

How to Grow a Tomato Plant

1. **Choose a sunny spot to place** the plants to transplant them. Place tomato plants in a site receiving full sun (7 hours or more daily). Tomatoes need lots of warm sunshine for optimum taste. Soil temperature should be about 65 degrees F. before planting outside.
2. **Prepare the garden bed by adding lots of well rotted--not green--compost** (5 to 8 pounds per square ft.) to the soil. Turn compost into the top 3 inches (6 to 8 cm). Tomatoes demand a growing medium rich in organic matter. If you don't make your own compost, use store-bought compost or composted manure available in the 40-pound bags. Compost or Manure is usually less than \$5 per 40-pound bag.
3. **Warm up the soil before planting.** Cover the planting area with black plastic held in place with boards or brick. Use a kitchen meat thermometer or soil thermometer to make sure the soil is between 65 and 70F before transplanting. To keep the soil warm in the first few weeks after transplanting, cut holes in the black plastic, transplant as described below, and poke holes in the plastic.
4. **Next, "harden off" your plants** for at least a week to acclimate them to the great outdoors. Start by placing them outdoors in a sheltered location with 2-3 hours of dappled sunlight, but bring them in at night. Increase their time outdoors, but bring them in at night.
3. **Transplant the tomato deeply.** . In our area, it is best to bury the tomato in a trench about 6 to 8 inches deep. Bury about 50 to 75% of the plant (especially for leggy plants that became skinny growing in pots). Pinch off the lower leaves—allow 4 or 5 sets of leaves to remain on the plant, and bury the rest of the stem. New roots will emerge along the buried stem, giving the plant a developmental boost; a new transplant needs to focus on root production. At planting, broadcast (sprinkle evenly) a balanced vegetable fertilizer with a higher 2nd number (E.g.8-10-8, 3-9-4, 4-6-3) according to package directions.
4. **Give each plant about 1 gallon of warm water (about 80 degree)s within ten minutes of transplanting** to avoid transplant shock.
5. **Space tomato plants 18 to 36 inches apart;** Either stake your tomato plant or cage them. If you allow the plants to shade each other's fruit, you will get a sweeter flavor. Don't forget to leave yourself enough space to get in between the plants to water, weed, and harvest. Those cute, little seedlings may not remain that way for long.
6. **Water in the first 7 to 10 days after transplanting at about 16 ounces of warm water per plant every day.** Drip or soaker hose watering is ALWAYS better than overhead, which can encourage diseases that tomatoes are particularly prone to.
7. **Wait two or three weeks after transplanting, and place a mulch of straw,** herbicide-free dried grass, or pine needles to control weeds and keep the soil moist during dry weather. If you are using drip irrigation or soaker hose, you may remove the black plastic before mulching. The mulch should be about an inch thick and surround at least a circle 12 inches in diameter around the stem. **Caution: Do 'not keep the soil continuously wet or "soggy"**. That will kill (smother) the roots and will cause a stem disease (fungus) especially once it is really warm/or hot weather.
8. **Space water out more after 10 days** and ensure that plants are receiving 1 to 3 inches of rain weekly. If not, give each plant about 2 gallons per plant "per week," beginning by about the end of the second week after transplanting. Water deeply 2 to 3 times weekly (so, water each plant with about .75 to 1 gallon each time, increase water as the plants get larger and when weather is hotter. It's okay in hot or dry weather to water even more frequently with larger volumes. **To determine if your plant needs more water,** dig down 6 inches in a few areas around the tomato plant. If the soil is muddy and soggy at 6 inches down you are overwatering. If it's really dry 6 inches down, increase water. Your soil at 6 inches should be moist, like a mostly wrung out sponge.
9. **Give support** Consider using a tomato cage or a tall stake to support the tomato vine about 14 days after transplanting.
- 10 **An additional application of nitrogen about fruit set time,** placed in a circle 1 foot away from the plant, helps sustain production. Choices include 1.5 oz of ammonium sulfate for each 10 ft of row, or nitrogen in the form of fish meal, blood meal, or a balanced fertilizer with a higher 1st number, E.g. 10-5-5 or 16-6-4). Read and follow the package instructions

when applying the fertilizer you choose. Side-dressing means to dig a 2-4 inch trench about 4 inches from the plant's stem, add recommended amount of fertilizer, and cover with soil. More applications of nitrogen fertilizer are not recommended, as it tends to promote excessive vine growth and delay fruit maturation. Adding organic matter to the soil improves soil quality and may add nutrients.

How to get a ripe tomato in the PNW--At the end of August

- Any fruit that hasn't set by then won't ripen.
- Cut off all blossoms and growing tip of each plant to the first node
- Remove most of the leaves
- From bottom up
- If very hot weather expected, keep leaves that shade tomatoes
- Better circulation helps prevent late blight
- Plant's energy focuses on ripening fruit
- Water sparingly, but don't let plants wilt.
 - Too dry: blossom end rot

Red tomatoes from green-off the vine

- Harvest largest, unblemished, mature green tomatoes, wipe clean
- Reasonable size and color turning lighter
- Clip stem close to fruit
- Place in open cardboard box
- Room temperature—70 degrees
- Check for spoiled fruit
- Should ripen in around 14 days

This growing guide is provided by the WSU Extension Master Gardeners of Cowlitz County.

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