

Harvesting Squash Seed

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with full credit and appreciation to Carol Deppe, Ph.D., author of *Breed Your Own Vegetable Varieties: The Gardener's and Farmer's Guide to Plant Breeding and Seed Saving* (Chelsea Green, December 2000; \$28)

When your squash and pumpkins reach full maturity, it's time to harvest the seeds you want to save. Winter squash and pumpkins are ordinarily picked from the vine at full maturity, so harvesting them for seed saving involves nothing special. Summer squash, however, are usually eaten when immature. To save the seed of a summer squash, you must allow it to grow to full maturity, which is long past the best time for eating it.

The seed of squash and pumpkins continues to ripen for about three weeks after you've harvested the fruit. For seeds of maximum plumpness, vigor, and viability, wait at least three weeks after harvest before cutting the fruit open and cleaning the seeds. You can remove and clean the seed up to several months later if you wish.

Cleaning. I use two somewhat different methods, depending on whether I am saving seed from just one fruit or from many of one type in a single lot. To process the seeds of several fruits of one type (or a whole field's worth) at once, I use a scaled-down version of commercial processing involving a fermentation step (see "Processing Big Batches of Seed," below). Usually I save seed from only one squash or pumpkin at a time, however. In that case, a simple washing procedure produces beautiful, clean, loose seed.

Open the fruit and remove the seeds and attached debris. (At this point, you can cut up the flesh, pop the chunks into the oven or microwave, and cook them up.) Put the seeds and debris in a big bowl with at least 20 times as much water as seeds. Work the seeds and debris with your hands to free the seeds. (If the debris and seeds are fairly dry, you may need to let them soak for 5 minutes or so before working them.) Fresh seeds float, but most of the debris is slightly denser than water, so it sinks. Scoop the seeds off the surface of the water into another container, and pour out the debris-containing water. Repeat the process if necessary to eliminate all the large chunks of debris.

Next, put the seeds in a wire strainer, and swish them around gently to scrape and further clean them by gently rubbing them against the strainer. Then clean off the fine debris with a stream of water through the strainer.

Drying. There are two tricks to drying seed. The first is to dry at just the right speed. You want to dry it fast enough, especially initially, so that the seed doesn't have a chance to absorb moisture from the washing water and begin to germinate, losing viability. (As long as the seed is in the fruit, germination inhibitors prevent germination. As soon as the seed is washed, however, it becomes much more vulnerable.) On the other hand, seed that dries too quickly cracks and also loses viability.

The second trick is to rustle, fluff, and separate the seeds at a certain stage in the drying process so that they become loose and separate and don't stick together in big clumps.

I usually spread seeds for drying in a single layer on a screened tray in a food dehydrator and dry them for an hour or two at 95°F. If you don't have a dehydrator, you can leave small amounts of seeds in the strainer and set it in front of a fan indoors for 2 or 3 hours for the initial drying. For larger amounts, use a window screen or piece of hardware cloth and a fan indoors. You can also dry seeds on trays. But whatever you do, don't dry the seeds on paper, cardboard, or cloth because the seeds will stick to those materials.

You can also dry seeds in a shady place outdoors if the weather is warm and dry. Keep a close eye on the seed, however, to guard it from birds, squirrels, and other seed-coveting critters.

The first stage of drying is over when the surface of the seeds is dry and they stick to each other and to the screen, but not too tightly. At this stage, I "rustle up" the seeds. I rub my gloved hand around the dehydrator tray, strainer, or screen to separate the seeds from the surface and from each other. If the seeds dry completely without this rustling-up step, they stick very tightly and are hard to separate without damaging them.

After that step, I spread the seeds in a single layer in a tray, plate, or other shallow container and allow them to finish drying a few days or more without further attention.

A seed is completely dry when its covering snaps when broken in two. If it flexes or bends, it isn't dry. Transfer fully dried seed to envelopes, jars, or other containers for storage.

Storing. If stored in a cool, dry place, seed will keep for six years or more. It will keep even longer in glass jars stored in the freezer.

If you freeze seed, remove the jar from the freezer a day or more before opening the jar so the seed can come up to room temperature slowly and the main supply of seed does not become coated with condensation.

Processing Big Batches of Seed

To process several squash or pumpkins (or a whole field full) of one type, I suggest this fermentation method developed by Alan Kapuler, research director at Seeds of Change:

Put seeds, debris, and water into 5-gallon buckets, and set them aside for one to three days of fermentation. Sometime during the first day or so, swirl the seeds around with your hands to separate seeds and debris. Then, separate the floating seeds off into buckets with more water. Wait one to three days until the seeds sink. The good, vigorous seeds absorb water and sink. Inferior seed and empty seed husks don't sink.

Check the seeds daily to catch them on the day they go from floating to sinking. Collect the sinking seeds, rinse them, and put them on dehydrator trays. Dry them for eight hours at 95° F. (Stop drying them at the appropriate point, and "rustle up" the seeds to unstick them. See text above.)

A disadvantage of this fermentation method is that it's critical to dry the seeds quickly initially, because they've been allowed to absorb some water. You need a dehydrator. This method requires much less hand working than the simple washing method, though, because part of the work of separating seeds and debris is achieved by fermentation instead of hand labor. An additional advantage is that the poor quality seed separates out for easy disposal.

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