Planting the home vegetable garden is one of the most enjoyable phases of gardening. Planting is easy, so everyone can participate. Everyone enjoys watching a seed they planted sprout and begin to grow. To be successful, some equipment and supplies are needed. Make sure you have them on hand before planting time.

**Seeds**

Purchasing seeds early gives you time to order varieties that might not be available locally. Consult the individual Easy Gardening crop publications for recommended varieties. Most seed companies will send a catalog of vegetable types and varieties on request.

Refer to your garden plan to see how much of each vegetable to plant. Do not order more seed than needed for the spring and fall gardening seasons. While most seeds can be held over for use the following year if properly stored, it is usually best to get new seeds at least every 2 years.

Before planting last year’s seeds, test their germination by placing 10 or 20 seeds between two layers of paper towel. Place the towel in a bowl or plate and keep it moist for a few days. Then count the number of seeds that sprout. If one-half or fewer of the seeds sprout, purchase new seeds (Fig. 1).

**Figure 1. Seeds for germination.**

Many crops do better if they are started indoors and then transplanted into the garden. It is always best to use transplants when growing broccoli, cauliflower, pepper, eggplant and tomato. Home gardeners can grow their own transplants or purchase them. If you decide to purchase transplants, select good quality, healthy plants that are free of insects and diseases.
Harden home-grown transplants before planting them in the garden. About 10 days before transplanting, treat plants in the following manner:

- Reduce watering but do not allow plants to wilt.
- Gradually expose plants to garden conditions by placing them outside in a protected spot.
- Do not fertilize before transplanting.

Purchased transplants may be well hardened at the time of purchase. The nurseryman can answer this question. Do not over-harden plants, as this will stunt them.

**Equipment**

The planting equipment you will need depends on the size of the garden. In large gardens a hand planter or garden tractor may be useful. In most home gardens a hoe, rake, hand trowel, string, stakes and labels are sufficient.

**Planting**

Plant cool-season crops such as lettuce and broccoli as soon as the soil can be worked in the spring. If planted too late, high summer temperature will cause low yield and poor quality.

Do not plant warm-season crops such as beans and tomatoes until the soil has warmed. These crops grow poorly or not at all when the soil temperature is below 65 degrees F. For fall gardens, plant warm-season crops early enough to mature before the first frost.

**Seeding**

Plant seeds when the soil is moist but not wet. Soil worked when wet may crust over and prevent seedlings from breaking through.

Use a string stretched between two stakes as a guide to keep the rows straight. Vegetables planted in straight rows are less likely to be accidentally cut off during hoeing and are easier to distinguish from weeds in the seedling stage.

Use a hoe handle, narrow stick, or a similar tool to make a seeding trench along the string. Do not plant seeds too deep. Plant small seeds such as carrot, greens, radish, and lettuce ¼ to ½ inch deep. Plant medium-sized seeds such as beet and okra ½ to 1 inch deep. Plant large seeds such as bean, corn and squash 1 to 1½ inches deep (Fig. 2).

To get a good stand, plant more seeds than needed and thin the plants after they have come up to get the proper spacing. This is especially important if old seeds are used. Thin plants while they are still small to avoid damaging them. Seedlings that aren’t thinned will be crowded and will not grow and yield as well as they will with sufficient room (Fig. 3).

**Figure 2.** Plant seeds at the proper depth.

**Figure 3.** Plant more seeds than you need, then thin the plants.
Transplanting

The ideal time to transplant is as soon as the soil dries after a rain. Transplant on a cloudy day or late in the afternoon. This gives the plant time to recover from transplanting before it is exposed to the sun.

Thoroughly water the transplants before planting. Using a hoe or trowel, make holes deep enough in the row so the plants can be set slightly deeper than where they grew in the pots.

Make a starter solution by dissolving 2 tablespoons of garden fertilizer, such as 10-10-10, in 1 gallon of water. Fill the hole with the starter solution and allow it to soak into the soil.

Then remove the transplant from the pot or tray, set it in the hole, and firm the soil around the roots. Leave a dish-shaped depression around the plant to hold water. Water well to make sure the soil is in good contact with the roots.

When setting out plants growing in peat pots, cover all of the pot with soil. Peat pots exposed to the air draw moisture away from the plant roots (Fig. 4).

Hot caps or other protection may be needed to protect eggplant, pepper and tomato plants from late spring frosts. Be prepared to protect plants each time freezing weather is expected. Remove protection as soon as frost danger is past (Fig. 5).

Plants set in the garden in late summer for a fall garden will need some protection from the sun. A shingle, piece of cardboard, or similar object placed on the west side of the plant will provide shade (Fig. 6).

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This publication was revised from earlier versions written by B. Dean McCraw, former Professor and Extension Horticulturist, and Sam Cotner, Professor Emeritus and former Extension Horticulturist.

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