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Starting Garden Seeds Indoors

For most gardeners, nothing washes away the winter blues like browsing through garden catalogs. Even though it's fun to pick and choose seeds from catalogs, be forewarned that unless you grow a large number of plants, starting seeds indoors at home may be more expensive than buying transplants (seedlings) from the garden center. You can save some money by ordering early when many companies offer a discount.

You'll need vermiculite, sterilized potting soil, pots or flats, a way to regulate heat, moisture, adequate light, space and plenty of patience. Starting your own seed may be rewarding if you're looking for new or unusual varieties of plants that are not available at the garden center, or you're a gardener who simply enjoys starting plants from seed.

A Simple Method

The following method of starting seed indoors is simple and results in a high percentage of germination of many varieties of plants. First, wash a few pots in soapy water, then sterilize them by soaking them in a 1:10 solution of bleach to water for a few hours. After the pots are dry, if you can't fill a pot without the vermiculite pouring out of the bottom, lay a small piece of paper towel to cover the drainage holes to keep it contained. Fill the pot with vermiculite, then gently set the entire pot in a pan of clean tap water to wet the vermiculite from the bottom up. Remove the pot from the pan when the surface is moist.

Follow seed packet or catalog directions for spacing and planting depth. Keep the directions for future reference on transplanting, bloom times and maturity dates. In the absence of specific sowing information, space small seeds at least one-eighth inch apart within rows that are one inch apart. Allow more space for larger seeds. In this way a "nursery" pot or flat can hold dozens of seedlings. Cover the seeds by evenly spreading a one-quarter inch layer of vermiculite over them if light is not necessary for germination. If the seeds require light to germinate, sprinkle them over the surface of the vermiculite. If possible, press them gently in. Label the rows with pencil or indelible marker.

To ensure that the vermiculite stays moist, you may make a tent over the pot with a plastic lunch bag or put all the pots in one large container or tray and loosely cover the tray with plastic wrap. In either case, allow room for the seedlings to grow their first true leaves. As soon as these leaves appear, remove the plastic to increase air circulation.

Most seeds will sprout quickly if the vermiculite is given bottom heat (kept at a constant 70-80 degrees F). They can be set on top of the refrigerator or other warm appliance for heat if they don't need sunlight while germinating. Using this method, peppers, which usually sprout in 21 days, may pop up in only seven. Set the plants in bright light. Use a well-lit, sunny windowsill or place them two to four inches beneath artificial lights as soon as they sprout. Four-foot fluorescent shop lights fitted with 50 percent each warm white and cool white bulbs work well. If you use these, you do not need specialized daylight bulbs.

When the plants have two to four true leaves, push a knife or fork deep into the vermiculite under the roots and lift them out. While holding the **leaves** only, carefully separate the seedlings' roots. Place each transplant in its own two-inch pot or in a cell of a cell-pak or other growing container, available at most garden centers. Use sterilized potting soil in these pots or paks.

Keep the soil evenly moist but not soggy. If the plants begin to become root-bound, pot them up in larger containers. If the plants are not ready for larger containers, but are growing poorly they may benefit from a dilute, balanced fertilizer. Fertilizer at full strength will burn tender plants.

Your plants will need to be slowly acclimated to outdoor conditions before they can move to their final place in the garden. Approximately two weeks before planting, slightly reduce watering (don't let the plants dry out). Running a small fan that creates a light but indirect breeze will strengthen the plants. At least one week before planting, place the pots outdoors in the shade for a few hours each day. Gradually increase the amount of time they spend outdoors and sunlight they receive. After a week or so, you may leave them out overnight in a protected place; at this point they will withstand full sun and the outdoor environment and may be planted in the garden.

Time Your Indoor Planting

Follow any specific instructions from the catalog or seed packet that relate to your specific varieties. In the absence of information from a seed company, you may use the following chart as a guideline for popular varieties. Hardy varieties marked with an * may be planted outdoors after the last spring freeze, usually in early to mid-April. The remainder are tender varieties that must be planted after the last frost and the soil has warmed. This usually occurs between mid-May to Memorial Day or the first week in June.

1st week March	2nd week March	3rd week March	3rd week April	1st week May
*Broccoli	Eggplant	Tomato	Cantaloupe	Cucumber
*Brussels sprouts	Pepper	Aster	Muskmelon	Squash
*Cabbage	*Lettuce/salad greens	Balsam	Celosia	Watermelon
*Cauliflower	Ageratum	Coleus	Zinnia	
Dusty Miller	Alyssum	Cosmos		
Impatiens	Marigold	Nasturtium		
Lobelia	Salvia	Portulaca		
Petunia	Strawflower	Statice		
Phlox	Verbena			
Snapdragons				

Cucumber, Melon and Squash are often direct seeded outdoors in warm garden soil (around Memorial Day or the first week in June).

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