More:

- <u>5 Fast Growing Seeds for Beginner Gardeners</u>
- 10 Techniques to Increase Germination Rate of Seeds

## 5 Fast Growing Seeds for Beginner Gardeners



In the world of gardening, the joy of planting a seed and watching it grow into a thriving plant is unparalleled. For beginner gardeners, this excitement is often tinged with impatience and the eagerness to see quick results. Fortunately, certain seeds grow at a rapid pace, offering almost immediate gratification and a sense of achievement. Here, we explore fast growing seeds ideal for beginner gardeners, ensuring a successful and rewarding gardening experience from the get-go.

## 1. Radishes: The Speedy Edibles



Radishes are the quintessential fast-growing crop, making them a top choice for beginner gardeners looking for quick results. These crisp, peppery vegetables can go from seed to harvest in as little as 20-30 days. Planting radish seeds in well-drained soil and ensuring they receive plenty of sunlight will yield a bountiful harvest in no time. Radishes are not only fast but also versatile, adding a fresh, zesty flavor to salads and dishes.

## 2. Sunflowers: Giants in the Garden



Sunflowers are not just fast growers; they're also capable of reaching towering heights, making them a spectacular addition to any garden. With some varieties growing several inches in a single day, sunflowers can reach full maturity in about 60 to 70 days. Their large, bright blooms bring a vibrant splash of color to the garden, and their seeds attract birds and wildlife, creating a bustling garden ecosystem. For beginner gardeners, sunflowers offer the added thrill of watching a tiny seed grow into a giant, sun-seeking flower.

## 3. Lettuce: The Leafy Quick Grower



Lettuce is another fast-growing vegetable, ideal for those looking to harvest their greens in a short amount of time. Depending on the variety, lettuce can be ready to pick in just 30 to 50 days. It's a cool-season crop, best planted in early spring or fall, and it thrives in cooler temperatures. Lettuce is perfect for beginner gardeners as it can be grown in containers or small spaces and offers a continuous harvest by picking outer leaves as the plant continues to grow.

### 4. Peas: The Climbers



Peas are not only some fast-growing seeds for beginner gardeners but also a delightful sight with their delicate tendrils and sweet flowers. From planting, peas take about 60 to 70 days to mature, but the shoots and tendrils can be harvested much earlier as a tasty addition to salads. Peas prefer cooler weather and can be one of the first seeds planted in the spring. Their climbing nature adds a vertical element to gardens, making them both beautiful and space-efficient.

## 5. Basil: The Aromatic Quickie



Basil is a must-have in any herb garden, especially for beginners looking for fast-growing, aromatic herbs. This versatile herb can go from seed to harvest in 30 to 60 days, adding a fresh, fragrant flavor to dishes. Basil thrives in warm weather and can be grown in pots or directly in the garden. Regular harvesting encourages more growth, providing a continuous supply of fresh basil throughout the season.

## **Growing Tips for Beginner Gardeners**



To ensure the success of these fast growing seeds, here are a few tips tailored for beginner gardeners:

- Start Simple: Choose one or two types of seeds to start with. This will help you focus your attention and learn the specific needs of each plant.
- Quality Seeds: Invest in high-quality seeds from reputable suppliers to increase your chances of successful germination and healthy growth.
- Follow Instructions: Pay close attention to the planting instructions on seed packets. Depth, spacing, and watering guidelines are crucial for optimal growth.
- Monitor and Maintain: Regularly check your seedlings and plants for signs of pests or diseases. Early detection can save your crop.
- Patience and Persistence: While these seeds are fastgrowing, gardening is a learning process. Mistakes are part of the journey, so keep experimenting and enjoy the process.

## Try Out the Fast Growing Seeds for Beginner Gardeners Today!



Embarking on the gardening journey with these fast growing seeds offers beginner gardeners the perfect blend of ease and excitement. Watching seeds sprout and flourish in a matter of weeks is not only gratifying but also instills a deeper appreciation for the wonders of nature. Whether it's the towering presence of sunflowers, the crisp freshness of lettuce, or the aromatic delight of basil, these fast-growing plants promise a rewarding start to any gardening adventure. Remember, every successful gardener started as a beginner, and with these seeds, you're already on the path to a thriving green space.

#### Read More:

12 Low-Maintenance Gardening Tips for the Busy Millennial

## Seed-Saving Techniques You Should Master



Seed-saving is the practice of intentionally collecting and preserving seeds from plants grown in a garden or farm for future planting and propagation. It involves deliberately selecting, harvesting, and storing seeds from mature, healthy plants to ensure the continuation of specific plant varieties.

## Why Care About Seed-Saving?

Seed saving holds immense significance in the realm of agriculture and sustainable gardening practices. At its core,

it serves as a crucial mechanism for preserving genetic diversity within plant species. By intentionally collecting and safeguarding seeds from various plants, individuals contribute to the conservation of diverse plant varieties that might otherwise fade into obscurity. This genetic diversity acts as a reservoir of resilience, ensuring that different plants possess the genetic traits needed to adapt to changing environmental conditions, pests, and diseases. In fact, without seed saving, many unique plant varieties, each with its distinct attributes and adaptability, could be lost over time, diminishing the richness of our agricultural landscape.

By cultivating a habit of seed saving, gardeners and farmers maintain control over their food sources. They reduce dependency on commercially produced seeds, which might not always align with local climates or evolving environmental conditions. Through seed saving, individuals can consistently grow crops that are well-suited to their specific region, ensuring a more reliable and sustainable food supply. This self-reliance fosters a sense of empowerment and resilience, particularly in the face of uncertainties like climate change or disruptions in supply chains.

## Learn a Little About Seed-Saving

Before you begin, there are <u>several key considerations</u> to learn about to ensure successful and effective seed saving:

- Plant Life Cycle and Seed Types: Understanding the life cycle of different plants is crucial. Learn about annuals, biennials, and perennials, as well as the specific seed types produced by each plant.
- Plant Varieties and Cross-Pollination: Recognize the differences between open-pollinated, hybrid, and heirloom varieties. Understand how cross-pollination can affect seed purity, especially with wind or insect-pollinated plants.
- Seed Maturity and Collection Timing: Learn to identify

when seeds are mature and ready for collection. Timing is crucial for optimal seed viability and quality.

- Seed Processing and Cleaning Techniques: Familiarize yourself with techniques for cleaning, drying, and storing seeds. Proper processing ensures seed viability and longevity.
- Pollination Methods and Isolation Techniques: Understand techniques to prevent unwanted cross-pollination, including hand-pollination, bagging, or distance isolation for different plant varieties.
- Seed Storage Conditions: Learn about suitable storage conditions, including temperature, humidity, and container types for different seeds. Proper storage ensures seed viability.
- Seed Viability Testing: Discover methods to test seed viability before planting to ensure successful germination.

## Seed-Saving Techniques

There are many different techniques that you can use, and they vary <u>depending on the types of plants</u> you're collecting seeds for/from. Here are some that you'll want to master:

#### Dry Method

The drying method of seed saving is a straightforward technique suitable for a wide range of seeds. It's particularly useful for those plants with dry seed pods, husks, or that are found within the fruit. It's effective for seeds like beans, peas, lettuce, cilantro, and many flower seeds.

#### **Process:**

1. Harvesting: Allow the seeds to fully mature on the plant. For example, with beans or peas, leave the pods

- until they begin to dry and rattle.
- 2. Extraction: Collect the seeds by removing them from the pods or seed heads. This is often done by hand or by gently breaking open dried seed pods.
- 3. **Cleaning**: Remove any remaining plant debris or chaff from the seeds. A simple winnowing process or gently blowing air can help separate seeds from chaff.
- 4. **Drying**: Spread the seeds out in a single layer on a screen, paper towel, or a tray in a well-ventilated area. Ensure good airflow to aid in the drying process. Additionally, avoid direct sunlight or high humidity.
- 5. Checking for Dryness: Seeds should be completely dry before storage. Test by pressing seeds with your fingernail; properly dried seeds will not dent or show moisture.
- 6. **Storage**: Once dry, store seeds in airtight containers in a cool, dry place. Label the containers with seed type and the date of collection.

#### Fermentation Method

The fermentation method of seed saving is particularly effective for seeds that are encased in a gel-like substance, commonly found in fruits like tomatoes, cucumbers, okra, and some peppers. This technique helps to remove this gel coating, which can inhibit germination if not removed.

#### **Process:**

- 1. **Harvesting Ripe Fruit**: Select fully ripe fruits from which you plan to collect seeds. Cut open the fruit and scoop out the seeds along with the surrounding pulp into a container.
- 2. **Fermentation**: Add water to the container to create a slurry with the seeds and pulp. Allow this mixture to ferment for a few days (typically 2-4 days) at room temperature. Stir the mixture once or twice a day.
- 3. Fermentation Process: During fermentation, the pulp

around the seeds breaks down and separates from the seeds, and beneficial microbes help to remove germination inhibitors from the seed coat.

- 4. Rinsing and Drying: After fermentation, add water to the container and stir; viable seeds will sink to the bottom, while debris and non-viable seeds will float. Carefully pour off the floating material, then rinse the seeds thoroughly under running water to remove any remaining pulp.
- 5. **Drying**: Spread the cleaned seeds in a single layer on a paper towel or screen to dry thoroughly. Ensure good airflow to prevent mold or mildew. Once completely dry, store the seeds in a cool, dry place.

### Additional Methods of Seed-Saving

The two methods above are commonly used. They're a great place to start with seed-saving. Here are some additional techniques that you might want to master as well:

#### Wet Processing Techniques

Fermentation is one of these. However, there are also others:

- Winnowing is a seed-saving technique primarily used for seeds that have chaff, husks, or lightweight debris attached to them. Use it for amaranth, quinoa, or other grains with hulls. It involves gently pouring harvested seeds and chaff from one container to another in a gentle breeze or using a fan to separate the heavier seeds from the lighter debris.
- Wet Sieving. Seeds are placed in water and agitated to separate them from the surrounding pulp. Then they are sieved to remove debris. Plants like tomatoes, kiwi, guava, and squash, where seeds are enclosed in pulp or surrounded by gel-like substances, benefit from wet sieving.
- Washing and soaking directly uses water to remove debris

or pulp from seeds. Lettuce, radishes, and flowers with easily removable chaff or debris from seed heads benefit from washing and soaking.

#### **Cold Storage**

Cold storage, also known as cold stratification, is a seedsaving technique that mimics the natural winter conditions some seeds require to break dormancy and germinate. Seeds are subjected to a period of moist, cold conditions to prompt the necessary physiological changes needed for germination.

This method is particularly effective for seeds of certain perennial plants, trees, shrubs, and some herbaceous plants that have evolved to require a period of cold temperatures before they can sprout. Plants like certain wildflowers, fruit trees (such as apples or cherries), and perennial herbs like lavender or echinacea benefit from cold stratification to prompt successful germination and enhance seedling growth when planted.

#### **Direct Planting**

Direct planting as a seed-saving technique involves sowing seeds directly into the soil where they'll grow, mature, and naturally disperse or be collected for future use. This method is particularly effective for self-seeding annuals and biennials such as calendula, poppies, or some herbs like cilantro. Additionally, certain vegetables like lettuce, radishes, and carrots can be directly sown, allowing them to bolt and produce seeds that are left in the soil for natural harvesting.

#### Natural Harvest and Winter Storage

Similarly, natural harvest involves allowing plants to naturally disperse seeds or keeping seeds within fruits or pods until they are ready to be collected. Winter storage, in this context, refers to leaving seeds in the ground over winter, where they undergo natural cold conditions. Plants like biennials (carrots, parsley), some perennials (echinacea, black-eyed Susans), and wildflowers (milkweeds, asters) are suitable for natural harvest and winter storage, allowing seeds to disperse or remain in pods on the plant through winter for collection.

#### **Vigilant Harvesting**

Vigilant harvesting refers to regularly checking plants for mature seeds and promptly collecting them to prevent pods from shattering and seeds scattering. This method is advantageous for plants like beans, peas, or annual flowers such as marigolds or zinnias, where seeds mature in pods or seed heads. Timely and frequent harvesting ensures the collection of seeds at optimal maturity, maximizing seed viability and preventing loss due to dispersal.

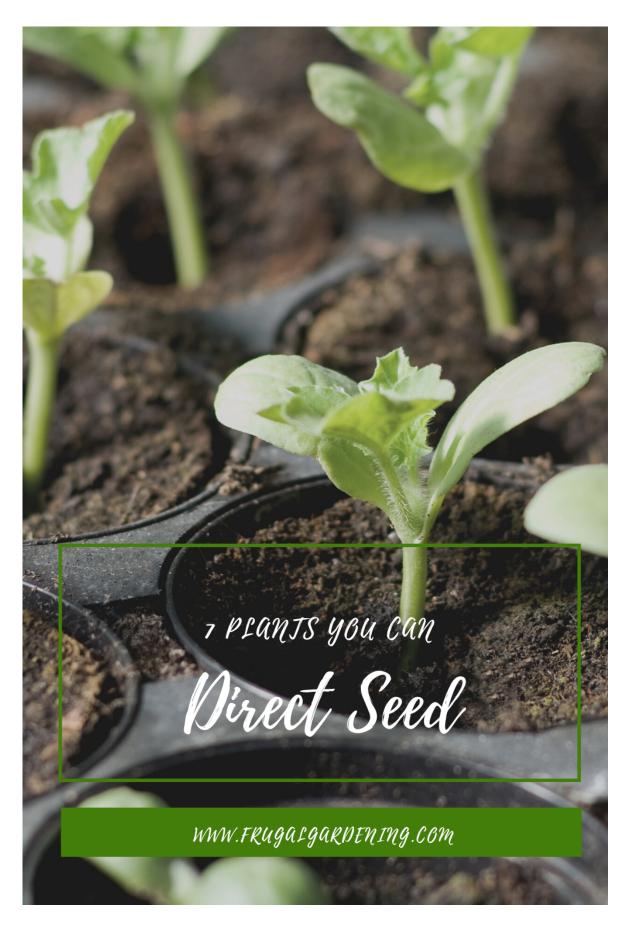
#### Hand Selection

Hand selection involves manually choosing the best-looking, healthiest seeds from plants for saving, ensuring better-quality seeds for future planting. This method is suitable for various plants, especially those producing large seeds like pumpkins, squash, or sunflowers, as well as tomatoes or peppers. By selecting seeds with desirable traits—such as size, color, or disease resistance—gardeners ensure the propagation of strong, high-quality plants in subsequent generations, contributing to better yields and healthier crops.

#### Read More:

- 5 Easy and Neat Seed Storage Ideas
- Starting Seeds Inside: The Basic Guide
- How to Get Free Seeds from the Government

## 7 Plants You Can Direct Seed



Recently, I've mentioned that this year I just don't have the bandwidth to garden like I usually do. But that doesn't mean I'm completely abandoning my favorite hobby. Although I didn't

start seedlings indoors, I still have a vast collection of seeds at my disposal, and I've already started sketching a plan for what I want to plant. There are plenty of things I can direct seed and grow without much intervention. A bit of thinning here and there is all that's required.

Some plants are great for direct seeding because they grow quickly. Others do best direct-seeded because they don't transplant well. When I started gardening, I direct seeded everything. I didn't have the space to commit to starting seeds indoors, and I didn't really understand that some plants needed long growing seasons to reach maturity. Through the years, though, I've learned about the best plants to direct seed—with a lot of trial and error.

I've even had success direct seeding some dwarf tomato varieties! With gardening, the sky's the limit. But to get you started off on the right foot this year, here are 10 plants you can direct seed just before or after your last frost date.

#### Plants You Can Direct Seed

Here are some of the easiest plants to direct seed in the garden.

- Radishes. These pungent, crispy root vegetables are one of the quickest growing edibles in the garden. Like most root veggies, they don't transplant well. If you're going the square foot garden route, plant 16 or 9 per square.
- Carrots. I just sowed my carrot seeds in the garden. I normally plant 16 per square, but this year I decided to broadcast sow the seeds because I'm planting so many, and I didn't feel like carefully pinching seeds into hundreds of holes. Carrots grow slowly, but they're really easy to grow given the right soil conditions. Once they sprout, all you need to do is thin out the seedlings. After that, regular watering is really all

that's required.

- Kale. Another slow-growing one. BUT kale does exceptionally well when direct-seeded. You can sow kale in the spring before your last frost date. I like the interplant kale with herbs and flowers to entice pollinators and beneficial bugs to settle in. Most years, cabbage loopers decimate my kale crops not under protection. But last year, I had a lot of success pairing my brassicas with flowers and flowering herbs.
- Spinach. This crop is another easy one to grow. You'll have the best results sowing early in the spring as soon as the soil is workable. Spinach bolts when the weather gets warm, so early plantings can mitigate premature bolting. Grow spinach in partial shade. The hot afternoon sun, even on a cool day, can trigger bolting.
- Asian greens. There are many delicious Asian greens out there, but some of my favorites include bok choy, Chinese broccoli, and frilly mustards. Most of these grow well from seed. You can also harvest them early as baby greens.
- Summer squash. I'm not planting squash this year because I have a squash bug problem. But if you're lucky enough not to have to deal with these irritating insects, summer squash is an excellent plant to grow from seed. It grows exceptionally fast, and once it starts to produce, you'll have plenty of food to eat. My favorite variety is patty pan. Sow summer squash right after the last frost date.
- Beans. Beans grow so quickly I never bother starting them from seed. They also don't love to be moved around. I prefer bush varieties because they don't require supports, but if you space them too closely, you can end up with a tangled mess. Sow bean seeds right after the last frost date.

#### Read More

Yes, you can garden for free

Ten ways to get free plants for your garden

How to get free plants

## 10 Top Reasons Why Seeds Don't Germinate



There are a lot of reasons why seeds don't germinate. Knowing what can go wrong is the first step in solving the problem. If you're struggling to start seeds this spring, here are a few

#### Why Aren't Seeds Germinating?

Here are a few common reasons why seeds don't germinate.

- It's too hot. It's a common misconception that seeds require heat to germinate. Not all seeds like it hot. Some germinate best when the soil is cool. The ideal temperature for lettuce seeds, for instance, is between 40 to 85 degrees Fahrenheit. Closer to 80 degrees means seeds are less likely to emerge.
- It's too cold. Similarly, some seeds require plenty of warmth to germinate. Things like tomatoes, eggplant, and peppers do best if you use a heat mat. If you don't provide extra warmth, your seeds may take longer to germinate or not germinate at all.
- The soil is too wet. Seeds and <u>seedlings</u> need air to survive. If you drown your seeds in water, they may not be able to access oxygen, and they'll eventually rot. When starting seeds, you want your soil to be moist but not overly so.
- Damping-off. This is a fungal disease that commonly affects seeds and seedlings. Avoid it by using sterilized seed starting mix, disinfecting tools, and using quality seed. If you notice your seedlings continually succumbing to damping-off, it might be wise to throw out that seed packet.
- Seeds are getting eaten. In some areas, you may already be direct seeding outside. It's a great way to get a jump start on the season. Unfortunately, some animals, like birds and small mammals, don't really care that you're excited about the gardening season. If you plant seeds and wonder why they aren't germinating, it might be

- because critters are eating them when you're not around. You can use netting or other protective covers, like cloches, to keep your seeds away from hungry mouths.
- You've got duds. Sometimes, seeds, even from quality retailers, just aren't going to germinate. Most reputable seed companies have a germination percentage figure on their seed packets to let you know how many seeds are expected to germinate. The lower the percentage, the more likely you are to have a few non-starters. If you continually find yourself with duds on your hands, it's time to find a new seed supplier.
- Your seeds are too old. Seeds don't last forever. They'll last a shorter time if they're stored haphazardly. Some types of seeds also last longer than others. If your seeds aren't sprouting, check the date on the packet. I often buy packets of seed that contain way more seed than I know I'll be able to use. I like to share seeds with other gardening pals to make sure they don't go to waste.
- You're not being patient enough. Some seeds take a while to germinate. While lettuce seedlings usually pop up within less than a week, many herbs take a lot longer to sprout. Others can take months. Seeds will also take longer to germinate if the conditions aren't quite right.
- Your seeds need an extra helping hand. Some seed types require periods of freezing weather or soaking in water to sprout. Always carefully read the back of a seed packet to check if this needs to be done. Some flower seeds have hard coatings, so you need to go through these steps to weaken the coating.
- You've planted them too deep. This is more of an issue when direct sowing. Only plant as deep as

the length of the seed. So for small seeds like carrots, you want to make sure you're sowing them very shallowly.

## Do Pre-Packaged Seeds Grow Faster Than Fresh Seeds?



It's that time of year when the seed catalogs start arriving in the mailbox. Getting new packets of seeds from a seed supplier is a real treat. Knowing that those carefully

harvested seeds will eventually grow into food or flowers is so exciting.

It's just as satisfying to sort through personally harvested seeds from your own garden. Collecting seeds right from your garden is not only environmentally responsible but can also save you money in the long run. Shiny new seed packets can get expensive, after all.

## Pre-Packaged Seeds vs. Fresh Seeds: What's the Difference?

Confused about what I mean between <u>fresh and pre-packaged</u> seeds?

Here's why they're different. When I refer to pre-packaged seeds, these are seeds that you buy from seed suppliers. They arrive in packets, and you can buy them in various quantities.

When I talk about fresh seeds, I'm talking about seeds harvested from your garden. When your cilantro plant bolts and flowers, it eventually produces seeds at the end of the season. To harvest them, you dry the pods and remove the seeds.

Hold on, though, fresh is really just a way to distinguish between the two. Once you store your garden-harvested seeds, they aren't technically fresh anymore.

Both pre-packaged and "fresh" seeds can vary in freshness. When buying seeds, always check the packaging date to make sure you haven't received a super old packet.

Really, the only difference between the two is the source.

### Pre-Packaged Seeds vs. Fresh Seeds: Which

#### **Grows Faster?**

There's nothing more annoying than receiving a packet of seeds and finding out that most are duds. Unfortunately, it happens. It's also proof that buying pre-packaged seeds doesn't guarantee freshness or quality.

The plant growth rate has nothing to do with whether seeds come from your garden or a seed supplier. The same goes for germination. The rate of growth and germination has more to do with how you store seeds.

Proper storage is *everything*. It's key to keeping your seeds viable for longer. Poor storage can turn quality seeds into duds very quickly. To make sure your seeds (whether from your garden or elsewhere) stay fresh:

- Store in an airtight container.
- Don't expose them to moisture.

### Tips for Starting Seeds

When the time comes to start seeds, there are also a few things you can do to speed up germination.

- Match seed type and temperature. Some seeds germinate best when exposed to warm temperatures, while others like it cooler. Keeping things at the right temperature can speed up the germination process.
- **Keep soil moist**. Moisture is key for germination, but make sure not to drown those little seeds.
- Manage airflow. If you're starting seeds in a confined space, too much humidity can be a problem. It can promote mold growth and disease. If plants are too close together, it can also prevent adequate airflow.

Want some tips on how to save your own seeds? Here is a <u>handy</u> guide from Seed Savers Exchange.

## Troubleshoot the Seed Starting Process



While every other region seems to be experiencing a thaw, it's still mostly frozen here. My starts are happily enjoying their spots under the indoor lights and this weekend I'll be

Starting another batch of plants like kale and Chinese broccoli. I happened upon a sale and purchased two additional plastic shelving units to hang a bunch of lights I had on hand. The extra space will give me plenty of room to repot tomatoes, peppers, and eggplants, and even start a few extras like flowers and herbs. So far, so good! But that doesn't mean I never have to troubleshoot while seed starting.

Every gardener has run into problems at one point or another. Unfortunately, a lot of information out there doesn't address the many things that could go wrong. Sometimes, even when you follow all the steps, your plants still die, pests still munch on all your greens, and seeds fail to germinate. I recently received a question that I thought would be worth answering here.

## Troubleshoot the seed starting process

The beans I put in a couple of weeks ago haven't germinated and have gotten moldy. Are they going to germinate?

The unfortunate answer is no. Bean seeds are notoriously quick to germinate, and their large size makes it easy to spot when that's happening. Let's troubleshoot the seed starting process. Here are a few reasons those seeds may have failed to germinate:

#### Inadequate moisture

Seeds need moisture to <u>germinate</u>. That doesn't mean you should drown your soil in water. Too much water can lead to rot. This isn't just an issue with seeds, many plants don't do well when they're drowning in water. Waterlogged soil can lead to root rot. Many new plant owners actually kill their indoor houseplants this way.

#### It's too cold

Beans will sprout in soil that's at least 60 degrees Fahrenheit (about 15 degrees Celcius). The ideal range is between 70 and 80 degrees, though. If you're growing in a basement where it tends to get chilly, consider adding heating mats underneath your pots or plant trays. Sprouting seeds near a window? In the daytime, when exposed to sunlight your plants may be nice and toasty, but on cloudy days or during the evenings, the temperatures likely dip considerably. Although it may be tempting, NEVER use a <a href="majorage-near-right">space heater</a> to keep your plants warm unless you're in the room and supervising. Space heaters can lead to fires if left unattended.

#### It's too hot

Certain seeds actually prefer cooler temperatures. Applying heat may be hindering the process. Seeds like lettuce and kale, for instance, might not germinate if conditions are too hot.

#### Seeds are too old

Properly preserved <u>seeds</u> can last a while in storage, but most folks simply fold down the packet and toss it wherever is convenient. If your seeds are over a year old and haven't been stored in an airtight container, it's possible they're no longer viable. If you just purchased the seeds? It could be that you received a bad batch. You can try contacting the seed company to ask for a replacement. Buy from reputable companies to avoid getting bad-quality seeds.

#### Disease

Did you notice a small seedling only to return a day later and find the baby plant shriveled and dead? Damping-off occurs when seedlings are exposed to a fungal disease either through contaminated soil or unsanitary garden implements and accessories. Prevent this from happening by <u>sanitizing</u> your seed trays, pots, and tools every year. Purchase a sterile seed starting mix from a reputable company.

#### It's ok to ignore algae

If you're working with a hydroponic setup, you may notice algae build-up on your soil pods. It's a bit unsightly but it's anything to worry about. If it bothers you, you can cover the pods with tin foil to prevent algae growth.

#### A note about mold

Are you wondering what's with all the mold? If you're noticing a fuzzy white substance covering your freshly soil-filled pots or trays, it's a sign that you're overwatering your seedlings or that your growing area isn't properly ventilated. Placing a fan in your growing space will help strengthen seedlings and keep air circulating. Watering from below may also help reduce the risk of mold growth.

## A specific tip for growing beans

Don't bother starting them indoors. Wait until all chance of frost has passed and direct sow seeds outside. Why? Beans don't respond well to the transplanting process. You'll have healthier bean plants if you sow outdoors.

I like to plants a few different bean varieties that mature at different times, so I always have a steady stream of beans to harvest for my dinner plate. Beans are pretty easy to grow, and they're really fun to harvest. Finding ready-to-eat pods among the foliage is like a gardening treasure hunt!

Other seeds that prefer to be direct-seeded:

- carrots
- radishes

- rutabaga
- beets
- parsnip
- parsley

Something all these have in common is that they have a large taproot. Transplanting tends to disturb the taproot and can stress the plant to the point of no return. It doesn't mean you can't start these indoors ever, but chances are higher that your plants will become stressed during transplanting.

## 5 Easy and Neat Seed Storage Ideas



via <u>flickr.com</u>

I'm an organization nerd (and a seed storage geek). It's why I'm so attracted to <u>Square Foot Gardening</u>. I like it when things have their place. Without a system, things easily start to become messy and confusing. "Where did I put that again?", "What did I just plant there last week?". I'm more forgetful than I like to be, so keeping everything in order, making notes, and marking planting areas allows me to clear my head of the details and focus on what's important.

Over the years, I've experimented with a number of seed storage ideas from tiny vials to lab storage equipment. Here are my favorite seed storage options:

#### **Arts & Crafts Storage Box**



This is my current seed storage method because, at this point, I have too many seeds for any other option to be viable. The large box contains several small containers, which are labeled by seed variety (carrots, squash, flowers, herbs, etc.). There's also enough room inside the storage case for me to stick two sharpies, a roll of string, and a handful of plant markers.

It's a sizeable box, but with its handle, it's ultratransportable, and I tote it out to the garden almost every morning at the height of the gardening season.

### **Tiny Vials**



via flickr

When I started gardening, I had a very small collection of seeds and lots of time on my hands. I purchased a bunch of tiny vials at the dollar store and filled them full of seed from packets I had found at the hardware store. Carefully pouring in the seeds was time-consuming yet relaxing work. When I was done, I had cute little seed-filled bottles on my hands. Seeds were easy to shake out and I could keep them on display and within reach.

### Filing Container

I purchased my little black filing container from a local office supply store for under \$10 and still use it to this day. Because my seed collection has expanded considerably, it's now the spot where I store <a href="mailto:empty\_seed\_packets">empty\_seed\_packets</a> since I like to have those on hand for future reference. You can find something similar on <a href="mailto:Amazon">Amazon</a> or most big box office supply stores.

### Tiny Lab Sample Containers

When my collection started to outgrow the vials, I decided on a new storage solution: <u>lab equipment</u>. The tiny circular containers were perfect for storing seed (except big ones like squash and cucumber seed). Instead of labeling each container, I coded them with numbers and letters and created a spreadsheet to keep track of the seed type and date purchased. It was a big undertaking, but the system was incredibly useful, and I used this type of storage for years.

### Tiny Resealable Bags

I use little <u>plastic bags</u> to store seeds destined for other people. They're perfect for swapping or sharing seeds. The small packets are lightweight, watertight, and easy to label. I prefer the clear plastic because I and others can easily see what's inside. These little packages are excellent for storing saved seeds, too.

Don't forget to check out my previous post that covers <u>handy</u> <u>seed storage tips</u>.