Seed Saving

How to Save Vegetable Seeds

Why Save Seeds?

With the recent increase in industrial agriculture many old varieties of seeds have disappeared. In the past four years, over 950 food plant varieties have become "extinct" as small seed companies go out of business and farmers increasingly purchase seed from a limited number of large distributors. Many of the remaining varieties are endangered. Just as biodiversity is important for the health of the global environment, so is food plant diversity. Having many varieties suited to local environments ensures that if drought, disease or pest problems strike, some plants will be resistant, and we will be able to continue using them to feed our population.

Back yard and community gardeners, and small farmers, play an important role in preserving our food plant diversity. These growers often choose unique and unusual plants that are not readily available on the supermarket shelves. Valuing the interesting look, flavour and history of these varieties, saving the seeds and sharing them with other gardeners, these growers are part of a global network of people committed to preserving genetic diversity. We encourage you to become part of this network.

Before Getting Started

- Save open-pollinated or non-hybrid varieties only.
- Only save seed from the healthiest plants.
- Do not save seeds from greens that bolt quickly.
- Separate varieties or only grow one variety of the same vegetable in order to ensure genetic purity. For example, brandywine tomatoes can cross with roma tomatoes and should not be grown together if you pan to save the seed. The distance needed between varieties of the same species is known as isolation distance. The isolation distances for specific plants are indicated in the following seed saving instructions.
- If you want to save seeds from two varieties that require isolation, you can also use a barrier to ensure genetic purity. Barriers are usually structures made of wood and screen that are placed over the plant. When the flowers appear, you will need to pollinate by hand, taking pollen from one flower to another on the isolated plant.
- Because seeds are living, but in a dormant state, it is important to keep them in a coo dry place, away from the light. If the seed has been properly dried, it can be kept in the freezer or refrigerator.
- It is important to keep good records of your seeds. Label each seed package with the variety's name, origin, date of planting, days to maturity, disease resistance, yield and special

characteristics.

How to Save Seeds from Self-Pollinating Vegetables

If vegetable flowers contain both male and female parts, pollination without the help of insects or wind is possible. This is called self-pollination. Insects and wind, however, can cause cross-pollination between different varieties of the same type of vegetable if they are located close to each other in the garden.

Beans Different kinds of beans will not cross with each other. For example, runner beans will not cross with garbanzos and bush beans will not cross with fava bean. But, different varieties of the same kind of bean will cross with each other. In this case, isolation distances become important. To harvest seeds, let the pods dry out and leaves die down. Pull out the plants and put them in a cool dry place to finish drying. Isolation Distance: Different kinds of beans have different isolation distances. Bush bean varieties must be separated by 20 feet.

Lettuce Let your lettuce plant go to seed or bolt. As the seed matures it will have a feathery appearance. Harvest seeds continuously over a period of a month or so. Shake seeds into a paper bag and let them dry in a cool dark place. Isolation Distance: Separate varieties by 12-25 feet.

Peppers Let pepper fruits ripen fully. When they are slightly over ripe, and a little bit soft, harvest the fruit and remove the seeds. Let the seeds fully dry. In dry climates, whole pepper fruits can be dried and the seeds can be stored in the dried fruit. Isolation Distance: Separate varieties by 500 feet or provide a barrier.

Tomatoes Let the tomato fruit over-ripen slightly on the vine. Cut the tomato in half, scoop out the seeds and leave them for several days in a warm place. A mould will begin to grow over the top of the seeds. This fungus is beneficial since it eats the gelatinous coat surrounding the seeds, destroying germination inhibitors and seed borne diseases. After the seed has become mouldy, empty the container into a strainer and rinse. The pulp should rinse off, and the seeds should become clean. When seeds are clean, put them onto paper towel or newspaper to dry. Isolation Distance: 25 feet for modern varieties, 50-75 feet for cherry and older varieties.

How to Save Seeds from Cross-Pollinating Vegetables

Cross-pollinating plants require insects, wind or humans to carry pollen from one flower to another. In order for pollination to occur, several plants of the same variety are necessary. TO keep one variety from crossing with another, isolation or barriers are necessary.

Chinese Cabbage (Pac Choi, Pe Tsai, Oriental Mustards) Isolate the variety that you want to save seed from, or only allow one variety to go to flower. Let the flower head develop, and when the seed pods have turned brown and dry, cut the plant and put in a cool, dry place. When the seed pods have dried, put them in a pillow case or plastic bad and beat them until the seeds are loose.

Cucurbits Cucumbers, gourds, melons, squash and pumpkins easily cross-pollinate within the same species. This makes seed saving tricky if more than one variety within the same species is being grown. However, plants from different species can be grown together, without risk of cross-pollination. For example, you can grow one variety of cucumber, one variety of squash and one variety of melon and save the seeds from all the fruit. If you want to save seeds form

varieties within the same species, consult the seed saving resources mentioned below.

Seed Saving Resources Used To Prepare this information

Seeds of Diversity Canada. How to save your own vegetable seeds. 1999 Available from Seeds of Diversity Canada, P.O. Box 36, Station Q, Toronto, Ontario, M4T 2L7

Nancy Bubel. The seed saver's handbook. Rodale Press, 1988.