

Tomato Seed Saving

Solanum lycopersicum

Difficulty	Easy
Seed Viability	4-10 years
Minimum Plants	6-20
Pollination	Self
Isolation Distance	5-15 meters*

Save seeds from as many of the best-looking tomatoes from the healthiest-looking plants. Make sure to never save seeds from plants that do not seem to carry the same genetic traits that the variety is supposed to have.

For example, if you growing out a round red tomato, but once ripe the tomatoes are yellow or display a different shape, the seeds were probably not true-to-type so seeds wouldn't be saved from the plants that produced the untrue tomatoes. Never save seeds from diseased or unhealthy-looking plants.

When tomatoes are ripe enough to eat, the seeds are ready. I try to leave the seed tomatoes on the plants as long as possible. The longer the tomatoes are on the plant, the more viable and healthy the seeds will be. Tomato seeds are covered in a jelly coating that inhibits germination, so this coating will need to be removed. The easiest way to do this is to ferment the seeds. This will also remove many seed-borne pathogens. Cut the tomatoes in half and squeeze the juices into a cup or container. I like to use a small mason jar for this so it's easy to see the status of the fermentation inside the jar. I don't worry about pulp getting in there. Once the seeds are all inside the jar from your saved tomatoes, assess how much liquid is inside. If there is enough liquid to cover the seeds and sustain some evaporation, there is no need to add any water. This is especially true for very juicy beefsteaks. Paste tomatoes are less juicy so some water may need to be added to keep the mixture in a liquid state during fermentation. Place paper towel or cheesecloth over the top of the jar and secure with an elastic or string. Set aside for anywhere from 2 to 5 days. Once the mixture has formed a moldy coating on the top and smells bad, the fermentation process is underway and the seeds are most likely ready to be cleaned. Gently shake the jar and look at the seeds on the bottom. You can usually see if the jelly coating is still thick on the seeds, or if they seem to be free from the sac. When they are ready, add enough water to double the contents. Stir vigorously to release any seeds still trapped in the jelly sac. Allow to sit for 5-10 minutes. Seeds that float to the top are not viable. Seeds that sink to the bottom are the ones you are after. Carefully pour the contents from the top of the mixture out into the sink or trash/compost bin until all the floating contents are removed. Pour the remaining seed mixture into a small-mesh strainer and run under very warm water for several minutes while very gently rubbing the seeds back and forth to remove any leftover gunk and slime. Careful not to be too rough, as this may damage the seed coat. Once the seeds are clean, lay them out on glass plate or a wax-coated paper plate and allow to dry in a well-ventilated area for one to two weeks depending on the humidity in your environment. A great perk about Northern growing is that our low-humidity indoor winter conditions are ideal for seed drying. Once seeds are completely dry, they are ready to be packaged up. Be sure to write the details of the variety, year grown, and where they were grown on the envelope before returning some seeds to the library.

*If unable to isolate by 5-15 meters, use an isolation bag. Organza bags are usually used for this as they still allow sunlight in, but can be secured tight with the drawstrings. The bag is placed over the blooms before the blooms open. Once all flowers have set fruit, the bag can be removed to allow the tomatoes room to grow.

Don't forget to tag the tomatoes that were isolated so you know which ones to save seeds from in the fall. Some use a brightly colored piece of weather-resistant cotton string tied (not too tightly to allow lots of room to grow but secure enough that it won't easily fall off or be blown off in the wind) around the stem of the cluster of tomatoes that were isolated.

For a complete guide on tomato seed saving, please see
www.growersblend.ca/tomato-seed-saving