

10 Tips for seed starting

1 keep records to allow for better planting

Keep a record of your plant propagation at the end of the year you can evaluate what went well and what failed. The observations can help you make adjustments for the following year also keep track of where you obtained or purchased your seed from as quality and reliability may vary by source

2 Store seed properly to maintain viability

Seeds are a fragile commodity, and if not treated properly, their viability will decline. To maintain dormancy, keep seeds in a cool dark location with low humidity, like a refrigerator. Once you are ready to sow, you can test the viability of many but not all seeds by soaking them in water for a few hours. The seeds that are still living will sink to the bottom, while the dead ones will float to the surface. This test generally works better for larger seeds, but here are no absolutes.

3 Use wide, flat containers to avoid overcrowding

Plastic pots or containers are preferable to clay pots when starting seeds, as they retain moisture more consistently. Wide, shallow containers prevent overcrowding of seedlings and excessive moisture around fragile, young roots. Plants that resent root disturbance when transplanted are best sown in small individual containers. Recycled containers, like yogurt or margarine tubs work, provided you poke hole in the bottom for drainage. Containers must be clean and free from pathogens. To sanitize a container, soak it in a 10 percent bleach solution for 15 minutes and leave to air dry.

4 Tamp seeds down to make direct contact with the soil

Use a kitchen sieve to spread soilless seed starting mix evenly over the top of the seeds to a depth of two times the seed diameter. Very small seeds and those that require light to germinate should lie directly on the surface. Seeds must be in firm contact with the moist surface to begin germinating. Use a pestle or the bottom of a glass to gently tamp down the surface

5 Prevent disease by providing air flow and drainage

The fungal infection often referred to as damping off is usually caused by excessive moisture and poor air circulation. To promote good air circulation, a small fan can be placed near your seedlings. Keep the fan on low and direct it to blow across the containers at the soil level. Placing a thin layer of 50 percent milled sphagnum and 50 percent starter chicken grit [finely ground stone] over the soil to keep the soil around the emerging shoots dry and provide a inhospitable environment for pathogens.

6 Cover trays with plastic wrap to keep the moisture level constant.

Seeds are very sensitive to the extremes of overwatering and under watering. In addition heavy handed watering can disturb newly germinated seedlings. Securing plastic wrap over the surface of a freshly sown seed pot can help keep the moisture level constant. The pot should still be checked daily for moisture and germination. If the pot requires rehydration place the whole pot in a basin with 2 to 3 inches of warm water and allow the planting medium to wick moisture from the bottom. If just the surface has dried you can lift the cover and spritz the surface with water from a spray bottle. As soon as the seeds germinate, remove the plastic wrap.

7 Keep seeds warm to encourage germination

Most seeds require temperatures of 65 to 75F to germinate. Placing seed containers near an existing heater or vent can help raise the ambient temperature. Heating pads designed for plants placed directly under the seed containers can help germination. When using additional heat source, be sure to check for moisture often, as the seed containers may dry out more quickly.

***8 Turn seedlings daily to keep stems strong.**

Most seeds will not germinate without sunlight and will perform best with 12 to 16 hours each day. Indoors, place seed containers in a sunny south facing window and give the container a quarter turn each day to prevent seedlings from overreaching toward the light and developing weak, elongated stems. Also, gently brush the palm of your hand against the tops of the seedlings to encourage strong stem growth.

9 Feed them well

Proper nutrition at a consistent rate will keep your seedlings growing strong. When the embryo inside the seed is developing, it relies on food stored in the endosperm to fuel its growth. As the shoot emerges from the soil and true leaves develop, the initial nutrients supplied by the endosperm will be depleted and supplemental fertilization is then required. Most seed-starting mixes contain a small nutrient charge to help make this transition while not burning the developing roots. However, once the true leaves emerge; it is time to begin a half-strength liquid fertilizer regimen on a weekly basis.

10 Acclimate seedlings to direct sunlight.

Before seedlings can be planted outdoors, they need to be hardened off, or acclimated to direct sunlight and fluctuating temperatures. It is best to do this over a three-day period by placing them in direct sunlight during the morning only of the first day, then increasing their time outside by a few hours each day until they are vigorous enough to be transplanted.