

Growing Your Own

A beginner's guide to gardening

Tomatoes

Tomatoes are a popular summer crop that many consider to be a basic part of the home garden. Growing tomatoes can require more labor compared to other vegetables, but the results can be very rewarding.

Varieties

There are two different kinds of tomato plants. Indeterminate tomatoes keep growing taller all season. Determinate tomatoes grow to a certain height and then stop.

Indeterminate tomato plants must be trellised in order to stay upright. Pruning lower suckers (side branches) as the plants grow taller is recommended. Tomato harvest continues throughout the summer season as the plant grows.

Some varieties of indeterminate tomatoes are:

- Better Boy
- Beefsteak (large fruit)
- Early Girl
- Juliet (grape)
- Jolly (pear shaped)
- Supersweet 100 (cherry)
- Sungold (golden yellow cherry)
- Cherokee Purple (heirloom, dark purple)
- Brandywine (heirloom, red, pink, and yellow types)

Determinate tomato plants are shorter than indeterminate plants. They can be staked, caged, or trellised, and need to be pruned only once. The harvest period is shorter compared to indeterminate types. You will harvest more tomatoes over a shorter period of time compared to indeterminate types.

Some varieties of determinate tomatoes are:

- Celebrity
- Mountain Fresh
- Carolina Gold (golden yellow)
- Plum Dandy (paste)
- Terenzo (cherry)



Early Girl

(Photo: Johnny's Selected Seeds, johnny-seeds.com)



Terenzo

(Photo: All-American Selections)



Cherokee Purple
(Photo: Johnny's Selected Seeds, johnnyseeds.com)

How much to plant

Plan for two or three plants for each person in your family. This should provide enough fresh tomatoes for everyone for most of the summer. For a family of five, that would be 10 to 15 plants. If you set out five plants for each person in your family, you should have enough to eat all summer and early fall. Plus, you should have enough to be able to can tomatoes for meals next winter and spring. That would be 25 plants for a family of five.

When and how to plant

Tomatoes are a warm-weather crop. They should not be planted until all danger of frosty weather is past. Safe days for planting in Kentucky are about May 1st (Western) and May 15th (Central and Eastern). Try to plant the tomatoes in the evening or on a cloudy day so they will not dry out.

It is best to buy tomato plants ready to set in the garden in early May. You can try starting tomato seeds indoors in mid-March, but you will need a very bright window for plants to do well.

- **Plant** tomatoes in rows about four feet apart. Put plants 18 to 24 inches apart in the row. Dig a hole six inches deep for each tomato plant.
- **Stake** the plants. Put a six-foot stake about four inches from each plant. Drive the stake 8 to 10 inches deep into the soil.
- **Prune** and tie the plants. As the plant grows, new shoots start where the leaves join the stem. Let the first shoot grow into a second main stem. Each week pinch off all other shoots



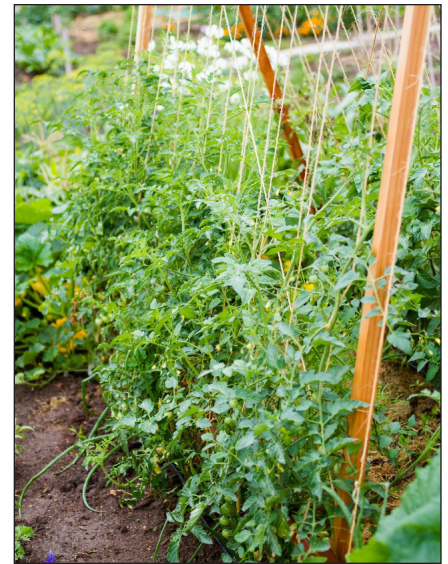
A wire cage is one of the easiest ways to keep the plant off the ground, which results in better quality fruit.

(Photo: Matt Barton, UK CES Agriculture Communications)



Tomatoes can be supported by a stake, but you will need to loosely tie the plant around the stake as it grows taller.

(Photo: Matt Barton, UK CES Agriculture Communications)



Several tomatoes in a row can be supported by a trellis. There are many different options to create a trellis. Even using a wire fence is an option. Plants will need to be loosely tied to the trellis.

growing on the two main stems, but be careful not to remove flower clusters close by. When the plant reaches 12 to 15 inches high, tie it to the stake. Use a heavy twine. Tie the twine tightly to the stake and then loop it around the plant. Each time the plant grows another 12 inches, add a tie.

- **Fertilize** in summer. Once tomato fruit has reached a large size (about two weeks before the first harvest), scatter some urea fertilizer along sides of each row. Use only four to five table-spoons full per 10 feet of row. Add the same amount of fertilizer two to three weeks after first harvest. You may switch the urea fertilizer with a water-soluble fertilizer, which is dissolved in water and poured around the plants. Follow the advice from the label when preparing and applying water-soluble fertilizer.



As tomato plants mature, portions of the plant need to be removed, which improves fruit quality and yield. The arrow in the photo is pointing at what is called a “sucker,” or side shoot, which needs to be removed. Otherwise, the plants will produce more leaves and less fruit.

(Photo: Matt Barton, UK CES Agriculture Communications)

Pests and diseases

Tomatoes are susceptible to pests and diseases throughout the season. Protect young plants from cutworms by placing a cardboard tube around the base of the plant. Hornworms will eat both leaves and fruit and can be taken off by hand or by cutting away the foliage they are feeding on. They can be squashed under foot or disposed of in the trash. Corn earwoms feed on fruit and may burrow inside. Pull the worms off or use a pesticide.



A cutworm eating the stem of a plant.

(Photo: R.J. Reynolds Tobacco Company Slide Set, R.J. Reynolds Tobacco Company, Bugwood.org)



Tomato hornworms eat the leaves and stems of tomato plants. This reduces the amount of tomato fruit that is produced.

(Photo: Fox & Hen Farm, LLC)

There is a beneficial wasp that lays eggs in the body of tomato hornworms. Worms that have been affected by this will have white cocoon-like structures on their back. This is good for hornworm management. Do not remove hornworms that show signs of this wasp.

(Photo: Fox & Hen Farm, LLC)





Corn earworms will feed on the surface of the tomato fruit and may also tunnel into the fruit.

(Photo: Alton N. Sparks, Jr., University of Georgia, Bugwood.org)

Blossom end rot may be prevented by keeping even soil moisture during the growing season. A mulch of straw or leaves may help. Move tomatoes to a new part of the garden every few years. This will lessen soil-based disease problems.

Tomato plants may be very attractive to bees and other pollinators. Do not apply pesticides when pollinators are present. For more information on managing pests and diseases, contact your county Extension agent or consult the UK Cooperative Extension publication *Growing Vegetables at Home in Kentucky* (ID-128) at www2.ca.uky.edu/agcomm/pubs/id/id128/id128.pdf.



Tomato blossom end rot is often caused by high temperatures and low soil moisture. Be sure to water your plants regularly. You may also put a light layer of straw around the base of the plants to help keep soil moist.

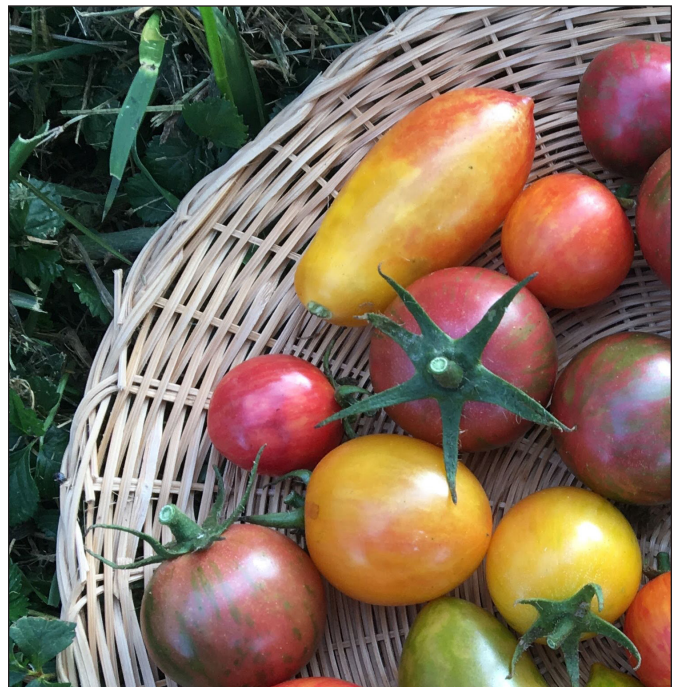
(Photo: Brenda Kennedy, University of Kentucky, Bugwood.org)

Harvesting

Tomatoes can be picked from the vine when they first start to ripen. They will fully ripen indoors. Waiting until the tomatoes are fully colored on the vine does not make them taste better. Birds and rodents may be drawn to the bright color. Before the first frost, pick off all tomatoes, even the green ones that are the right size. Wrap them in newspaper, place in a box, and store in a cool place indoors. Check tomatoes every few days and move the ripened ones to a warmer, lit area. This method may result in “fresh” tomatoes for four to six weeks, but the flavor may lessen with time. Lastly, green tomatoes are edible. If you wish to eat green tomatoes, harvest when tomatoes are full size but before any red color is present.

Clean Up

Pull plants out of the ground after frost kills them and throw them away or place them on a compost pile.



Many people think tomatoes are one of the best things about growing a home garden. Pick them when they first start to ripen and let them ripen fully inside.

(Photo: Fox & Hen Farm, LLC)

Serving

Tomatoes are rich in nutrients that promote good health, including fiber and vitamins A and C. A medium tomato contains about 25 calories, 20 mg sodium, and is a good source of potassium. Tomatoes can be eaten raw or cooked.



Serve tomatoes raw or cooked.
(Photo: Fox & Hen Farm, LLC)

Storing

Store ripe tomatoes at room temperature and use them within three days. Keep out of direct sunlight. Place green tomatoes in a paper bag to ripen. Tomatoes will store longer when refrigerated but may lose quality.

Preserve your garden's harvest by home canning tomatoes and tomato products. This can help save money and gain control over what is in your food. When canning, do not use tomatoes



Canning is a good way to preserve tomatoes for future use.
(Photo: Fox & Hen Farm, LLC)

that are overripe or beginning to spoil. To ensure safe, high-quality home-canned products, always follow research-based recommendations when canning. For more information on home canning tomatoes, please refer to University of Kentucky Cooperative Extension publication *Home Canning Tomatoes and Tomato Products* (FCS3-580) at <http://www2.ca.uky.edu/agcomm/pubs/FCS3/FCS3580/FCS3580.pdf> or contact your [county Extension agent](#).

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