



## Saving Tomato Seeds

So you've heard about heirloom seeds and want to try saving your own? Here's how.

### Open-pollinated vs. hybrid

First, make sure that the variety you're saving is open-pollinated, not hybrid. All heirloom tomatoes are open-pollinated. Open-pollinated varieties will come true from seeds, but hybrids are created by seed companies who carefully crossing two parent plants to yield seeds for the hybrid variety. So hybrid varieties will not breed true.

### Choosing tomatoes to save

Over many decades, people created heirloom varieties by carefully selecting and saving seeds from their best plants, season after season. You can define 'best' to be whatever characteristic you're after: biggest or healthiest plant, biggest, tastiest, most interesting or colorful tomato. Whatever you want, just choose the best examples of what you're saving. For instance, if you have two plants and one is sickly, the other healthy, choose a tomato from the healthy one. The sickly one may be carrying some weakness in its genes, so you don't want to propagate that. This is not a time for "waste not, want not." You want the best. Similarly, choose tomatoes in their prime, not over-ripe or under-ripe, diseased, mis-shaped, etc. Since you're just saving the seeds, you'll get to eat most of the tomato anyhow, so this isn't a real sacrifice. To maintain good genetic diversity, it's best to save seeds from multiple tomatoes, and preferably from more than one plant of the same variety, if possible.

### Fermentation

You don't absolutely have to ferment the seeds, but it makes the seeds easier to separate from the gel, helps sort out bad seeds, reduces some seed-borne illnesses, and eliminates a germination inhibitor. If you're going to trade seeds with other people, it's considered good etiquette to ferment your seeds. Here's how.

Cut the tomato in half and scoop or squeeze out the seeds and gel into a small container labeled with the variety name. Set the rest of the tomato aside for eating. Add 1/4 to 1/2 cup of water. Set the container aside, out of the sun, for 3 to 5 days. A moldy film will probably form on top. That's okay.

To separate the seeds: First carefully remove the film. Then add some more water and stir. Good seeds will sink, so carefully pour off the water and the floating bits of pulp. Repeat until all the pulp is gone and you have clean seeds. Drain them as well as you can (using a paper towel helps), then spread them in a single layer on a screen or a paper plate to dry. You can use paper towels, but the seeds tend to stick to them. Don't use plastic or ceramic plates! The seeds need to have the water wicked away from them. If you're saving multiple varieties, be sure to label the plates.

### Storage

Once the seeds are thoroughly dry, place in an airtight container for storage. Tomato seeds remain viable for years, even stored at room temperature. For extra protection, you can store them in the refrigerator or freezer, but let them come to room temperature before opening the jar so you don't introduce moisture from condensation. Small packets of silica gel will help absorb excess moisture also.

### Crosses

Tomato flowers will generally fertilize themselves, but a busy bee could create a natural hybrid for you. Commercial growers isolate their varieties by large distances to ensure pure seed. That's not an option for most home growers, but if you've got an active bee population in your tomato patch, you could try bagging your blossoms instead.

Choose a cluster of flowers that haven't opened yet and place a paper or cloth (not plastic) bag over them for a few days. Shaking it gently every morning may help pollination. Remove the bag after the flowers wither, marking the cluster with a tag so you'll remember which one you bagged. Watch to see if any fruits start to form. If not, try again with another cluster.