

Saving heirloom tomato seeds

A basic rule of seed saving is to save the widest possible genetic diversity of mature seeds. If supply is large, then choose seeds from fruit that have traits you preferred, maybe tastiest, earliest ripening, largest etc. If only a few are available, then save from every tomato unless you are not certain it is the correct variety. Each tomato has so many seeds inside that it is best to save about 15 every you cut up an excellent specimen. That way when planting you are more likely to get a better selection from differing tomatoes. Additionally, it is crucial to sterilize the seeds to prevent carryover of disease from one year to the next. I learned this the hard way when using saved seeds that ruined my tomato plants for several years running until I understood why my tomato plants were developing blight as soon as they went into the ground.

I use Ziploc sandwich bags with seed name written on each bag with a Sharpee for this first step. Knock 15 seeds from each tomato into the labeled baggie along with a bit of extra tomato flesh. Add water till seeds are barely covered. To reduce fruit fly problems, place all labeled baggies into a tightly closed clean margarine tub or something similar. After sitting 2-3 days (called fermenting the seeds as they can get stinky and look moldy on water surface) it is time to process them. This ferment is necessary for tomato seeds as that gel surrounding the seeds prohibit the seeds from sprouting while still inside the tomato. Fermenting breaks down the sprouting inhibiting chemical.

I use cheap 10 oz plastic cups and write seed name on the outside of each one to match every seed variety I need to process. Use a sink w double lined full sized paper towels over the drain. Open the baggie and add some water. Empty baggie into the cup. If necessary, add more water and squeeze baggie again into cup. You can turn the baggie inside out and dip the corners that still have seeds in them into the water to remove last seeds from baggie. Discard extra water till cup is only $\frac{1}{2}$ full to prevent overflow. Then squeeze anything solid you can grab in the container to start removing any tomato flesh still stuck on the seeds. Squeeze every piece a couple of

times and rub between fingers. Let solution rest a minute. At that point there should be stuff settling to bottom, and junk floating on top. Aim at the center of the towels and gently let the top junk flow out of container onto towels. Add water, pause, and repeat several times till you have no top junk but lots of settled stuff. It helps to gently swirl the cup before each water discard. Understand you will be losing some seeds with every rinse. Any seeds that float are not viable. Only save the heavy seeds settled on bottom. When you have only bottom seeds gently drain off as much water as you can. I use a finger to hold back the good seeds from coming out at the end of this drain cycle. It is now time to sterilize seeds.

Basic seed sterilization states use 10% bleach for 10 minutes. I actually do 15% for 15 minutes to be certain. Mix the bleach solution in a spray bottle then spray the seeds at the container bottom till they are well covered. 15 minutes to a day later gently add clean water to cut the bleach strength and make it easier to deal with. Gently pour most water off. Add more water, swirl to help seeds rinse the bleach off. Drain again. I do this about 3 times, then drain all water. I use a finger to hold back the good seeds from coming out at the end of this drain cycle. Fold the corners of the paper towels full of junk into the center to lift, squeeze dry, and easily discard the dirty towels. I stick the paper towels into the now empty baggies again to discourage fruit flies.

Dry swirl the seeds in the container to help break up the clumps. Twice a day swirl to break up clumps. It's fine if they stick to the sides. Gently tap outside of container to help then loosen at next swirl. Separated seeds dry more quickly. When fairly dry you can squeeze any remaining clumps to break them up. Because it is hard to plant damp sticky seeds dry about another day or two. They are now ready to plant. Seeds saved for later use need to dry about a month longer and are best then stored in labeled paper envelopes to prevent mold.

If you process seeds during times of high humidity it helps to use a gentle fan to help dry the seeds more quickly to prevent sprouting before drying.