



Growing from Seeds – Want to Start Something?

In the winter, it seems like the only thing that's growing is your impatience to get out into the garden. Well, you can "spring" into action early by starting plants from seed. It's easy and fun to do, and has many advantages over buying plants from a nursery. Whether you want to start flowers or vegetables, annuals or perennials, the process you use—and the satisfaction you get!—is the same.

What You'll Need.

Seed starting mix or planting medium
(See Step 2.)

Seed trays or containers (See Step 3.)

Lights, either fluorescent fixtures
or "grow lights"

Labels

Seeds



Growing from Seeds—Want to Start Something?

Why Start from Seed?

Aside from the fact that many gardeners simply enjoy the process of starting their garden from scratch, there are several practical advantages to growing your own seedlings indoors.

- Greater variety—While you can certainly find a selection of plants at a good nursery, starting from seed means you can get exactly what you want. Seed catalogs are full of interesting, unique choices. You have more options for special colors or flavors, insect and disease resistance, etc. And, of course, you can get your hands on new and hard-to-find varieties.
- Healthier plants—By raising your own plants, you can ensure that your seedlings are grown in good soil with well-developed roots. And you reduce the risk of soil and plant diseases.
- Cost savings—A packet of seeds can be bought for a fraction of the cost of a few nursery seedlings. Even considering the cost of your trays, pots, planting medium and lights, starting your own seeds can clearly save you a great deal of money.

STEP 1 Buy Your Seeds.

You can buy seeds from almost any nursery, garden center, home center or hardware store. Or you can order them from seed catalogs. Wherever you get them, be sure to check the seed packet for a “packing date,” and don’t buy any seeds that are more than a year old.

Other information to look for includes species or variety name, mature height or growing habit, suggested indoor and outdoor planting timelines, general sun and water requirements and special planting instructions.

STEP 2 Plan Your Timetable.

Check your seed packets for information about when to start your seeds. This information is usually in the form of “# of weeks before the last frost.” If you’re unsure of when this is likely to be, check with your county extension agent.

The suggested planting dates can vary significantly among different vegetable and flower plants, so you will probably not be able to start all of your seeds at the same time. While this may seem like a hassle, it’s important to pay attention to the suggested planting timetables.

- If you start your seeds too late, they won’t be ready to move into the garden until later in the season, and you won’t enjoy the benefits of having early homegrown seedlings.
- If you start your seeds too early, you will have to transplant and carefully tend a lot of young seedlings indoors, and they are likely to get leggy and overblown before you can set them out.

TROY-BILT



Growing from Seeds—Want to Start Something?

STEP 3

Choose Your Planting Medium.

You can buy seed starting mix or potting soil from your garden center, or you can make your own mixture. Whatever you use, it's important that you start your seeds in a medium that is:

- Free from weed seeds, pests and soil diseases
- Able to absorb and hold water
- Loosely packed and aerated

If you choose to mix your own planting medium, be sure to include each of these ingredients:

- Soil or compost—for nutrients
- Peat moss or vermiculite—for water retention
- Sand or perlite—for drainage

Before you fill your seed trays (next step) it helps to thoroughly moisten your planting medium. Put the medium in a bucket, gradually add water and mix until it's evenly moist. You should be able to make a ball of soil that holds together but is not dripping wet.

STEP 4

Fill Your Seed Trays.

First, select a container for your seeds. If you don't have any plastic seed trays and flats kicking around in the garage (and can't get used trays from neighbors or friends), you can buy inexpensive plastic trays or peat pots. Or you can simply use what you have on hand. Here are a few suggestions:

- Egg cartons
- Paper milk cartons
- Plastic jugs
- Cottage cheese or yogurt containers
- Clay flowerpots
- Foil pans

Just make sure that your containers have drainage holes. Then fill with your planting medium to within 1/2 inch of the top. Pat the mix down lightly to press out air pockets.



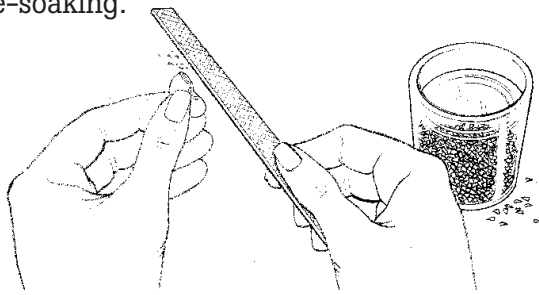
TROY-BILT



Growing from Seeds—Want to Start Something?

STEP 5 Prepare the Seeds.

Some seeds need a little help in the germination department. Large seeds with hard seed coats can be helped by “scarifying”—or nicking with a knife or file. Be careful to just barely break the seed coat open. Some seeds are naturally slow to sprout and will germinate much faster if you pre-soak them in warm water. Carrots, celery and parsley are a few that benefit from pre-soaking.



STEP 6 Plant the Seeds.

With small seeds, you will scatter the seeds lightly over the damp surface of the soil. Larger seeds allow you to place seeds exactly where you want them. In either case, seeds need a bit of room to grow. So try to give small seeds about 1/8 inch of space between neighbors; larger seeds need 1/2 to 1 inch of space.

Next, cover the seeds with soil. Planting depth varies and a suggested depth is often listed on seed packets. But a general rule is to plant seeds at a depth that is three times the diameter of the seed itself. (In the case of VERY fine seeds, simply press them into the surface.)

Since you have pre-soaked your planting medium (Step 2), it shouldn't be necessary to

water the seeds. If you do need to add water, do so carefully with a fine mist so you don't disturb the seeds.

Be sure to label your seed containers with the type of plant and the date you planted the seeds. (It's amazing how various seedlings look alike.)

STEP 7 Wait for Germination.

Cover your containers to maintain even moisture, and place them in a warm location until they sprout. Check every day, and spray with a light mist of water if the soil is drying out. Once your seeds sprout, remove the cover and place your new seedlings under lights. (You can also place your covered containers under lights right away, but most seeds don't need a lot of direct light until after germination.)

STEP 8 Provide Light and Water.

As soon as your seeds germinate, they need light. Fluorescent fixtures work well, as do commercial grow lights. Arrange your lights so that they are adjustable and move the lights as the seedlings grow, positioning the bulbs about 2 inches above the seedlings. Leave the lights on for 12 to 16 hours per day.

Keep the soil evenly moist. Use a light misting spray so that you also moisten the new sprouts, since they may dry out a bit under the lights. After about two weeks, you can start to fertilize your seedlings—fertilizing lightly every other time you water.

TROY-BILT



Growing from Seeds—Want to Start Something?

STEP 9 Thin.

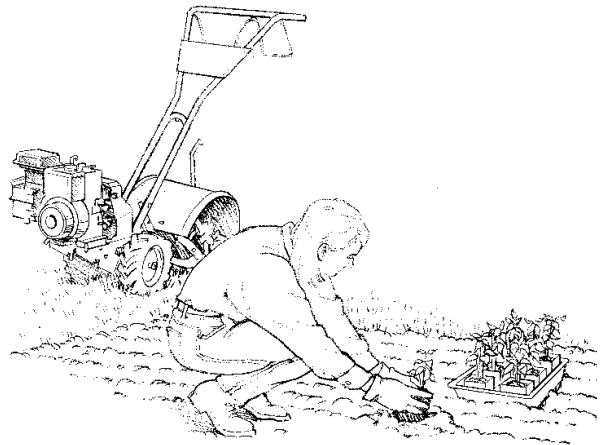
Most of the time you'll end up with lots of thick-growing seedlings. And as delightful as the sight of bright new growth is, you will need to thin things out in order to give fewer plants a better start. Try to do your thinning when seedlings are just an inch or so tall, before the roots become entangled. Pull out the weakest-looking sprouts with your fingers or tweezers, or cut them off with small scissors. The remaining seedlings should have about 2 inches of space in all directions.

STEP 10 Harden Off.

After about six weeks, your seedlings will be large enough and vigorous enough to get a taste of outdoor life. Instead of simply taking your pampered seedlings from the house to the garden, take the time to gradually introduce them to outside conditions. This process is called "hardening off." Very simply, you will place your seedling containers outside in a semi-protected location for a few hours a day. After a few days, place them in or near your garden bed for a few hours a day. Gradually increase the number of hours the plants spend outside until they are out all day. This process should take a week or two. (Until they are fully hardened off, always bring young plants and seedlings indoors if the temperature drops below 50°F.)

STEP 11 Transplant to the Garden.

Once plants are fully acclimated to life in the great outdoors, you can place them in their new home in the garden. Consult your seed packets for information about how to space each variety of plant. And make sure that the soil is properly prepared and ready to support your precious plants by tilling in lots of organic matter with your [TROY-BILT® tiller](#).



Note: Some plants that need special care when started indoors.

Some plants—because of deep, fleshy or sensitive roots—do not take well to thinning and/or transplanting. These plants do best when they are directly seeded in the garden. If you do want to start them indoors, be sure to start in individual pots and wait to transplant the seedlings until the roots are vigorous. These fussy plants include:

Beans	Melons
Corn	Pumpkins
Cucumbers	Squash

TROY-BILT

