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# Saving Vegetables Seeds: Tomatoes, Peppers, Peas and Beans

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You can save vegetable seeds from your garden produce to plant next year. Seed saving involves selecting suitable plants from which to save seed, harvesting seeds at the right time, and storing them properly over the winter.

## *Plant Selection*

Tomatoes, peppers, beans and peas are good choices for seed saving. These plants have flowers that are self-pollinating, and seeds that require little or no special treatment before storage. Seeds from biennial crops such as carrots or beets are harder to save, since the plants need two growing seasons to set seed.

Plants with separate male and female flowers, like corn and vine crops, may cross-pollinate, so it is difficult to keep the seed strain pure. A stand of sweet corn can be pollinated by popcorn from a nearby garden on a windy day. The flavor of the current sweet corn crop will be affected, and a crop grown from these seeds will be neither good sweet corn nor good popcorn.

Cucumbers, melons, squash, pumpkins, and gourds can all be cross-pollinated by insects. Although the quality of the current crop will not be affected, seeds from such a cross will grow into vines with fruit unlike that of the parent plant--often inferior in flavor and other characteristics.

When saving seed, chose open-pollinated varieties rather than hybrids. If open-pollinated varieties self-pollinate or are cross-pollinated by other plants of the same variety, they set seed which grows into plants that are still very similar to the parent plant, bearing similar fruit and setting seeds that will produce more similar plants. Open-pollinated varieties may be "heirlooms," varieties that have been passed down from one generation of gardeners to the next, or they may be more recent selections.

Hybrid vegetable plants are products of crosses between two different varieties, combining traits of the parent plants. Sometimes a combination is particularly good, producing plants with outstanding vigor, disease resistance, and productivity. Hybrid seeds are generally more expensive as they cost more to produce.

Hybrid plants, such as 'Big Boy', 'Beefmaster' and 'Early Girl' tomatoes will produce viable seed. Plants grown from that seed, however, will not be just like the hybrid parents; instead, they will be a completely new combination of the good and bad traits of the plants that were initially crossed. It's impossible to predict just how the seedling plant will perform or what qualities the fruit will have.

Some tomato varieties are not hybrids; instead they are open-pollinated types such as 'Big Rainbow', 'San Marzano' and 'Brandywine'. Seed produced by these varieties will grow into plants very similar to the parent plants, with nearly identical fruit. Likewise, 'Habanero', 'California Wonder' and 'Corno di Toro' peppers; 'Lincoln', 'Little Marvel' and 'Perfection' peas; and 'Kentucky Wonder', 'Blue Lake' and 'Tendercrop' beans are all open-pollinated varieties that will come true from seed.

Once you have planted an open-pollinated crop, select the plants from which you want to save seed. Choose only the most vigorous plants with the best-tasting fruit as parents for the next year's crop. Do not save seed from weak or off-type plants.

## *Harvesting Seed*

Saving tomato seeds is easy. Allow fruits to ripen fully and scoop out the seeds, along with the gel surrounding them, before you eat or cook the tomatoes. Put the seeds and gel in a glass jar with some water. Stir or swirl the mixture twice a day. The mixture will ferment and the seeds should sink to the bottom within five days. Pour off the liquid, rinse the seeds and spread them out to dry on paper towels.

Saving pepper seeds is even easier. Allow some fruits to stay on the plants until they become fully ripe and start to wrinkle. Remove the seeds from the peppers and spread them out to dry.

Save pea and bean seeds by allowing the pods to ripen on the plants until they're dry and starting to turn brown, with the seeds rattling inside. This may be as long as a month after you would normally harvest the peas or beans to eat. Strip the pods from the plants and spread them out to dry indoors. They should dry at least two weeks before shelling, or you can leave the seeds in the pods until planting time.

## *Storage*

Store seeds in tightly-sealed glass containers. You can store different kinds of seeds, each in individual paper packets, together in a large container. Keep seeds dry and cool. A temperature between 32° and 41°F is ideal, so your refrigerator can be a good place to store seeds.

A small amount of silica-gel desiccant added to each container will absorb moisture from the air and help keep the seeds dry. Silica gel is sold in bulk for drying flowers at craft supply stores. Powdered milk can also be used as a desiccant. Use one to two tablespoons of milk powder from a freshly opened package. Wrap the powder in a piece of cheesecloth or a facial tissue and place it in the container with the seeds. Powdered milk will absorb excess moisture from the air for about six months.

*Figure 1. Peppers and Tomatoes showing seeds. Michelle Grabowski*

Be sure to label your saved seeds with their name, variety, and the date you collected them. It's too easy to forget the details by the following spring.

*Reviewed by Cindy Tong, Extension Post-Harvest Horticulturist, University of Minnesota Extension, 1-08 and Vince Fritz, Extension Horticulturist – Vegetables, University of Minnesota Extension 1-08*