Grow Your Own Vegetable and Flower Seedlings

James Nichnadowicz, Union County 4-H Agent

Materials
- Vegetable or flower seeds
- Sterile potting soil
- 6-ounce plastic drinking cups
- Clear plastic foam wrap
- A window with southern exposure OR a fluorescent fixture with cool white bulbs
- Waterproof marking pen
- Rubber bands

Seeds
Seeds are available from local garden centers. You can also purchase them via mail directly from seed companies. Before buying however, take a close look at your garden site. Select only those plants that will thrive there. For help in selecting plants to grow, contact the Rutgers Cooperative Extension office in your county.

Potting Mix
Use a well-drained artificial soil mix consisting of peat moss, vermiculite, and perlite. This mix is also available at local garden centers.

Containers
To avoid overwatering your seedlings, start them in small containers. A 6-ounce plastic, not waxed paper, drinking cup works well. Be certain, however, that it has drainage holes in the bottom. If not, make several small holes in the bottom of each cup with a sharp instrument.

Sowing Seeds
1. Label containers--date and plant name--with a waterproof pen.
2. Fill a 6-ounce container with soil mix.
3. Using warm water, soak the pots until water runs through drainage holes.
4. Place four (4) seeds on the soil surface of each pot.
5. Cover seeds with 1/4-inch of artificial soil mix.

6. **Tamp** the soil lightly. This brings the seed in close contact with the soil.

7. Set the bottom of the pot in *warm* water. The water should not be above the rim of the pot. Water will move into the soil mix through the drainage holes. When the surface of the soil appears wet, pots should be removed.

8. Cover pots with clear plastic and secure with rubber bands. (Remove the plastic as soon as seeds sprout).

9. Place pots in a *warm* location (70 to 75°F.) -- the top of a hot water heater is a good location.

10. Keep the soil damp at all times. If necessary, water again from the bottom. (See step #7).

**Care After Germination**

1. Remove plastic coverings as soon as seeds sprout. Be patient! You can find out how long it takes for the seeds to sprout by reading instructions on the seed package.

2. Move plants under **fluorescent** lights or to a window that receives full sun most of the day. **NOTE:** fluorescent lights should be 4 to 8 inches above the plants and left on 14 to 18 hours per day. (The cost of power for lights is minimal). Also the temperature in this area should be above 65°F. at all times.

3. Water plants thoroughly with a solution of water and **houseplant fertilizer** whenever the soil surface feels dry to the touch.

   When each plant has four leaves, pull out of the soil all but the healthiest plant.

4. Your seedlings are large enough to transplant outdoors when their roots have filled the pot in which they are growing. This happens 6 to 8 weeks after you have planted the seeds. Check instructions on the seed package for more details.

**Planting Outdoors**

Before planting your seedlings outdoors they need to become acclimated. They’ve led a pampered life in your home. You’ve protected them from the drying wind, scorching sun, and cold night air. Allow a week for seedlings to become adjusted to the outdoors. Each day, place them outside in a sunny spot for a few hours. Gradually increase the length of time outside. By the end of the week leave them outdoors overnight. After 1 week of this procedure, the seedlings will have adjusted to the outside world. They are now ready for outdoor planting.

- **Illustrations by Lynne Ziobro**
  
  Master Gardener, Union County

© 2004 by Rutgers Cooperative Research & Extension, NJAES, Rutgers, The State University of New Jersey.

Published: May 1991

RUTGERS COOPERATIVE RESEARCH & EXTENSION
N.J. AGRICULTURAL EXPERIMENT STATION
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
NEW BRUNSWICK

Distributed in cooperation with U.S. Department of Agriculture in furtherance of the Acts of Congress on May 8 and June 30, 1914. Rutgers Cooperative Extension works in agriculture, family and community health sciences, and 4-H youth development. Dr. Karyn Malinowski, Director of Extension. Rutgers Cooperative Research & Extension provides information and educational services to all people without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Rutgers Cooperative Research & Extension is an Equal Opportunity Program Provider and Employer.