Bronx Green-Up • THE NEW YORK BOTANICAL GARDEN



Bronx Green-Up, the community gardening outreach program of The New York Botanical Garden, provides horticultural advice, technical assistance, and training to local gardeners, urban farmers, school groups, and other organizations interested in improving neighborhoods through greening projects. At the heart of Bronx Green-Up are the community gardens, school gardens, and urban farms of the Bronx. For additional information, contact Bronx Green-Up at 718.817.8026 or bronxgreenup@nybg.org, or visit www.nybg.org/green_up

Seed Saving

The ancient practice of seed saving dates to the Stone Age. As our ancestors transitioned from hunting and gathering to farming, they would select seeds for replanting the following season. For today's gardener, seed saving:

- Saves money
- Produces plants that have adapted over time to local conditions
- Preserves varieties that are part of human history
- Builds self-reliance by providing a choice of what is grown and eaten

Harvesting Seeds

- Seeds embedded in the flesh of fruits and vegetables are usually collected in plastic buckets, deli containers, or bowls.
- Seed pods are best collected in baskets, which allow better air circulation for further drying. Paper bags, feed sacks, and cardboard boxes can also be used.

Three Ways to Clean Seeds

Wet Process: Used for seeds found in the flesh of fruits or vegetables such as muskmelons, watermelons, squashes, and eggplants

- 1. Cut open the fruit or vegetable and remove the seeds.
- 2. Wash the seeds. Place the seeds with pulp in a large bowl or bucket. Add twice as much water as the seed/pulp mix and stir vigorously. Good, productive seeds are more dense and will sink to the bottom, whereas seeds of poor quality tend to float. Pour off the floating seeds and debris and add more water. Repeat the process until only clean seeds are left. Then pour them into a strainer and wash under running water.
- 3. Dry the seeds. Wipe the bottom of the strainer to remove as much moisture as possible. Thinly spread the seeds onto a glass or ceramic dish, cookie sheet, window screen, or sheet of plywood. Do not dry on paper or flexible plastic as the seeds may stick. It is important to dry seeds as quickly as possible, because warm, wet seeds will start to germinate or become moldy. Stir the seeds several times a day. Damage can occur if the temperature of the seeds gets above 96°F, so never dry seeds in an oven.

Dry Process: Used for plants that produce seeds in pods or husks such as beans, peas, leeks, and radishes

- 1. Allow the pods to dry on the plant (preferably), and harvest them individually.
- 2. Another option (especially if a frost is imminent) is to pull out the whole plant with its seed pods, and hang the plant to dry. As the plant dies, the seeds continue to mature and gain strength.
- 3. Remove the seeds from their coverings (a process called threshing): Put the seed pods in a burlap sack or pillowcase and shake it so that the pods crack open. For smaller seeds, mash the pods between two boards, being careful not to rub too hard, which can cause the seeds to split or break.

Fermentation Process: Similar to the wet process; used for the seeds of fruits and vegetables such as melons, tomatoes, and cucumbers

- 1. Remove the seeds and mix them with enough water to cover by about an inch. If the seeds and water are mixed with some of the flesh of the fruit or vegetable, that's fine.
- 2. Allow the seeds to ferment for a day or two.
- 3. When a layer of white or gray mold has formed on top of the water—this mold breaks down inhibitors to germination such as the gel sac around tomato seeds—the fermentation is complete. Add more water, swish it around, and pour off the mold and pulp. The viable seeds should sink to the bottom (bad seeds will float).
- 4. Set seeds on a plate or screen to dry thoroughly.

Seed Storage

After the seeds have dried thoroughly, they must be stored properly—in airtight containers to keep them dry and maintain their vigor (their ability to germinate rapidly and with good resistance to disease).

Moisture and high temperatures (greater than 96°F) are the enemies of stored seeds. Glass and metal are the only containers completely moisture proof. Baby food jars (with a good rubber seal) and canning jars work well.

Store airtight containers in a cool, dark, dry place. Locations at floor level will be cooler than those near the ceiling.

Label the seeds. Multiple packets of seeds can be put in plastic bags or envelopes then placed in airtight containers.

Seeds of all species can be stored for many years with almost no loss of germination and minimal loss of vigor when sealed in an airtight container and frozen. However, the seeds *must be dry*—moisture expands when frozen and breaks down cell walls.

Record Keeping

Gardeners who collect their own seeds from what they grow need to keep good records of seed sources and plant characteristics. An easy way to do this is with an index-card file.

Each card should include:

- 1. type of plant
- 2. variety name (for example, purple bush bean)
- 3. name and address of the source of the seeds
- 4. date the seeds were collected or obtained
- 5. date the seeds were stored
- 6. year the plant was last grown
- 7. history or cultural notes

Growing information is also helpful to document: days to maturity, grown from seed or transplant, diseases or pest problems, flavor and appearance.

Resources for Seed Savers

Seed Savers Exchange

A non-profit organization of gardeners dedicated to saving and sharing heirloom seeds.

Membership is required. 9076 North Winn Road Decorah, IA 52101

Phone: (563) 382-5990 and Fax: (563) 382-5872

http://www.seedsavers.org

Seed to Seed: Seed Saving and Growing Techniques for Vegetable Gardeners

By Suzanne Ashworth Seed Saver Publications, Decorah, IA, 2002