

Starting Vegetable Seeds

Vegetables grown in areas with short growing seasons or ones that take too long to mature need to be started indoors in order to get a good head start before moving outside.

Planting time for vegetable seeds started indoors depends on when the seedling needs to be transplanted in the garden. The indoor start is done in relation to the last frost, for the Killeen area this date is March 15th the times are as follow:

10 weeks--broccoli, cabbage, cauliflower, and head lettuce;

Seven weeks--tomato, eggplant, and pepper; and

Four weeks--cucumber, muskmelon, squash, and watermelon.

Starting vegetable seeds indoors ensures that high percent germination is achieved through provision of optimal conditions for seed germination. Some vegetable seeds are very expensive particularly hybrid varieties, so starting them indoors ensures that seed loss due to rodents or poor weather is minimal.

Vegetables established from transplants tend to mature much earlier than direct-seeded ones.

To start, select the vegetables you want to launch indoors and buy seeds, organic when available.

Such treatments for damping off disease will control fungal, which attack seedlings. Water should be room temperature. Soil should be moist not wet. Water either from the bottom or mist the soil. Kelp or seaweed added to water will help prevent fungus. Putting compost tea on seeds before planting will also help.

Test the germination percentage of the seeds by placing some of the seeds on a moist paper towel, and setting it in a warm environment with plenty of light. Check after six to seven days, depending on how long the seed of a particular type takes to germinate and count the germinated seeds and express it as a percentage of the total number of seeds tested.

It is important also to read the information on the seed packet for each variety or type of vegetable. Follow directions on the seed packet about when to start the seeds, light requirements, relative humidity requirements, and temperature requirements. If no planting instructions are included with your seed, plant them at a generic planting depth according to type. Most herbs and other plants with very small seeds should be planted at a shallow depth, no deeper than the seed.

Get materials such as pots, trays, plastic flats, peat pots, and potting mix for starting the seeds ready or buy seed starter kits from local garden centers or catalogues. Containers or trays for starting seeds need to have drainage holes on the bottom. Make the holes from the inside out to ensure good drainage. If reusing pots, sterilize them with vinegar and soap.

When starting vegetable seeds in a tray or pot, cover larger holes on the trays with Coir or a coffee filter, before filling with potting mix or soil. A good potting mix or soil for starting vegetable seeds needs to be light, loose, disease-free, insect-free, weed-seed-free, have good water-holding capacity, and well-drained.

Fill trays, flats, and pots with potting mix or starting media and level gently. Place the filled-up tray, flat, or pot on a pan of water overnight so that water can soak into the potting mix from the bottom. If trays are used, make shallow rows about one to two inches apart when starting different kinds or varieties of vegetables and label each row after seeding. Broadcast when starting one type of vegetable in a seed tray.

Plant the seeds uniformly by pressing them gently into the starting media according to the planting depth recommended on the seed packet which is usually no deeper than the size of the seed. Cover the container with plastic film or a piece of window glass to retain the moisture until the seeds germinate.

Do not place covered containers in direct sunlight. Place the containers in a warm location with optimum temperature range of 65 to 75 degrees F for most vegetables. Some cool-season vegetables such as cabbage, broccoli, cauliflower, and peas tend to do well when started at temperatures of about 55 degrees F. After germination, remove the plastic film or glass cover and move the cool-loving plants to a cooler location.

Inspect the plants for damping off disease and remove infected plants and drench the media with recommended fungicides. Incidences of damping off can be minimized by sanitation and avoiding overwatering of the plants.

Place the seedlings where there is bright light, particularly a bright south-facing window, or use two fluorescent light bulbs (one cool and one warm white bulb) and place the seedlings three to four inches from the tubes for 14 to 16 hours per day. Adjust the space between the fluorescent bulbs and the seedlings as the plants become larger.

Good air humidity is an asset in starting plants, and a humidifier may be put closer to the area where plants are being started. Do not overwater plants but ensure that plants are not wilting.

Feed the plants with water-soluble house plant fertilizers at half the recommended rate once every two weeks. After the appearance of true leaves, if the seeds were planted in individual containers or flats, then thin the plants to the desired number per pot or cell by removing weaker plants.

At this stage, you can transplant seedlings into individual pots or larger containers or transfer to a hotbed, if one is available.

Vegetables that can easily be transplanted from one container to another are broccoli, cabbage, Brussels sprouts, lettuce, and tomatoes. Some vegetables such as cauliflower, celery, eggplant, onion, and pepper have slower root development and are not as easily transferred.

Most of the warm-loving vegetables such as cucumbers, muskmelon, squash, and watermelon do not transplant well so they are seeded directly into larger cells or pots where they grow until reaching a size that can be transplanted in the garden.

Before transplanting seedlings in the garden, it is important to make the plants ready for outdoor conditions.

This is achieved by hardening the plants. Harden the plants two weeks before transplanting by moving them to a shaded area outdoors or by placing them in a cold frame. Then, move them gradually to sunlight for a short time during the day. Increase the length of exposure with time.

Do not expose seedlings to freezing temperatures or strong winds. Reduce watering and after proper hardening, plant them in the garden by carefully removing them from the containers.