

# Seed Starting



Some seeds should be started inside in the early spring so they can be ready to plant outside when the chance of damaging frost is gone. This gives seedlings the head start needed to actually fruit or flower so we can harvest and enjoy them during the growing season. Getting the timing right is important so your plants aren't waiting around too long inside and are ready to go out when the good weather is upon us.

Johnny's Selected Seeds has a useful tool for determining the timing: [Seed Starting Calculator](#). Once you've chosen your seeds, you can follow these steps:

1. **Gather the needed materials.** You'll need the following:

- Pots or a soil-blocking tool
  - You can use plastic or peat pots. If using recycled plastic, clean out the old dirt and dip them in a mild bleach solution (1 TB bleach in a few gallons of water). Let the pots dry before storing or using.
  - Alternatively, you can use a soil-blocker, which eliminates the need for a pot. Get a mini size and one to bump up to. The [Fruition Seeds kit](#) has two sizes. [Vermont Compost Company](#) and [Fruition Seeds](#) have videos on soil blocking.
- Clear dome lids
- Soil—specifically, a seed-starting mix such as Vermont Compost's Fort Vee (available at [NewFarm](#) in Orleans) or Espoma's Organic Seed Starter
- Labels—wooden or plastic
- Pencil
- Vermiculite
- Shop lights with grow lamps that are full spectrum and have a Kelvin temperature of 5000–7000
- Oscillating fan
- Heat mat
- Large, wide container for mixing and wetting soil

2. **Ready the soil.** In a large container, moisten your potting mix until it is thoroughly damp but not dripping wet. Fill seed flats to the top with soil, tapping firmly against the table as you go so the soil settles and no air pockets remain trapped in the tray cells.

Alternatively, make soil blocks with the soil-blocker tool.

3. **Label!** Note pertinent information on your labels. Include the plant variety name, date sown, days until germination, temperature needed to germinate, and whether the seeds need light to germinate.

4. **Plant your seeds.** Use your finger, a pencil, or a dibbler to make holes in each cell. As a general rule, plant the seed twice as deep as it is big. Some seeds need light to germinate, so be sure to note this and plant the seeds on top of the soil if this is the case. Drop 1–2 seeds into each hole until the tray is completely full. Cover the tray with a light dousing of fine vermiculite or potting soil, making sure all seeds are covered.

Alternatively, for soil blocks, place the seeds into the existing dimple and cover with vermiculite.

5. **Water initially.** Set the freshly sown trays into a plastic tub with an inch of water at the bottom and let them soak up the water from below. Remove the tray when the soil surface is evenly moist. Don't water the trays from overhead because one strong blast from the hose can wash the tiny seeds away.

Alternatively, water the soil block tray from the side, not directly on top of the blocks.

6. **Cover and heat the trays.** Cover each tray with a clear plastic dome and set onto a 70°–80°F heat mat (depending on the seed type—check the seed packet) or place in a warm corner of the house that's consistently above 65°F. Some seeds may need a little more heat, and some less.

7. **Monitor and water when needed.** Check the trays daily, and when seeds have sprouted, remove the plastic dome lids at once and move the trays off the heat. Place the trays under florescent lights that are full spectrum and have a Kelvin rating of 5000–7000. Make sure the lights are as close as possible to the seedlings, and put on a timer that gives the plants 15–17 hours of light a day. As the plants grow, keep raising the lights so they are 2–3 inches above the tallest plant. Check seedlings daily and water when the soil appears dry.

8. **Feed the plants.** After 2–3 weeks, feed with a weak solution (1 TB of fish/kelp emulsion to 1 gallon of water), still watering from the bottom.

9. **Install a fan.** Place a fan so that a light breeze blows over the plants. This will strengthen the stems and increase circulation of air, which decrease chances of fungal growth.

10. **Bump up and/or harden off.** When seedlings outgrow their trays, either repot them into larger containers inside or, if the weather is warm enough, start transitioning them outside. It's important to *harden off* young plants before putting them into the garden: set trays in a sheltered spot outside, increasing the amount of time they are out each day. This helps the seedlings acclimate; otherwise, they will be shocked by the sudden change in temperature. After all danger of frost has passed, they can be planted into the garden.