

Seed Saving

Saving seeds is an expansive topic that many home gardeners have yet to attempt. Although the specifics on saving seeds is highly dependent on the plant, there are many general rules that can help the beginning seed saver.

Seed Scouting

Seeds found “in the wild”: A common misconception many people have is that collecting seeds from nature isn’t harmful. While this may be true for relatively small amounts of collecting, it is much safer to avoid taking anything with you when you leave a park, trail, field or forest. You may collect only a few seeds but if every person did that there would be no seeds left to repopulate the species or feed wildlife. The best advice when venturing outdoors is to “take nothing but photographs and leave nothing but footprints.” I’m not sure who coined this catchy phrase but it’s a good lesson about the importance of allowing ecosystems to care for themselves.

Seeds from public gardens: Seeds found on plants in community gardens, botanic gardens or parks should not be taken without the garden owner’s permission. The gardens may be counting on saving seeds themselves or the plants they have may be patented. A much better option is to contact the garden and ask what the plant is (if it isn’t labeled) and where they purchased it. In some cases, this may lead to the garden allowing you to take a division when the plant becomes overgrown.

Seeds from the gardens of friends: Friends and family can be an excellent source of seeds if they are willing. A fun way to mix up the plants you have is to find a few friends with beautiful gardens and have a seed swapping or perennial division day. This allows you to start plants with more variety than what you can grow in your own space.

Seeds from your garden: Collecting seeds from your garden is the safest option, but there are still factors to consider. You want to make sure you’re growing enough types of one plant to provide genetic diversity. The home gardener should also pay careful attention to the plants year-round to scout for the most desirable traits—then collect seeds from these plants.

Botany of Seeds

To fully understand and have success with seed saving, a basic knowledge of botany is helpful. As with people and animals, many plants are the result of genetic crosses. When you take seeds, the seeds will not be identical to the plant you take the seeds from. Instead, it will be a cross between that plant and another plant. This swapping of genetic material is the reason why it is critical to provide numerous plants of the same type (but different varieties) in one area. At least a dozen plants will provide decent genetic diversity, but closer to thirty would be much better. Seeds collected from plants that have little genetic diversity (repeatedly bred together) may possess a lower vigor.

An understanding of pollination is also very helpful when collecting seeds. What type of pollination does your plant require? Wind, birds, insects and other natural occurrences are common pollination methods. Most of us think of bees and butterflies as the major pollinators but there are many more

insects and some animals that play key roles in pollination. Protecting these pollinators with habitat (shelter, water and food) and avoiding chemical use may result in higher seed production. Even organic chemicals can harm pollinators.

As you look to collect seeds, it can be helpful to label plants and journal specific traits each plant possesses. For example, you may want to collect cherry tomato seeds with the sweetest taste. You planted five varieties of cherry tomato plants for a total of thirty individual plants. In the spring your rows may be even, and you can see the small gap you intentionally left between varieties. By the time you go to collect seeds however, these rows will be messy and overgrown, and you may find it difficult to determine which variety is which. You may have also forgotten that early in the spring two varieties were badly affected by septoria leaf blight while the other three varieties only had mild cases. From those three, one may have the sweetest fruit and thus should be the seed sample collected.

Processing and Storage

There are two main ways to process seeds; wet and dry. Wet processing is applicable for melons, tomatoes, cucumbers and other fleshy fruit. Dry processing is applicable for seed pods or seed heads such as beans, peas, okra or carrots.

The first step in wet processing is to remove the seeds from the fruit and then carefully wash the seeds. When submerged in water viable seeds sink while non-viable seeds float. After the flesh of the fruit has been washed off, carefully pat the seeds dry or allow to dry in open air.

For dry processing collect the seed pods or seed heads when fully dry. This means leaving the pod on the plant after you would normally harvest. Separate the seed from the other plant parts (this can be challenging to do without damaging the seed) and clean off all the debris until only the seed is left.

After both processes, it is critical to keep all seeds cool, dark and dry. Moisture, light and high temperatures can break seed dormancy or lead to seeds rotting prematurely. Some seeds can remain viable for many years, but it is best to use seeds in the following season for maximum germination.

Consider leaving some seeds in your garden as they provide a food source for many of our native birds. To learn more about birds and other pollinator information, visit the pollinator page of our website:

<https://www.shawnee.k-state.edu/lawn-garden/pollinators.html>