

Starting Seeds at Home

*By Gregg Eyestone
Riley County Extension Agent, Horticulture*

SEEDING EQUIPMENT NEEDED

Light - overhead light source (fluorescent bulb shop light)

Heat Mat or Soil Heating Cable - either is recommend for best germination

Seeding medium - vermiculite, sterilized sand, peat moss or combination

Flat or Container - any will do as long as it has drainage

Seed - your favorite varieties

Transparent Cover - glass, plastic or plastic wrap

GETTING STARTED

1. First thing to consider is when do the seeds need to be planted. This depends on how fast the plants grow and when it will be safe to plant outdoors. Check seed packet for this information and hand-outs: Vegetable, Annual and Perennial Seed Sowing Dates available from the Extension office or website www.riley.ksu.edu
2. Place seeding medium into flat and leave space for watering. Moisten seeding medium before planting.
3. Plant or sow seed. Follow seeding depth on the seed packet. Rule of thumb is 2 times the diameter of the seed.
4. Moisten soil again and cover flat with the transparent cover.
5. Place over heat. 70 degrees is common, see Vegetable, Annual and Perennial Seed Sowing dates for specific temperature.
6. Put under light source. You can leave lights on constantly.
7. Keep flat moist and covered until seeds come up. Then remove the cover.

TRANSPLANTING SEEDLINGS

Seedlings are very tender plants that need gentle handling for best results. Make sure the true leaves have appeared before transplanting. (This is the second set of leaves of the young plant.)

TRANSPLANT EQUIPMENT NEEDED

Containers - plastic cells, peat pots, etc. that has drainage holes

Growing medium - any nutrient holding potting mix

Dibble stick - pencil, stick or something to loosen roots

Fan - prevent disease, strengthen seedlings

TO TRANSPLANT

1. Prick out the seedling by gently holding the leaves as you lift the root area from the seedling medium with the dibble stick. Avoid holding the plant by the stem as even the slightest pressure can damage the delicate cells that carry nutrients.
2. Place the seedling in an individual cell or pot, at the same level it was planted before.
3. Water newly transplanted seedling. Water and fertilize as needed through the growing period. Place seedlings directly under fluorescent lights.

TO HARDEN OFF

The plants will need to be exposed to conditions similar to what they will experience once they are permanently in the garden. They need warm days and cool nights to develop sturdy stems and strong root systems. The plants need to get accustomed to Kansas wind.

1. Start the hardening off process 7 to 10 days before setting the plants into the garden.
2. Set the plants out each day for increasing amounts of time. A cold frame is the ideal way to harden plants, but carrying them in and out each day works too.
3. There is no need to hold back on watering.

When the weather conditions have settled in the spring the plants can be transplanted directly into the garden. This is best done late in the afternoon or on an overcast day to spare the seedlings from the hot sun for their first few hours in the ground. Put each plant in the prepared soil of the garden or flower bed, make sure the soil is firmly around the roots to eliminate any large air pockets. Water gently with a transparent solution of water and water-soluble fertilizer mixed according to label directions. Optional: To give the newly planted plant a little extra protection, apply a thin layer of mulch over and around it. Make sure it is light enough to allow for air circulation and sunshine. As the plant grows, it will push up through the mulch.