

Starting Seeds Indoors

Starting seeds indoors is easy and fun. It's an inexpensive way to raise an assortment of bedding plants and vegetables. By planting your own seeds, you have more choice, as you can experiment more with unique varieties and also older ones that you might not find in pre-planted annual packs. Not only is starting your own plants inexpensive, it is sure to derive a great deal of satisfaction. Getting children involved with the process is a lot of fun; it's a great way to educate little gardeners and they really enjoy watching the seeds grow.

BEFORE YOU START...

- Read through books, seed catalogues & horticulture magazines to get ideas & information.
- Visit the seed rack & note the types of seeds available & when they should be sown. If you are not sure of availability of specific seeds, ask any of our staff members for help. Take notes on planting methods & dates from either the back of the seed packets or seed catalogues.
- Determine where in the house you want to start the seeds. If it is near a window, make sure that the temperature does not fluctuate. The best spot is an area out of direct light in a cool room (16°C to 21°C during the day).
- Be sure to choose seeds suitable for your garden when you transplant them outdoors.
- Gather the materials from the checklist, so you have everything you need. Be sure to choose the appropriate planting "container(s)" depending on your seed type. (flats/inserts, peat pots, jiffy pots, peat pots and/or azalea pots).



IMPORTANT!

Some seeds should be sown directly outside. Seeds for root crops like carrots & beets should be directly sown in to the ground where they are to grow. These plants do not transplant very well & moving them will result in malformed roots. Also cool weather crops (eg. lettuce, radish, & spinach) should be directly sown. Don't waste your time starting easy flowers like asters, clarkia, alyssum, California poppies & wildflower mixtures as these can be simply scattered directly into the garden. Determine which ones need to be started indoors by checking the directions on the back of the seed packet.

MATERIAL CHECKLIST

- An assortment of seeds
- Soilless mix for seeds e.g. Eddi's All Purpose Starter Mix or Sunshine #4 Mix. Soil from the garden is inappropriate as it is too heavy for container use & also may contain many harmful bacteria & fungus that young seedlings can't handle.
- Seed flats & inserts in either cells or rows (refer to NOTE below)
or Peat pots placed in plastic seed flats
or Azalea pots (pots that are short and wide)
or Jiffy Peat Pellets
- Mister bottle
- Water insoluble marker

NOTE: The type of inserts that you purchase is dependant on type of seed and length of growing time before transplanting outside. If you are sowing very fine seeds such as begonias, use the inserts that have rows of seeding areas. This makes it easier for you to transplant and also to sow a large number of seeds. If you wish to have a large sized plantlet when you set them in the garden, choose the large celled packs to encourage unhindered root growth.

PREPARING THE STARTER MIX

To begin, clear off an area (preferably on a counter) where you can make a mess without disturbing the rest of the household. Moisten your starter mix with warm water & work through the mix with your fingers. Try to eliminate all dry clods. Place moistened starter mix in the flats, flat inserts or peat containers to about 1/4" from the rim of the container. Tap down to rid the soil of air bubbles. In the case of jiffy pots, place them on a tray of warm water at about 1/4" deep & let them absorb the water.

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PLANTING THE SEEDS

The method of sowing a seed depends on the type of seed

1. **Large Seeds** For large size seeds such as sunflowers, cosmos, calendulas and beans, sow each seed in individual peat pots, individual cell inserts or in pre-soaked jiffy pots. The depth of planting is approximately 2.5 X the width of the seed (e.g. a sunflower seed is about 1 cm wide, plant at 2.5 cm deep). Usually large seeds, germinate & develop very quickly. Some seeds such as peas need to be soaked first overnight to help soften the seed coat.

2. **Very Fine Seeds** Mix fine seeds with some sand in a cup & sprinkle/"broadcast" on to either prepared flats or azalea pots.

3. **All other Seeds** Plant in row inserts or flats.

- For row inserts: tap seeds from the packet into the rows & cover gently with soil, or with washed horticultural sand.
- For flats: Make ridges with your finger & cover gently with soil or washed horticultural sand.



TAKING CARE OF THE SEEDS DURING GERMINATION

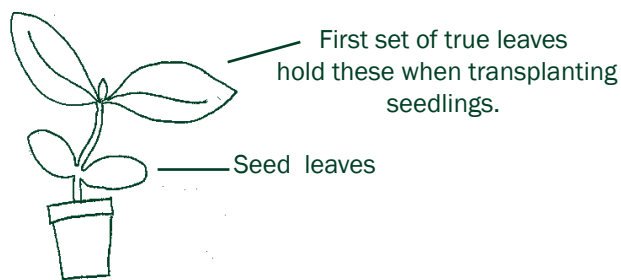
Once the seeds are sown and appropriately labelled, mist the surface of the flats, container or peat pots (do not soak). Place these newly seeded containers in your designated seedling area. In a few days (sometimes weeks), the seeds will germinate.

It is of the utmost importance that the seeds are not over-watered or left to dry out. If seedlings are over watered they may "Damp Off" - the seedlings will suddenly fall over. Place seedlings in a well ventilated area and do not over-seed. To further prevent "Damping Off" from occurring, use "No Damp" mixed into your water.

You need not fertilize the seedlings at the moment for they have enough food source stored up in the seeds to take them to the first leaf stage.

SPACING THE SEEDLINGS

When the seedlings grow their first set of true leaves (refer to diagram below), it is time to space them out. Use a dibbler (a pointed object for transplanting seedlings) to gently dig the seedling out and with your other hand, guide the plant by the true leaves (not the stem or seed leaves) in to a pre-made hole. Lower the roots in to the hole gently and make sure that the plant is at the same level as it was in the seed tray. Gently firm the soil around the base of the plant. Seedlings may be transplanted into cell paks in groups of 4 or in to smaller cell paks individually.



FERTILIZING YOUR TRANSPLANTED SEEDLINGS

The seedlings should be fertilized after transplanting. Use either a well balanced water soluble fertilizer such as GARDENWORKS 20-20-20, or a slow releasing fertilizer such as Osmocote. Make sure you read the rates prior to mixing the solutions as strong mixtures of fertilizers can easily hurt your young seedlings.

"HARDENING OFF"

The next step is "hardening off" of the plants prior to planting them in the garden. Hardening off is a process of preparing the plants to outdoor conditions. You may begin this process two weeks before planting them in the garden by placing the plants outdoors (out of direct sun) everyday and taking them in during the night, when cooler temperatures may put your seedlings at risk. Dates for planting out are also mentioned on the back of seed packets.

TRANSPLANTING

Don't be in a rush to set your plants in the garden. If they won't withstand frost, be sure all danger of frost has passed before setting them out. Plan the garden in advance, making sure your tall plants won't shade your low growing plants.

Water the ground outside and the seedlings thoroughly before transplanting. This helps prevent transplant shock. It's preferable to transplant on a cloudy day so strong sun won't wilt your seedlings. Press the soil firmly around the roots. Water immediately after transplanting and every day for the first week. Be sure to water deeply so you plants won't develop shallow roots.