



DOWLING COMMUNITY GARDEN

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Saving Seeds

Why save your own seeds?

Each season, fewer varieties of previously available seeds are offered by seed companies. Vegetables are being developed that store and ship well, but may not taste as flavorful as older varieties. A flower or vegetable that grows well in your area may not be available through seed companies who market a few varieties that grow in a wide range of conditions. There may be a variety of interest to your family: seeds brought to the U.S. by immigrants, or plants with cultural significance that have been grown for generations.

Dowling Community Garden is part of the world-wide community of seed savers helping to preserve our culinary and cultural heritage. Each year, selected seeds of heirloom vegetables and flowers are saved and offered to Dowling gardeners, and made available internationally through Seed Savers Exchange and Seeds Diversity of Canada.

References

Ashworth, Suzanne. *Seed to Seed: Seed Saving and Growing Techniques for Vegetable Gardeners*. Seed Savers Exchange, 2002.

Apple, Heather. *How to Save Your Own Vegetable Seeds*. Seeds of Diversity Canada, 1999.

"OG Solutions". *Organic Gardening*, August/September 2005, p20-21.

Useful web sites

Seed Savers Exchange
www.seedsavers.org

Seeds of Diversity Canada
www.seeds.ca

International Seed Saving Institute
www.seedsave.org/iss/iss_904.html

Introduction to Seed Saving

When saving seeds of vegetables or flowers, make sure your varieties are labeled "open pollinated" or "heirloom"; hybrid (sometimes labelled "F1") seeds will not produce offspring identical to their parents. You want to select the most attractive and healthiest specimens from which to collect seeds. Save seeds from more than one plant to maintain genetic diversity.

About Pollination Some plants are self-pollinating; pollen will transfer from the male to the female part of the flower without help from insects or wind (beans, eggplant, lettuce, peas, peppers, tomatoes). Other plants require insects to pollinate the flowers (broccoli, cukes, melons, spinach, squash, sunflowers). Insects can cause plants to cross-pollinate with different varieties, or with certain weeds, resulting in seeds that will not produce fruits or flowers identical to the original.

It's important to isolate the crops you want to save seeds from so that you will be sure to get seeds that will grow out to be just like their parents. Plants may be isolated by distance or by placing barriers around plants or flower clusters.

Insect Barriers To prevent insects from cross-pollinating your crops, you may need to cover plants with cages made from row cover material or fine mesh screen. Another technique is to place a small bag made of row cover material or mesh fabric over the flower cluster before it opens. Once fruit has begun to form, remove the bag, mark those specific fruits along the stem with colored string and save seeds from only those fruits.

Saving Seeds of Specific Plants

BEANS. Different kinds of beans won't cross with each other (green beans and soy, for example), but varieties of the same type of bean can easily become crossed by insects. Keep plantings of bean varieties separated by at least these distances:

Common beans At least 20 feet

Fava and Lima beans 1 mile

Garbanzo and Runner beans 1/2 mile

Lentils, Mung and Soy beans 10 feet

Let pods dry on the plants as long as possible. Finish drying process indoors, and discard any moldy seeds.

BROCCOLI. Broccoli will cross with any member of the cabbage family within 1/2 mile. Grow only one variety each year for seed, and make sure no other cabbage family plants are allowed to flower. Let seed pods dry on plant.

CABBAGE FAMILY. Vegetables like cabbages, cauliflower, Brussels sprouts, kale and kohlrabi require two seasons to produce seeds. In a cold climate, they will not over-winter in the ground; the vegetables must be carefully dug in the fall and over-wintered in a cold and moist root cellar to be planted again in the spring. See reference materials for detailed instructions.

Saving Seeds continued

WHERE TO LOCATE SEED-SAVING SUPPLIES

Bags to cover blossoms:

www.save-on-crafts.com/sachetbags.html

General supplies:

www.gardenmedicinals.com/pages/supplies.html#SILICAGEL

www.bountifulgardens.org/products.asp?dept=11

www.southernexposure.com/productlist/SUPP.html

Seed envelopes:

www.seedsavers.org/Items.aspx?hierId=61

Check office supply stores for coin envelopes

SEED VIABILITY

How many years seeds will last and still sprout depends on the variety and the conditions under which seed is stored. Many older seeds will still sprout, the germination rate will just be greatly reduced.

Beans	3
Beets	4
Broccoli	5
Brussels Sprouts	5
Cabbage	5
Carrot	3
Cauliflower	5
Celery	5
Chinese Cabbage	5
Collards	5
Corn	2
Cucumber	5
Eggplant	5
Fennel	4
Kale	5
Kohlrabi	5
Leek	2-3
Lettuce	5
Muskmelon	5
Okra	2
Onion	1
Parsley	1-2
Parsnip	1
Pea	3
Pepper	2-4
Pumpkin	4
Radish	5
Rutabaga	5
Spinach	5
Squash	5
Swiss Chard	4
Tomato	4-5
Hybrid Tomato	2-4
Turnip	5
Watermelon	4

Asian cabbages may set seed in the same year they're grown. Follow instructions for broccoli, or isolate small plants with mesh bags or screened enclosures.

CUCUMBERS, SQUASHES AND MELONS. These will cross with any other varieties grown within 1/2 mile. Plants must be hand-pollinated and blossoms isolated. See detailed instructions in reference materials.

EGGPLANT. Separate varieties by 50 feet, or cover plants or flowers. Let fruit stay on plant until very mature. Remove seeds and separate from pulp by placing in a container of water and working the pulp with your fingers; seeds should sink to the bottom. Drain well and spread out to dry.

LETTUCE. Separate varieties by 12-25 feet, and remove the weed Wild or Prickly Lettuce which will cross with garden lettuce. Flower heads may also be covered with a mesh bag before flowers open. Allow flower heads to mature and become fluffy-looking; shake seed into a paper bag and dry indoors.

OKRA. Separate varieties by 1 mile, or cover plants or flowers. Let pods dry on plants.

PEAS. Separate varieties by 50-300 feet. Let pods dry on plants.

PEPPERS. Insects will easily cross-pollinate, so separate varieties by 500 feet or cover plants. Allow peppers to fully ripen to their final color and become a little soft. Remove seeds and dry indoors.

RADISHES. Radishes will cross with each other, turnips, rutabagas, Chinese cabbage and mustard; separate varieties by 1/4 mile. Grow only one variety each year for seed, and make sure no other plants are allowed to flower. Let seed pods dry on plant.

ROOT CROPS. Vegetables like carrots, beets, onions and leeks, turnips and parsnips produce seeds the second year. In a cold climate, they will not usually over-winter in the ground; the vegetables must be carefully dug in the fall and over-wintered in a cold and moist root cellar to be planted again in the spring. See reference materials for detailed instructions.

SUNFLOWERS. Separate varieties by 1/4 mile. Cover maturing seed heads with paper bags to protect seeds from birds.

TOMATOES. See Dowling Community Garden's publication "Saving Tomato Seeds" for more information (available for download on the web site).

Drying and Storing Seeds

MAKE SURE THEY ARE VERY DRY. Seeds must be well dried before storing. Dry seeds in a dark and warm (not hot) location with good air circulation for a few weeks. You may also use silica gel (a desiccant) to absorb seed moisture: put seeds in a paper or cloth bag and weigh them; put package of seeds and an equal weight of silica gel in a glass jar with a tight fitting lid and leave for 7-8 days. Test seeds for dryness before storing; they should be very brittle.

STORAGE. Store dry seeds in an air-tight container and place in a cool, dark, dry place. Seeds may be stored in a refrigerator or freezer, or an unheated basement. Seeds will remain viable longer if they are not exposed to fluctuating temperatures, humidity or light. If storing seeds in the freezer or refrigerator, allow the jar to come to room temperature before opening, so that moisture will not condense on your dry seeds.

LABELING. Make sure you label saved seeds with the variety name, year seed was saved, seed source, and any other notes about your experience (disease resistance, yield, taste, days to maturity, etc.).