

# Seed Starting

## How to grow a whole garden from scratch

There are no magical chemicals, no special ingredients, no top-secret tricks known only to greenhouse growers. Starting plants from seed is something anyone can do with just a little basic know-how. But why bother when you can just buy transplants later? For one thing, you've got more choice of variety with seeds. For another, your plants will be ready whenever you want them. Plus, it's cheaper to start plants from seed, and you get the extra satisfaction of knowing you "gave birth" to the plant...a motherly-instinct kind of thing.

### What you'll need

You could buy one of those expensive seed-propagation kits, but the truth is, all you really need is some light-weight seed-starting soil, a few containers with holes, and of course, seeds.

One good game plan is to go with a two-step system in which you start the seeds in one larger container and then transplant as many of the seedlings as you need into individual cell packs, peat pots, or other small pots.

Moisten the seed starting soil and fill your seed container of choice about two-thirds full. Margarine tubs with holes poked in the bottom for drainage work great.

Sprinkle seeds over the top of the moistened soil, then cover with a thin layer of more soil. Most seeds should be covered about two to three times as deep as their width. However, some seeds (like impatiens, nicotiana, ageratum, alyssum, snapdragons and lettuce) need light to germinate, so they don't need covered at all. Hold in moisture by lightly covering your seed containers with a sheet of plastic wrap. You may need to rewet the soil once or twice if it begins to dry out before the seeds are up.

Besides moisture, your seeds need heat to germinate. Most seeds germinate best between 70 and 75 degrees. If your house is that warm, any table will work fine. Those who keep their houses cooler find their seeds germinate best atop a water heater, refrigerator or other heat-generating appliance. Next to a sunny window also might do the trick.

### Once they're up...

Within a few days to a few weeks (depending on the type of plant), baby seedlings should be poking their heads out of the soil. Once the first pair of seed leaves has popped open, it's time to transplant your babies into their own homes.

You've got lots of choices here for transplant containers. Peat pots are popular, but you can make your own pots out of newspaper, use household containers like milk cartons or foam cups (with holes poked in the bottom) or recycled plastic cell packs like those greenhouse plants are sold in. If you reuse cell packs or other containers, be sure to soak them first for a few minutes in a 10 percent bleach solution (nine parts water to one part household bleach) to kill any disease organisms.

Fill your pots with a good quality moistened potting mix, and you're ready to transplant. Don't scrimp by using inexpensive potting soil (often too heavy) or by using garden soil (too heavy and disease-prone).

Use a pencil or other pointy object to free your seedlings from the soil and to drill planting holes in your potting mix, and always be sure to handle seedlings by the leaves, never the stem. If you clumsily tear a leaf, the seedling can grow a new one. But if you squish the stem, the plant will die.

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## **Lights, water, action**

The most common problem rookie seed-starters run into is plants that get too leggy. The problem is that winter sun through a window is simply not strong enough to support good plant growth.

You'll have MUCH better success by growing seedlings under a common workshop light with fluorescent tubes. Place these lights within two to three inches of the plant tops. Don't worry - fluorescent lights don't get hot and won't burn the plants like regular light bulbs would. Fourteen hours of light a day is ideal for most plants. Hook up a timer so you don't have to remember when to turn the lights on and off. It's also a good idea to hang your workshop lights from chains so it's easy to move the lights up as the plants grow.

You can even grow plants in a dark basement using artificial lighting. That's actually a good idea because the cool, 50 to 60 degree temperatures in most basements is the ideal growing range to get short, stocky plants. You can also encourage stockiness by brushing or blowing on the seedlings every three days. (That stimulates plant hormones that induce compactness.)

Once you've transplanted your seedlings into individual pots, place the pots in watertight flats or plastic seed trays. These catch drainage, but better yet, you can water your plants by adding water to the tray and then letting the plants soak it up. That prevents soil from washing away from the roots and also helps prevent "damping-off."

Damping-off is the disease you're most likely to encounter as a home seed-starter. It's a fungal problem that causes seedlings to keel over the soil line. This problem can be all but eliminated by disinfecting reused pots, by using soil-less potting mix, by bottom watering and by good air circulation.

A half-strength, balanced fertilizer every other watering is plenty of food. When the plants reach garden size (usually at 6 to 8 weeks), it's time to "harden them off." This means gradually getting them used to real sun and outdoor wind.

Put your seedlings in a shaded spot outside for an hour or two at first, and then gradually step up the sun and time out over a 10-day period. Then it's into the garden! You did it!!

## **When to start what?**

To figure out when to start seeds, count backward from the time it's safe to plant that type of plant outside. Allow a week or so for germination, 6 to 10 weeks of grow time and 10 days for hardening off.

Example: You want tomatoes on May 12. Count back 10 days (to May 2) for hardening off, a week for germinating (April 25) and about eight weeks of grow time. That means you'll want to start your tomatoes at the end of February.