

SEEDING AND PLANTING

When to plant

The date to plant is determined by local weather conditions and the nature of the various garden vegetables. Some vegetables require warm soil and air temperatures, while others will grow in colder temperatures. Most home gardeners are eager to have some vegetables early in the season.

Planting dates are based on estimated average temperatures in various locations. There may be unusual years that are either much warmer or much colder than the average. Each year is unique. Use your judgment in evaluating the weather each year. Many vegetables can be planted so they mature for use in the fall as well as in the spring. Some vegetables are more tolerant of frost than others.

Preparing the seedbed

The condition of the seedbed largely depends on how you prepare it. Work the seedbed as little as possible, but break up most of the larger surface clods.

Most gardeners plow or spade their soil in the spring. In some areas with heavy soils it may be desirable to plow in the fall to allow winter freezes to mellow the clods. Make sure the soil crumbles well as it is plowed or tilled. Working the soil when it is too wet will cause a poor seedbed and poor soil conditions throughout the season. As a rule, soil is too wet to work if you can press a handful of it into a muddy ball.

For tiny vegetable seeds such as lettuce and carrots, it may be necessary to rake up a seedbed of very fine soil. For most vegetable seeds or plants, it is usually better to have some small surface clods.

Seeds

Seeds should be obtained early in the year so you can get the varieties you want. Seeds can be obtained from local dealers and seed catalogs.

Avoid using seed from your previous crops unless you have a special interest such as the continued propagation of an unusual variety. Commercially available seeds are treated for disease and insect resistance and are stored under conditions which ensure health and vigor. It is possible to get atypical plants when you save your own seeds and when the plants are cross-pollinated or hybrid varieties.

Producing transplants

Most home gardeners obtain plants from local plant growers or suppliers. In areas where dealers are not available or where the desired varieties cannot be obtained, gardeners may need to produce their own plants.

Transplants are generally started by seeding vegetables in a small box or flat. In order to prevent diseases, a disease-free material such as sphagnum moss, vermiculite, or sand should be used instead of soil. Sow thickly in rows 2 inches apart. Cover lightly with a thin layer of the planting medium and water gently. Place the box or flat in a hotbed or sunny window and keep it moist until the seeds germinate.

As a general rule, it will be 6-8 weeks from the time seeds are sown until the plants are ready for transplanting to the garden.

After the seedlings emerge and have 2-4 small leaves, they should be replanted in small pots and allowed to grow until transplanted to the garden. Pots should contain soil mixed with peat or sand to loosen it.

Various types of containers can be used. Paper cups, milk cartons, clay pots, peat pots, flats, or other packages can be used. Any container must have a drain hole. Fill containers with the soil mixture and firm slightly. Lift the seedling plants from the flat and grasp the leaves, not the stem, of the small plants. Place one seedling in each pot. Water gently and place in a sunny window or hotbed until transplanting time.

Before transplanting to the garden, plants should be "hardened," or conditioned to outside temperatures. About 10 days before the transplanting date:

- * Gradually withhold watering so the plants are not wilting but are getting less water than normal.
- * Gradually expose plants to the outside temperatures by removing the hotbed lids or placing the plants in a protected location outside.
- * Avoid fertilizing, especially with nitrogen.

If this hardening procedure is followed, the plants will begin to grow soon after transplanting rather than suffer "transplant shock."

Transplanting

Immediately before transplanting, water plants well.

- * Allow as much soil to adhere to the roots as possible when transplanting.
- * Water well after transplanting, using a starter solution.
- * After the water has soaked in, sprinkle some dry soil over the moist soil around the plant.
- * Protect the young transplants for the first few days.

How to plant

When peat pots are used for transplanting, the pot and all can be planted to lessen the transplanting shock. Make sure the pot is well covered, however, because the exposed peat pot acts as a wick to draw moisture from the soil around the transplant.

Use a string to mark straight rows through the garden. If you have a mechanical tiller or cultivator, be sure to allow adequate space between rows for cultivating. After seeding at the proper rate and depth, cover gently and water if the seedbed is very dry. If your garden soil tends to crust or the surface becomes tight after a hard rain, a light layer of sand may be applied over seeds.

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