
Collecting West Virginia '63 Tomato Seeds

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During the summer, West Virginia '63 tomatoes are grown for seed collection at the West Virginia University organic research farm (<http://www.caf.wvu.edu/plsc/organic/>) for the West Virginia University Extension Service. West Virginia '63 resulted from a breeding program initiated in 1950 by the West Virginia Agriculture and Forestry Experiment Station. Today, there is significant demand for this blight-resistant variety, but seed supplies are rapidly diminishing. This program will be continued in the future to ensure that West Virginia '63 will always be available. However, you can easily collect your own seed using the procedure outlined here.



When collecting tomatoes for seed, it is important to collect from healthy plants that fit the description below and have fruit that looks like those in these two photographs. According to Dr. Mannon Gallegly, plant pathologist and developer of West Virginia '63, the tomatoes in these pictures are "true to type." In other words, these tomatoes look like the original tomatoes that were bred in the 1950s, and the next generation will look like its parent.



Vine: Large, indeterminate, vigorous; provides good leaf cover for the fruit to prevent sunscald. In addition, proper fruit covering is important because seed collected from tomato fruit that matured at temperatures of 35°C or higher were found to be less vigorous (Liptay, 1989).

The vine trains well and may be staked.

Fruit: Uniform ripening; high external, internal color; meaty; crack resistant; about 3 inches in size; oblate to globe shaped, smooth, and red.

Maturity: A late-maturing variety, requiring about 80 days after transplanting for earliest ripening.

Disease Resistance: Resists late blight caused by the fungus *Phytophthora infestans* and to the *Verticillium* and *Fusarium wilt* diseases.

West Virginia '63 is an open-pollinated variety. This means that unlike hybrid tomatoes (F1) these seeds can be saved for one year to another and continue to be "true to type."

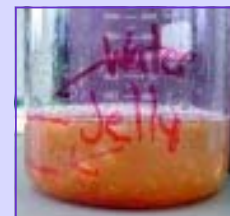
[Click here for more information about WV '63](#)

Procedure for Collecting West Virginia '63 Seeds

A. Cut the tomato fruit in half and squeeze the seeds and jelly surrounding them into a large container.



B. Add water to the container and stir.



C. Ferment the seeds at 15°C to 30°C in a well-ventilated area for 24 to 48 hours. Stir daily, until you notice a layer of mold.



D. Add water and vigorously stir the mixture to separate the seeds from the jelly coating.



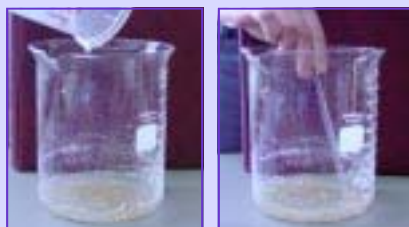
E. Let stand and wait for the viable seeds to sink to the bottom.



F. Pour off the top layer of water and debris.



G. Repeatedly add water, stir, and pour off the top layer of water, until the viable seeds remain.



H. Use a fine mesh strainer (.06") to separate the rest of the liquid from the seeds.



- Thoroughly dry the seeds **out of the sun** on a no-stick surface, such as glass or formica.
- Store the seeds in a paper envelope in a cool, dark, dry place.
- Put the paper envelopes in an airtight container with desiccant and keep in the refrigerator.
- The temperatures should not exceed 68°F, and relative humidity in the storage area should not exceed 30%.

- Remember to label the seeds and include the collection date.

To obtain West Virginia '63 seed, contact the WVU Greenhouse at 304-293-4480.

For additional information on saving tomato or other vegetable seeds, see:

www.seedsave.org — International Seed Saving Institute

www.seedsavers.org — Seed Savers Exchange

References

Gallegly, M.E. 1964. West Virginia '63 . . . A new home-garden tomato resistant to late blight. Science Serves Your Farm. West Virginia Agriculture and Forestry Exp. Sta. Bul. 490. 3-16.

Liptay, A. and Moore, L.A. 1988. High temperature damage encountered by tomato fruits and their seeds when the fruits are exposed directly to the sun and not covered by plant foliage. Acta. Hort. 253.

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