

Starting Seeds Indoors

Many gardeners start their own seeds indoors. This can allow gardeners to try some new plant varieties. As well, it can be a good way to grow some plants that have a longer growing season. The following are some tips for success.

What Vegetables Should You Seed Indoors?

Most vegetables, except for root crops (carrots, beets, parsnips) can be started inside for earlier crops.

Vegetables that are good choices for starting early include: Tomatoes, Peppers, Broccoli Cabbage, Cauliflower, Celery, and Onions (grown from seeds not bulbs). You can also try Corn, Cucumbers, Pumpkins, Squash and Zucchini.

What to Plant into – You can use just about anything to plant your seeds into as long as it holds soil and allows water to drain. Seeds can be started in household items such as yogurt containers, cut down milk jugs, plastic pop bottles, margarine tubs or even plastic bags in cardboard boxes. Seeds can also be started in trays that are plastic or wood that are wide and a few inches deep.



Most containers, except the peat pots, can be saved and used again the following year. If you decide to reuse containers, make sure you wash the containers with hot water and chlorine bleach to sterilize them before use. Use about nine parts water to one part bleach, soak containers for about five minutes and rinse thoroughly.

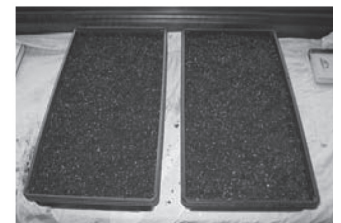


Soil – You can collect sand, loam soil and peat moss in the fall for your bedding plants in the spring. Mix two parts of the black loam soil with one part peat moss and one part sand. You can mix in one tablespoon of fertilizer per liter of soil. Purchased potting soil or a soilless growing medium made of peat moss, vermiculite

and perlite can also be used for starting seeds indoors. It's lightweight and porous so it's ideal for young roots. Many garden centres have growing mix or seed-starting mix.

When to Start Seeds – Decide when is the last date of the expected spring frost for your area. Seed packets will tell you how far in advance of that date to sow indoors. Timing is important because plants started too early indoors are more likely to succumb to the stress of transplanting.

Seeding into Flats – Fill the container to within $\frac{1}{4}$ of an inch of the top with soil. Pat down the soil so it is firm. Seeds can be spread evenly or spaced out. By spacing seeds you will not have to thin them too much



and you will not have to replot them before transplanting. By seeding them thicker you will have more plants to replot but you may need to thin plants by pulling out the smallest ones. This gives each seedling enough room to grow. Once the seed is spread, cover with an additional $\frac{1}{8}$ to $\frac{1}{4}$ inch of soil and pat down and water.

Seeding into Containers – For container seeding, you can purchase pots or use household items. Make sure the pots have drain holes in the bottom because plants don't like their "feet" to be wet. Fill to $\frac{1}{4}$ of an inch from the top with soil. Firm up the soil by pressing down. Place two-to-four seeds or more, depending on the size of the container. Press them in $\frac{1}{8}$ - $\frac{1}{4}$ of an inch into the soil and cover with the soil, water them. You can set these on newspaper to absorb excess moisture. You may want to place containers in a cut down cardboard box as well. Your containers and flats should be placed where it is warm and in sunlight. A good source of heat is on top of your refrigerator. If you place your seedlings in a sunny spot in the house, make sure they don't dry out or get too hot.

Whatever you decide to use for containers, make sure to keep track of what you planted. When seedlings are very small, it can be difficult to remember what they are and many seedlings look alike. Small sticks (popsicle sticks), toothpicks with masking tape flags, etc. will work as plant markers.

Water – Always use room temperature water. Your seeds need to be kept moist to allow them to germinate, if they dry out they will die. If you want, you can use fertilized water on every third watering after they germinate. Add one teaspoon of fertilizer to two liters of water.



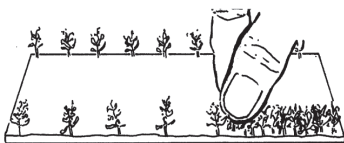
To prevent damaging young seedlings, you need a watering jug that waters like a gentle rain or you can use a spray bottle to mist the soil. As seedlings grow, you can allow the top layer of soil to dry

slightly between watering to cut down on the chance of disease, but never allow seedlings to dry out completely – they rarely recover.

Plastic wrap – Covering the containers with plastic wrap or a plastic cover helps maintain a warm, moist environment for the germinating seeds and keeps them from drying out. Remove the wrap when the seedlings emerge. Water the seedlings as often as required.

Fungicide – Sometimes young seedlings get a disease called damping-off. This is characterized by clumps of seedlings suddenly keeling over at soil level. Crowded or overwatered plants are susceptible too. To prevent this disease, use No Damp Fungicide, it kills the fungus in the soil. Use 10 ml or two teaspoons of No Damp in one liter of water or 50 ml or 10 teaspoons in five liters. You can also use two oz of peroxide 17 per cent solution in one litre of water. Spray or pour this on liberally so it soaks through the soil. There are a number of brands of No Damp; it is widely available through seed catalogues and stores that carry gardening supplies.

Thinning – When your seedlings are growing in a small pot or container remove the weakest ones, leaving the largest with room to grow.



Hardening off – Plants should be hardened off prior to planting – this is a process of getting them accustomed to direct sun, wind and temperature fluctuations. This should be done about a week before planting them out into the garden. Leave plants outside in a cold frame or in a partially protected spot for about two hours the first day, then give them an hour more each day. Keep the plants watered and bring them indoors (or close the cold frame) if it turns cold or if frost is in the forecast.

Planting Out – Before you transplant your plants into your garden, raised bed, cold frame or container, you should moisten them thoroughly several hours before you start to transplant. This helps to hold the soil together around the roots.

The best time to transplant is late in the afternoon on a cloudy day. This way the seedlings aren't planted out in the hot sun which is hard on the new plants. Dig a hole in the soil where you will be planting your transplant. The hole should be slightly larger and deeper than the plant and its surrounding soil.

When transplanting from containers, gently tip the plant out and take all the soil with the plant. Try to take all the roots with the plant. Place it into a hole slightly deeper than the top level of the soil in the container. Press the soil firmly around the transplant and water thoroughly.

If you've started your plants in peat pots, the pot is planted along with the seedling in the garden – the peat fiber decomposes in the soil. However, tear the top lip off the pot and be sure that no part of the peat pot pokes above the soil surface; otherwise moisture will be wicked away from the roots and into the air. You can also gently "break open" the sides of the pots to speed up the process of allowing the roots room to grow out into the soil.



Water seedlings immediately after planting and water plants every day until new growth occurs.

