

# Cleveland Seed Bank's

guide to growing

## \*TOMATOES\*

Tomatoes are native to what we now call South and North America. While early wild tomatoes were the size of peas, indigenous peoples of Mesoamerica, such as the Aztecs, selected for color, size, and shape to slowly create the foundation for the diversity of tomatoes that we have today!

The word 'tomato' comes from the Nahuatl Aztec word 'tomatl'. Spanish colonists introduced tomatoes throughout the world. However, even in the 1700s, many Europeans feared tomatoes as poisonous, since tomatoes are a member of the nightshade family.

**Latin name:** *Solanum lycopersicum*

**Sun:** Full

**Life cycle:** Annual

**Direct sow or transplant:** Transplant

**Height:** 2.5-5'+ depending on variety

**Container Friendly:** Yes.



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## SOW



**Direct sow/transplant:** Tomatoes need lots of heat to germinate. In NE OH, it's best to start tomatoes indoors ~6 weeks before final frost, pot up frequently, and transplant once the 2nd set of true leaves emerge.

**Common mistakes:** Starting seeds too early can lead to smaller and less abundant plants. Heat mats & grow lights are an easy way to increase germination for plants in the nightshade family; if you do not have these, it's better to wait to start seeds until the weather and soil are warmer (55+ degrees).

**Days to germination:** ~ 8-10 days, depending on temperature and weather.

**When:** Start seedlings indoors 6-8 weeks before final frost. In NE OH, the final frost is around the 2nd week of April.

**Seedling Depth:** ~ 1/8 inch deep.

**Spacing:** Plant indeterminate transplants every 2-3 ft., smaller varieties can be placed closer together.

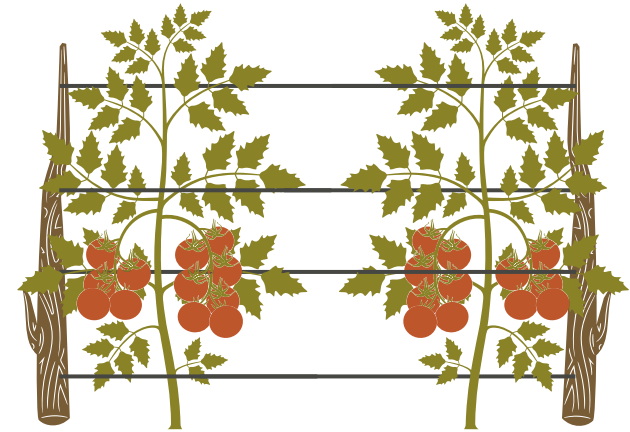
**Succession sowing:** Tomatoes are typically not succession sown due to their long growing season.

**Companion planting:** Low-growing herbs and baby greens are a great choice. Try radish, dill, basil, and mint.

## GROW

**Soil:** Tomatoes enjoy nutrient-rich soil with a pH of 6.3 to 6.6. Feed often with compost.

**Trellising** Tomatoes benefit from trellis support for increased airflow & disease resistance. The 'Florida Weave' uses only stakes and twine to hold up heavy stems.



The 'Florida Weave' trellis system.

**Containers:** Smaller varieties can grow in 10+ gallon containers while larger varieties, like indeterminates, need 15+ gallons. Use dark containers to absorb more heat. Yellow leaves can indicate a nutrient deficiency.

**Pests:** Check for the Tomato Hornworm.



**Diseases:** Early and late blight, both fungal diseases, and septoria leaf spot. The older, lower leaves may indicate disease before the upper leaves.

# HARVEST



Tomatoes are ripe for picking when they are soft to the touch. Some heirlooms may be slightly yellow, or even green, but are fully ripe!

*It takes ~1 month to fully ripen a tomato, depending on the variety.*

**To ripen faster:** Toward the end of the growing season, prune off the top stem (flowers, leaves, small green fruits & all) just above the last ripening tomatoes. This directs energy towards fruiting & provides the lower leaves with more sunlight.

**For cracking:** Usually caused by dry soil conditions, cracking is best prevented by even watering, especially during fruiting.



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# SAVE

Tomatoes self-pollinate. With little chance of cross-pollination, they're an easy choice for seed savers!



**1** Select a mature fruit and slice it open.



**2** Squeeze out the gel-coated seeds into a container. Add water to double the volume.

**3** In 1-3 days, a layer of mold will appear on the top of the liquid; the seeds are now ready to be rinsed and dried on a screen. If the seeds remain in the mixture too long (over 72 hours), they may rot or germinate prematurely.



**4** Rinse and dry over a screen, out of direct sunlight. Drying could take up to four weeks. Seed viable for 4 years.

**Preserving the harvest:** Tomatoes can be enjoyed fresh and preserved in a wide variety of ways.

Saucing, canning, freezing, or making salsa are all easy options!

Can tomatoes using a water-bath method. You'll just need a deep pot, tongs, and jars with sealable lids.

# TYPES

**'Bush':** Great for containers, these only grow 2.5-3.5' tall! Also known as 'dwarf' varieties.

**Determinate:** These varieties bear all of their fruit within roughly a month and can grow 4-5' high.

**Semi-determinate:** Acts like both the determinate (only growing 4-5') and indeterminate (continuing to flower and produce fruit throughout the season) varieties - the best of both!

**Indeterminate:** Producing flowers and fruit throughout the growing season, indeterminate varieties can grow 5'+ tall. It will need a trellis system for support!



Beefsteak tomato



Paste tomato



Cherry tomato



Slicer tomato