There are many advantages to growing flowers and vegetables from seed. And the rewards of seed sowing success are sweet … so why risk disappointment? A team of Master Gardeners came together at a recent Home Gardening Seed Association gathering, and shared their tips for first-time success. To these we have added a few bits of essential advice from our own experience.

1. **Your Garden is only as Good as Your Soil**
   This is the prime tenet of gardening. Healthy soil drains well; it has adequate nutrients; and it is alive with organisms that help your plants to stay vigorous and productive. The best thing you can do for your garden is enrich the soil with organic matter—compost, grass clippings, chopped-up leaves in fall. This will feed the underground community of insects and microorganisms that is so vital to plant growth, and it will maintain the pore spaces that help your soil hold on to moisture during dry spells, and drain well after a heavy rain.

2. **Purchase Appropriate Seed from a Reliable Source**
   A successful garden begins with high quality seed that is adapted to your growing conditions. Consult seed catalogs and seed sellers’ websites for information about the numerous varieties on the market, so that you can choose wisely. Carrots, for example, can be short (best for dense soils) or long (suitable for loose, well-drained soils). Purchase seed from a reputable seed company, and save copies of your seed orders, so you can keep track of the varieties you’ve planted.

3. **Order for Fall in Spring**
   If you wait until summer to order seeds for a second planting of lettuce or beets, you may not find the varieties you prefer. Besides, the time for planting a second crop of some vegetables, broccoli for example, follows right on the heels of your spring garden.
4. **Read the Packet**

Most seed packets contain a wealth of information. They tell you when to plant, and how far apart and deeply to sow. They offer thinning instructions, harvesting tips, fertilizing advice, and sometimes even suggestions for cooking and eating. Keep the seed packets for the life of the plants, even if they’re empty. You may need that information later.

5. **Before Using Old Seed, Test It!**

There’s nothing more discouraging than planting seed that doesn’t germinate. You can use last year’s seed, and, assuming it didn’t get wet and moldy in storage, it will likely sprout. Your chances of success decline with each passing year, however. Take a few seeds and roll them up in a moist paper towel. Place the roll in an open jar in a warm spot, and check often to see if the seeds germinate. If you get less than 90% germination, sow the seeds more heavily than recommended on the seed packet. If germination is less than 50%, buy new seed.

6. **Timing is Critical**

The first warm day of spring will set gardeners into a flurry of motion. Unfortunately, the soil may still be too cold for seeds’ comfort. For every seed type there is an optimum soil temperature. If the soil is colder or hotter than ideal, the seed may still germinate, but it will take longer. Most seeds germinate most quickly when soil is in the 65° to 80°F range, although there are exceptions. Eggplant, for example, likes it warmer, and spinach prefers it cooler. You can buy an inexpensive soil thermometer to help gauge best sowing times, but an easier method is succession sowing. Fill a row of lettuce by planting a portion of it each week—this will not only ensure success, it will stretch your harvest season.

Timing your indoor seed starting is equally important. One common mistake people make is starting their seeds too early. If a packet recommends starting seeds 6 weeks before the last frost date in your area, follow this advice. You will want to get young seedlings into the ground before they get too big, to avoid stressing them.
7. Requirements for Indoor Sowing: Light, Air Circulation, and a Sterile Soilless Medium
It’s easy to get carried away in early spring, and plant hundreds of seeds indoors. Remember, though, that each of those seeds will become a seedling, with its own special needs. Whether you are relying on natural light or using fluorescent fixtures, limit your ambitions to match your available light, or you will end up with a roomful of weak, lanky seedlings.

Begin your indoor planting project by purchasing a soilless seed starting mix. There’s no need to use a fertilizer-enriched medium; young seedlings do not need the extra nutrients. When your seeds germinate, provide seedlings with good air circulation—set up a fan if you have to—to prevent damping off, the sudden collapse of new seedlings. Don’t overwater, as this will make seedlings more susceptible to diseases.

8. Thinning is Hard – but Essential
No matter how careful we are to sow seeds at their proper spacing in the garden, they frequently end up too crowded. Thinning is especially important with root vegetables, such as beets and carrots, which will not develop properly if they have to compete with close neighbors for space and nutrients. Use scissors to cut out extra seedlings until the remaining plants are spaced according to the packet’s instructions.

9. Water, But Not Too Much
Plants prefer their water to fall gently, and at regular intervals. Unfortunately, in the real world of weather, unpredictability rules. So what’s a gardener to do? Here are a few suggestions:

- Water young seedlings with a gentle spray.
- Make sure your garden has excellent drainage—plant in raised beds if necessary—so roots won’t become damaged by too much wetness.
- Check the soil moisture by poking a finger into the ground. For seedlings, you shouldn’t allow the soil to dry out more than ½ inch deep; mature plants will probably need watering when the top 2 inches are dry.
- Shallow-rooted plants, such as lettuce, should be checked every couple of days; deep-rooted plants like tomatoes can go longer.
- Use an inexpensive soaker hose to deliver water right to the roots.

10. Oh, and About Those Slugs …
Slugs love cool wet weather. Coincidentally, so do many of our favorite greens. Lettuce seedlings are particularly vulnerable, and apt to disappear overnight. The first thing to do if you suspect slugs is to go out at night with a flashlight, and inspect. Fortunately, there are safe and easy ways to prevent a slugfest: you can trap the pests by sinking shallow containers into the ground and filling them with beer, or surround susceptible plants with an abrasive material such as diatomaceous earth. But the best option for a small garden is to use a slug bait containing iron phosphate, such as Sluggo and Escar-Go. These baits cause the slugs to stop feeding and die within three to six days, and are harmless to other animals.