

Starting Vegetable Transplants for the AOG Plant Sale

Austin Organic Gardeners - By David Kraemer

Why grow your own transplants:

- Provide earlier harvest than waiting to plant outside
- Greater variety selection than available at most retail outlets
- Better control of plant placement in the garden
- Stronger and healthier than many purchased transplants
- Develop self-reliance, independence and save money
- Enjoyable indoor project during dreary winter days
- Donate extra to AOG to help support education and outreach

Selection: Select vegetables that are suitable for transplanting (e.g. no carrots, beans, peas, or radishes) and varieties that are best for our local growing conditions (e.g. tomatoes with less than 75 days to maturity).

Pots: Pots and seed trays must be sterile and have adequate drainage. 4" pots will hold 20-30 seeds and deeper pots are better than shallow because roots develop better and soil is less waterlogged and doesn't dry out as fast. Metal and clay pots and trays can be sterilized in an oven. Plastic should be cleaned with a 10% bleach solution or ½ vinegar and water. Solarizing is good also.

Light: Seedlings must have strong light as soon as they sprout. 8 hours of sunlight per day (enough to produce a shadow) or 16 hours of artificial light (cool fluorescent is good but a combination of hot and cool is better. Lights of this type should be so close, they almost touch the plants. Tubes sold as "grow lights" tend to be more expensive and aren't necessary for vegetable transplants however, there are interesting options for full spectrum T5 fluorescent tubes and screw-in bulbs.

Temperature: Tomato, pepper, eggplant, squash, cucumber, and basil sprout best between 70 and 80 degrees. Most others can tolerate cooler. This is soil temperature, not air. After sprouting, seedlings can be kept 10 to 20 degrees cooler, especially the air temp, but never below 55. Heat mats designed for plants (i.e. waterproof) are readily available and effective - they can raise the soil temperature 10-15 degrees above the ambient air temperature.

Pasteurized Planting Medium: A good quality, commercial seed starting medium can be used or you can make your own. If you make your own, soil or compost should be pasteurized as follows: spread moist medium 4" deep in a baking pan, cover with foil and bake at 200 degrees for 2 hours.

Soil based seed mix = 1/3 sterile soil, 1/3 peat (or substitute), 1/3 perlite

Soilless seed mix = ½ peat (or substitute), ¼ fine bark, ¼ perlite

It's best to moisten the medium (especially if using peat or coconut coir) before filling the pots – when you grab a handful, it should stay together but not drip.

Water: Watering from the bottom is best. Otherwise, gently spray from above. Medium must always be moist but not soggy. Cover with plastic to conserve moisture and reduce the need to water. Once the seeds sprout, remove the cover.

Transplant: Move seedlings to individual 4" pots soon after the first set of true leaves develop. Hold only by the leaves – never by the stem.

Fertilize: A good quality, diluted, organic fertilizer with an emphasis on nitrogen should be used after the true leaves appear. For example, equal parts of fish emulsion, seaweed, Hasta Grow – ½ strength.

The following timeline is a guideline for starting transplants for the plant sale assuming the sale is the first Saturday in March:

