

Saving Tomato Seed

The popular members of the Solanaceae family – peppers, tomatoes and eggplant – are also some of the easiest to save seed from. Tomatoes, in particular, are self-pollinating, and hence ideal for beginners

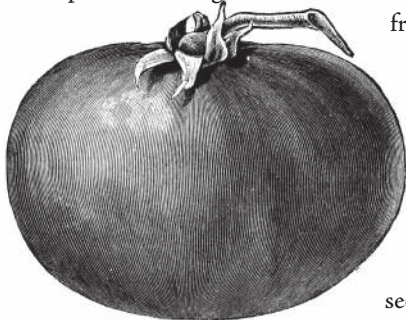
	Tomato	Tomato, wild and ancient	Currant Tomato
Difficulty	Easy	Intermediate	Intermediate
Longevity (years)	4-10	4-10	2-4
Minimum plants for non-commercial seed saving	6	6	6
Pollination	Self	Insect/Self	Insect/Self
Isolation Distance for non-commercial seed saving	5m	15m	50m

GROWING

All members of the Solanaceae family have complete flowers, so they are capable of self-pollinating. However, almost all of them have open flowers which allow insects to cross-pollinate them. Tomatoes are the important exception, since they have been bred over countless centuries to have tightly closed flowers and short styles (the female part of the flower) that often fully pollinates within the flower. However, wild tomatoes, currant tomatoes and very old heirlooms usually have longer styles that stick out of the tip of the flower cone, allowing insects to cross-pollinate them. Note that currant tomatoes (with fruit only 5-10mm which grow in clusters on large viney plants) are a different species and cannot cross-breed with other tomato types.

It's important to choose open pollinated, not hybrid, varieties, as hybrid seed will not come true when re-planted in a future season.

Tomatoes thrive with fertile soil, plenty of space and ventilation to help combat fungal diseases, and mulch or stakes to keep fruit



from sitting on the soil where they can rot or be eaten by rodents and bugs. If your tomato plants start to show signs of disease, remove all infected leaves from the plants and harvest all ripe fruit for seed saving to reduce chances

A note on heritage and heirloom tomatoes

These terms are used interchangeably and actually have more to do with ownership than age. To be considered heritage/heirloom, seeds must be public domain (aka "the people's seeds") and open pollinated. They have generally been grown for at least one generation, though many have been around for much longer. These seeds play an incredibly important role in preserving our food's genetic biodiversity and regional adaptations.

that the disease will be spread to the seed itself.

As with all seed saving endeavours, remove all sick-looking plants, or any plants with undesirable or off-type features before they flower.

HARVESTING

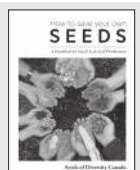
Let your tomatoes ripen as long as possible on the plant before harvesting the fruit for seeds. Nearly-ripe, or "green-shouldered" fruit have viable seeds, but they may not last as long in storage or germinate as vigorously as seeds from a fully ripe fruit.

Tomato seeds are unusual because they are surrounded by a protective jelly-like material that prevents them from germinating prematurely. This jelly should be removed before the seeds are dried, since it can absorb moisture from the air and allow mould to grow, or inhibit germination of the seed later on.

(Turn to the next page for detailed instructions on cleaning tomato seed.)

The complete guide on *How to Save Your Own Seeds*

For step-by-step instructions on saving seed from beans, peas and other vegetables, check out our new handbook, *How to Save Your Own Seeds*. With clear illustrations, easy-to-read reference charts, separate instructions for beginners and experts, botany basics and pollinator profiles, this book has all you need to know about growing, harvesting, and storing seed from the vegetables and herbs in your garden. Find out more and order your copy at www.seeds.ca/saveyourseeds.



Cleaning Tomato Seeds

1 Start with fresh, ripe tomatoes. It's good to save seeds from as many fruits and from as many plants (of the same variety) as possible.



2 Cut the tomatoes and scoop the seeds into a bucket or bowl. You can use a spoon or just get your fingers right in there. If you wash first, you can use the rest of the tomato for sauce!



3 Put the seeds and pulp in a labelled container with a lid. There is no need to add water if the lid fits well. Keep it in a warm place (but below 40°C) for three days.



4 After three days, you'll know why you put a lid on. The pulp rots and ferments quickly, freeing the seeds, which sink to the bottom. At cooler temperatures it might take four or five days before the seeds separate from the pulp and sink.



5 Add a little water, let the seeds sink to the bottom again, and carefully pour off the rotted pulp.



6 The first rinse gets the seeds nearly clean!



7 Refill the container with fresh water, let the seeds sink, and carefully pour off as much water and floating pulp as you can. A few seeds will float too, but those are probably hollow duds, so pour them off.



8 Dump the clean seeds into a strainer with mesh fine enough to catch them and drain the water. You can press the seeds gently with your fingers to push out excess water. Don't worry, they're pretty tough.



9 A fine-meshed screen, tray, plate, or cake pan is an excellent place to let the seeds dry. Spread them out to give them air. A slight breeze helps if the weather is wet or humid, but heat or sunlight is not necessary (and heat over 40°C can kill them). If you stir them gently with your fingers when they're half-dry, they won't stick together.



10 When the seeds are fully dry, store them in an airtight container. If you keep them dry, tomato seeds should last at least five years. If they are dry and cool (in airtight jars in the basement, garage, etc), they can keep for 10 to 12 years.



** Uh oh. We broke our most important rule and didn't label the tray! Always label your seeds in containers, trays, and envelopes. It's impossible to tell different varieties of tomato seeds apart!*

You can store many kinds of seeds together, in small envelopes, carefully labelled with the name of the variety and the date, all in an airtight mason jar. 🌱🌱