

Saving seed

Saving your own vegetable seed can be a very satisfying activity. It offers a sense of self-sufficiency and saves money. You can also maintain a cultivar that is not available commercially, which helps to perpetuate a broad genetic base of plant materials.

Precautions

There are certain considerations to be kept in mind when saving seed, however. Seedlings from hybrid cultivars are not likely to be the same as the parent plants, so only open-pollinated cultivars should be used at home for saving seed. The term 'open-pollinated' refers to vegetables that reproduce themselves either by cross-pollination between two plants (via wind, insects or water) or self-pollination (between male and female flower parts on the same plant). Beets, brassicas, carrots, corn, and squash are cross-pollinated, and so require isolation in the field to keep varieties true. Lettuce, beans, peas and tomatoes are self-pollinated and do not require isolation, and are the easiest for novice seeders.

Some seed dealers have responded to the increasing interest in seed saving by clearly marking open-pollinated cultivars in their catalogues.

Another consideration in saving seed is the possibility of carrying seed-borne diseases into the next year's crop. Many commercially grown seeds are grown in dry areas unsuitable to fungal, viral, and bacterial diseases that may be present in your region. Take care to control diseases that can be carried in seed. Another weather-related factor is the speed of drying seeds, which can be adversely affected by frequent rains and/or humidity.

Records and labels

When you save or exchange seeds it is important to keep accurate records. Write down the plant name, origin, year when seeds were collected, seeding dates, number of days to maturity, and any other specific features (disease resistance, yield, etc.).

Drying and storing

Harvested seeds need to be dried in a warm, well-ventilated area. You can use a heated surface or fan to speed drying, but keep the temperature below 45°C. Seeds can also be dried with silica gel. Put seeds in an envelope and weigh them. Put envelopes and an equal weight of silica gel in an airtight container. Leave seeds in the container for up to one week (excessive drying may damage the seed). To check if a seed is dry, try to bend it: if it splits or bursts it's ready to store.



Mason jars make good air-tight containers for storing seed in humid environments.
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Store dried seeds in a cool, dry spot away from light. Seeds can also be stored in envelopes but in humid environments, store in air-tight containers. Seeds will remain viable for some years (see Table 1 in 'Buying seeds and plants' for the average number of years various seed can be saved). To test for germination, sprout seeds between moist paper towels. If germination is low, either discard the seed or plant enough extra to give the desired number of plants.



Some seed saving procedures

LETTUCE:

Lettuce is self-pollinating so different cultivars can be grown fairly close together. However, cross-breeding may occur if there are many pollinating insects in your garden and a separation of 4 to 8 m (12 to 25 feet) is recommended to be sure. Cut off seed stalks when fluffy in appearance, just before all the seeds are completely dried. Seeds will fall off the stalk and be lost if allowed to mature on the plant. Place the stalk in a paper bag until completely dry then shake seeds off.

BEANS AND PEAS:

Beans and peas are usually self-pollinating, but again, cross-pollination may occur. Recommended isolation distances are 6 m (20 feet) for beans and 15 m (50 feet) for peas. Allow seed pods to turn brown on the plant. Harvest pods, dry for one to two weeks, shell, and then store. If bean weevil is a problem in your area, put dried seed in a sealed container in the freezer for two days to kill any eggs under the seed coat.

HERBS:

Herbs vary in the way their seeds are produced. In general, allow herb seeds to stay on the plants until they are almost completely dry. Some seed heads, such as dill, will shatter and drop their seeds as soon as they are dry. Watch the early ripening seeds: if they tend to fall off, harvest the other seed heads before they get to that point, leaving several centimeters of stem attached. Hang several stems upside down, covered with a paper bag to catch falling seed, in a warm, dry place until the drying is complete. Remove seeds from the seed heads, and store in envelopes or small glass jars. Some herb seeds (dill, celery, anise, cumin, coriander, and others) are used for flavoring and are ready to use once dry.

TOMATOES:

An isolation distance of 5 m (16 feet) is sufficient for tomatoes. Pick fruit from desirable plants when fully ripe. Cut fruit and squeeze out pulp into a container. Add a little water, and then let ferment two to four days at room temperature, stirring occasionally. Good seed sinks to the bottom. When seeds settle out, pour off the pulp, wash seeds thoroughly, and spread them out to dry.



Use ripe tomatoes and make sure seeds are completely dry before storing. © Desiree Jans, Dalhousie.



Activity 1

Save some tomato seeds.

For a wintertime activity, practice extracting and drying seeds from store-bought tomatoes (unfortunately you will not know the name of the tomato variety or if it is suitable for your garden). Look for fully ripe tomatoes and follow the directions above for extracting the seed. Test the dried seed for germination by placing it between moist paper towels for a few days.

Activity 2

Visit a seed exchange.

Find out if there are any seed exchanges planned for your area. They usually take place in late winter or very early spring. Get advice from seasoned seed savers - and maybe a few samples of saved seed too! Check out the Seeds of Diversity Canada website at www.seeds.ca for more information on seed saving and seed exchanges.

