



SEED SAVING STEPS SECURE SATISFYING SEQUELS

Grow those same delicious vegetables next year!

Mae Smith

Did a friend give you tomato seeds that grew the best heirloom tomatoes you have ever eaten? Saving the seeds enables having those delicious tomatoes again next year.

Saving seed can be fairly easy or quite complicated depending on the plant. As a beginner, easy vegetables to start with are bean, lettuce, pea, eggplant, pepper, and tomato. Once the art of seed saving is mastered, you will be a pro at the more difficult vegetables like beets, broccoli, and cabbage, or even wildflowers, grasses, nuts, and trees.

Demystifying Seed Saving

Decide what seeds to save for next year and get to know the plant a little. You'll need to know if the plant is a hybrid, if it self-pollinates, is an annual or biennial, or if the seeds come in fleshy fruits, pods, or heads.

Hybrid seeds should not be saved because they will not exhibit the same traits as the parent. Check the label for "F1 Hybrid." Crosspollination can be a big problem when trying to save seeds that will produce a plant with characteristics of a particular variety. Wind-pollinated plants need as much as 1 mile of separation between varieties, while insect-pollinated plants require ¼ mile or the resulting plants will have mixed traits.

Self-pollinated plants are easiest because they require no separation and will have the same traits year after year. Most of the "easy" plants above are self-pollinating. Special measures such as bagging and hand-pollination can be taken if varieties are closer than recommended.

Collecting seed from biennial plants is much more difficult. Biennials require two years before producing seed. Plants must be left in the ground or dug, stored, and replanted in the spring and will produce seed that second year. Some of these vegetables include cabbage, kale, Swiss chard, and root vegetables.

The Process

There are probably characteristics you like best about the particular varieties you've selected to save, such as disease and pest resistance, large fruits, early fruiting, bright color, or flavor. Pick the fruits, and therefore the seeds, that exhibit those characteristics. If you want spinach that bolts later, don't collect seeds from the first plant to bolt. The plants on which you are going to let seeds mature will produce less fruit because of the resources used for the ripening. For leafy greens, limit the harvest on plants you want to use for seed.

Seeds are harvested when mature, which is usually after the point



of being too ripe for eating.

- Pod crops are left on the vine until the pod dries and seeds turn brown.
- Squash is left on the vine until the skin is hard and then allowed another several weeks for seed ripening.
- Tomatoes and peppers should be allowed to fully ripen on the vine and harvested before rotting.

Collect the seeds before they disperse or are eaten by birds or other animals. If the seed is not quite mature but in danger of being eaten or dispersing, the whole plant or stalk can be collected and allowed to dry until the seeds mature.

After Harvesting

Clean seeds after harvesting. Bigger seeds are usually better and produce the most vigorous seedlings. For dry seeds, separate the seeds from the chaff, hulls, and other impurities. Separating seeds from fleshy fruits, such as tomato and cucumber,

After you've saved those seeds ... see "Starting plants from seed indoors – the basics" in the Winter 2014 Barnyards & Backyards magazine.

is more difficult. Cut the fruit in half and scoop out the seeds. Place the seeds and an equal amount of water in an uncovered container out of direct sunlight for three to six days. Stir this mixture twice a day and change the water as needed to prevent fungal growth. The fruit material will ferment, and the viable seeds will sink to the bottom.

Alternatively, remove as much pulp as possible and rinse the seeds in a strainer. The germination will be lower because non-viable seeds have not been removed.

Seed Storage

Moisture is the biggest enemy in seed storage. Seeds need to be

dried to between 5-8 percent moisture content (some seeds need a higher moisture content and require special handling). Drying is usually not a problem in Wyoming's dry climate. Spread the seeds on paper towels or a screen to dry or place in a paper envelope such as a coin envelope. In Wyoming's climate, seeds can usually be stored in the paper envelopes in a dry, cool, and dark place. Placing the envelopes in a plastic freezer bag or an airtight jar will ensure they do not rehydrate.

In a more humid climate, silica gel can keep seeds dry. For longer term storage, seeds contained in plastic freezer bags can be placed in the refrigerator or freezer. Some seeds store and remain viable for longer periods. Make sure to label the seeds, including variety date and other notes – don't let your hard work be wasted.

Seed Testing

Come planting time, you may want to test germination rates to see how well the seeds fared in storage. Place 100 small seeds or 25 large seeds on a paper towel. Roll it up like a jelly roll, moisten the towel, and wring out excess water. Place in a plastic bag in a warm place out of direct sunlight. After a week, unroll and count the germinated seeds. Planting rates (and amount of seed collected next year) may need adjusted if germination rates are low.

Saving seeds is an ancient art that has, for the most part, been replaced by the commercial seed industry; however, seed saving can be very rewarding, allowing gardeners to cultivate the best crops and express some creativity in the selections.

We're not sure if Mae Smith ate her vegetables while growing up, but we're pretty sure of her vegetable growing skills. She is the University of Wyoming Extension educator based in Big Horn County but also serving Fremont, Hot Springs, Park, and Washakie counties and the Wind River Reservation. She can be reached at (307) 765-2868 or maep@uwyo.edu.