Seed Starting & Seed Exchange Info

L. Burtner for the Greater Rochester Perennial Society

Seed Exchange

Swapping seeds with other gardeners is a fabulous way to expand a seed collection, almost without spending a dime. For gardeners who are hoping to grow some new and interesting varieties in their garden next year, trading seeds is the way to go.

To save flower seeds successfully, select and save seed from your best plants. Learn how and when to collect your seeds so they are fully mature and ready to harvest.

Reasons Why Gardeners Save Seeds

Some gardeners save seeds for sentimental reasons and enjoy growing successive generations of a favorite plant descended from a friend or relative's garden, or as a souvenir from a favorite place or famous garden. Some flower gardeners save seeds as a personal contribution toward maintaining and preserving the critical genetic diversity of the planet. Some seed savers simply prefer growing heirloom plants or wild flowers rather than modern hybrids.

Some seed savers hope to carefully select and ultimately refine or develop the seed strain in their garden to a point of perfection. Some seed savers are in fact amateur hybridizers. There are probably as many reasons to save seeds, as there are gardeners who do so, but its also fun and easy!

How To Save Seeds: Seed Saving Basics

Whatever the reason for seed saving, the most important steps to successful seed saving include identifying worthwhile plants to save the seed in a cool and dry place to preserve its viability.

Which Seeds Are Best to Save? Hybrid vs. Open Pollinated Varieties

When selecting the parent plants from which you collect the seed, be sure they are an open pollinated variety. With hybrids, very often the hybrid plant produces seeds that are not viable (will not germinate), or the progeny will be quite different from the parent plant. With open pollinated varieties, the seeds you collect should produce fairly consistent seedlings from generation to generation

Select and Save Only the Best:

As with any harvest, your best seeds come from your best plants. Select the parent plants based on overall health and vigor as well as other characteristics you deem important. For example, you might want to select for a certain color or size bloom, or for a certain plant height or habit, or for demonstrated disease resistance. The more carefully you select the parent plants from year to year, the better your seedlings will be.

Developing a Seed Strain

Repeated selection for a certain trait will increase the uniformity of your seedlings. Eventually, if you are careful to cull out rogue plants and are consistent with your efforts,

you will develop a seed strain unique to your garden, adapted to and optimized for your growing conditions and also with the inherited traits you prefer.

When to Collect the Seeds
Successful seed savers are patient and observant gardeners. Wait for the seeds to mature and dry on the plant before you harvest or collect them.

Stop Deadheading! If you are accustomed to dead heading your flowers (regularly removing the faded blooms) either to keep things tidy or to encourage additional blooms, you will need to stop doing that so the plant can develop its seeds.

Finding the Seeds on the Plant
To locate the seeds, look carefully at your flower. The seeds form in the flower's ovary, which is a bulge located at the base of the flower. On a rose, for example, this looks like a miniature apple and is called a rose hip. When ripe, the color changes from green to red.
Typically, once the flower fades and dries and the petals fall off, you will quickly see the now swollen seedpod or capsule. Milkweed plants, for example, have large decorative seedpods that begin green and eventually dry out and crack open to release the seeds with their downy fluff. Poppy plants, another distinctive seedpod, have large rounded pods favored for use in dried arrangements.

When the seeds are ready for harvesting, they may rattle inside the pod or the pod may begin to split open ready to spew the seeds onto the ground. Try to collect the seeds before they drop to the ground and before the pod has begun to break down or rot or deteriorate due to weathering.

On some plants, such as marigolds and zinnias, the flower remains intact while it dries and seeds form at the base of the petals; collect these when the flower begins to shatter, pull it apart gently to reveal the seeds. Or, you may have a flower such as Gaillardia, which makes puffy seed balls similar to dandelions. For ease of harvesting, collect the puffs just before they begin to break apart. If you wait too long, the seeds will drift away on the breeze.

Observe Your Flowers
If you observe your flowers carefully, you will soon learn to see when the seeds are mature and ready to be collected or harvested for saving.

Patience! Seeds Must Be Mature
Wait until the seeds mature before you collect or harvest them. Avoid seeds that seem damp or soft or moldy or harbor insect pests.

Keep Seeds Dry
Work on a dry day after the dew has dried in the garden. It is very important to keep the seeds dry from now on. Knock the seeds into a paper bag or paper envelope for easier

handling. Label the seeds as you go. Allow them to air dry indoors at room temperature in a flat layer on a piece of paper for another week or so before storing.

How To Store the Seeds You Save

Store your seeds in a cool, dark, dry place. Seeds can be stored successfully in paper or glassine envelopes at cool room temperature in the back of a desk drawer or pantry or closet. But a more reliable place is to put the envelope of seeds inside a closed container such as a glass jar with tight fitting lid, or a zipper style plastic bag. Then put the jar or bag in the refrigerator where the temperature is cool and relatively consistent. Seeds stored this way should remain viable for a year or two – or even longer.

Using A Desiccant

Some gardeners enclose a desiccant inside the jar along with the seeds to make doubly sure the seeds are dry. You could use a little packet of silica gel (such as those included in the package with new electronics or leather goods). Or, make your own using a spoonful of dry milk powder wrapped in a piece of paper towel. This should absorb any excess moisture inside the jar.

Caution! Seeds Are Alive!

Seeds are living things, so treat them with care. Do not crush or damage them. Do not let your seeds freeze (or overheat) while in storage. Be sure they stay dry. If they become moist while in storage they may try to grow prematurely and then die. Although seeds can sometimes survive extended periods of storage, it is usually better to plant seeds sooner than later because germination rates decrease over time.

Record Keeping For Seed Savers

Label each envelope or packet of seeds with the plant name and/or description, the date you collected the seed, and where the seed came from. You may want to keep a master list so you know specifically which seeds you have on hand and how long they have been stored.

How to Test Seed Viability

Keep old seeds or throw them out? Are they worth planting? What's the shelf life of seeds? Will seeds you already have still grow? Test them!

Seeds might seem like inanimate objects, but in reality they are alive. Some seeds are naturally very short lived (sweet peas and delphinium for example) while other seeds may easily retain viability for several years and maybe for as long as a decade. Storage conditions affect the longevity of seeds as well. You can do an easy germination test at home to check on seed viability and seed germination rate.

Do A Germination Test Before Planting Old Seeds

If you have some leftover or older seeds and wonder whether or not they are viable and will still germinate and grow, you can find out for sure with a germination test. It's better to test your seeds before planting than to waste time and effort planting seed that is no longer viable – and why purchase more seeds if those you already have are still good.

How To Set Up Easy Seed Germination Test
Take a small sample of your seeds to test, maybe ten seeds or so from each batch. Slightly dampen a paper towel and place the sample seeds on it. Fold the barely damp paper towel in half over the seeds. Enclose in plastic wrap or place inside a sealed plastic bag so it will stay damp. Label the package with seed name and date. Set the package in a relatively warm place. (70 – 75 degrees), such as the top of your refrigerator or on a high shelf. Do not put it in direct sun (direct sun could cause it to overheat).

How long to Wait: Check Seeds Often
The seeds should absorb water and swell. Check daily for germination and to make sure the paper towel is still just barely moist. Mist it lightly if it begins to dry out.

Depending on which specific plant you are testing, the seeds may begin to sprout in a day or two or may take several weeks to begin. Usually the majority will sprout within a few days of each other. When germination stops and no more seeds have sprouted for several days, you will know what approximate germination rate to expect from that batch of seeds.

How to Interpret Seed Germination Test Results
Seed viability decreases over time and under poor storage conditions, so expect reduced germination of old seeds compared to fresh seeds. You may need to plant more seeds than usual to yield the desired number of plants. Use your test results as a guide. For example, if only half of your test seeds germinate, you now know to take that into account at planting time and plant twice as many as usual. If very few of the seeds germinate in the test, you should probably buy fresh seed.

Preparing Seeds for Our GRPS Seed Exchange
Please package seeds in a reseal able plastic zipper baggie. Put an average of 20 seeds per baggy --- more for small seeds like cleome, fewer for large seeds like acorns. Then label each baggy with a white sticker (such as Avery standard 5160 address label sheets) giving all the information you have on the seeds. If known, include the plant's common and scientific names; its soil, sun, and watering needs; and, its origins - where and when you collected the seeds. If you don't know all the information, that's okay, just try to provide as much as you can. **Please try to provide a picture (from a catalog, photo or the web) of the plant from which the seeds you are bringing, came from.**

What If I Don't Have Any Seeds to Swap?
Come anyway! Even if you don't have any seeds to trade, you are welcome to attend! Bring along a package of store bought seeds that you think would be something wonderful and fun to grow. We will have plenty of extra seed contributions on hand and many attendees will be there just to learn, network, exchange seeds and prepare for next year's seed collecting.

How Do We Swap? As you check-in, you will be directed to place your seeds at the appropriate seed category tables (example: annuals, perennial, woody). Committee

members will help you find where they go. You will be given a random seed swap number. There will be a short period for attendees to preview all the seeds brought in and available for swapping. Then, you will be called in by your number (numbers will be picked randomly, much like our Drag & Brag), and you can then pick a seed pack from any of the seed categories.

After the initial seed swap is complete, attendees are free to take any of the left over seeds and to trade seeds with each other. Dividing of packets is encouraged and extra baggies with labels will be on hand for that purpose.

What Types of Seeds? Seed swap categories will include natives, edibles, herbs, exotics, annuals, perennials, and woodies (trees/shrubs). If you can pre-sort your seeds in advance into whichever of these seven major categories fits best, that would help us speed up the process on the swap day.

L. Burtner/7-23-08 Information derived from
http://flowergardens.suite101.com/article.cfm/saving_flower_seeds
Davesgarden.com & The Washington Magazine & Friends of Brookside Gardens

Example of Label For Your Seeds:
Greater Rochester Perennial Society

Botanical Name: _____
Common Name: _____

(circle one) Perennial Annual Bi-Annual
Height: _____ Width: _____
Light Requirements : _____
Soil Requirements: _____
Flower Bloom: Color/Size: _____
Bloom time: _____
Zone grown in: _____
Germination: (i.e. scarification, stratification, after frost transplant, no transplant, direct seed): _____
Year harvested: _____
Name of recipient: _____
Phone # and/or Email: _____