

Growing Tomatoes in the Home Garden

Deciding Which Varieties to Grow

- Determine intended uses – eating fresh, drying, canning, or making sauce
- Assess available garden space – how many plants and which type
- Choose between starting from seeds or purchasing plants, and
- Know if determinate or indeterminate tomatoes will work best for your garden.

Type of Tomato	Space / Support Requirements / Growth Habit	Harvest
Determinate	Less / can do with less support / bushy	Fruits ripen about the same time
Indeterminate	More / need sturdy support / keeps growing	Fruits ripen over a long season

Starting from Seeds

There is more variety and less cost than potted plants, and it gives joy seeing them grow.

- **Germinate the seeds** in early March (8 weeks before last frost, May 1-10 here). Place moistened seedling mix in small pots (1-1.5 inches), firm the soil, drop in one seed, and cover with 1/8 inch peat or starter mix. Keep the seed starts warm (65° to 70° F) using a bottom heat pad and a cover to keep them from drying out. They should germinate in 6 to 10 days.
- **Repotting seedlings** into 3-4 inch pots at second set of true leaves. Use seedling mix for this first of two repotting sessions. To repot or transplant tomatoes: 1. Hydrate seedling mix; 2. Water plant thoroughly with room temperature water; 3. Handle seedlings by leaves, not the stem; 4. Place the plant deeper in the new pot to grow new roots along the buried stem; 5. Firm soil around the plant to ½ inch below the rim; 6. Water thoroughly; 7. Place plant in a warm, sunny location, protected from wind.
- **Repot second time** into a gallon-sized pot when plant is 6-10 inches tall. Steps are: 1. Hydrate potting soil; 2. Hydrate the plant by floating pot in a bucket of water until bubbling stops and pot sinks to the bottom; 3. Remove lower leaves that will touch or be below the soil level and gently remove plant from pot; and follow steps 4 through 7 above. Protect plants from cold by surrounding them with water-filled milk jugs, covering with floating row cover fabric, or putting them next to a wall or fence.
- “Harden off” the transplant before planting into the ground. This may take place anytime after the first repotting. “Harden off” means gradually transitioning the plant from indoor to outdoors, beginning with a couple of hours in semi-shade the first outing to living outdoors full-time. The process usually takes a few days.

Planting into the Ground

Plant is ready to go into the ground generally in late May or early June when soil reaches 60° F. Prepare the site and plant as follows: 1. Select a site with 8+ hours of sun, loamy soil, and little wind, (avoid low areas where water and cold air settles); 2. Work soil 10 inches deep; 3. Add 2 inches of compost, and work it in well; 4. Hydrate the plant 1 to 2 hours before transplanting using the bucket float method above; 5. Prune lower leaves and all suckers (side shoots where a mature leaf joins the main stem) below the first blooms; and 6. Select a planting method.

Trench Method: Pros – roots are in warmest soil; good for leggy plants. Cons – requires frequent watering and careful, shallow cultivation.

Dig a trench 8-10 inches deep; add fertilizer and lime (based on soil test) to the bottom; cover amendments with 1-2 inches of soil to prevent burning roots. Lay plant at an angle, cover with soil, water, and push dirt up to pillow the stem before filling the trench. The plant will straighten up quickly. Place a marker at the root ball end to help prevent root damage when weeding. Add support structure at planting.

Vertical Method: Pros – larger reservoir of moisture available to roots; less cracking. Cons – deeper soil is cooler, resulting in slower growth & later fruit ripening.

Dig a hole 10 inch deep, add fertilizer and lime, cover as with the Trench Method. Place plant deeper to promote development of new roots from buried stem. Fill in with soil, water and add support structure.

Cultural Practices

- **Support** both determinate and indeterminate tomato types to improve air movement and to discourage diseases and pests. Tomato supports vary – choose the material to match the size of your plant. Anchor supports with stakes for extra stability.
- **Mulch** minimizes weeds, retains soil moisture, and prevents soil-borne diseases. Plastic mulch (clear, black or red) helps warm the soil and can be placed before or at tomato planting. Only the red is for all season. Organic mulch (compost, bark, etc.) must be placed after the soil warms in late June.
- **Prune** indeterminate plants helps ripen fruit and prevent disease. Decide how many stems your plant will have and allow only selected side shoots to develop. As the plant grows, remove all other side shoots (suckers), dead or sickly leaves. Thin to see into plant.

Other Tips

- If flea beetle damage occurs on young plants (lots of small holes in leaves), fertilize for stronger growth. Usually no other treatment is needed if the plant is strong.
- In dry or hot weather, soak the soil with at least 1 inch of water every 7 to 10 days. That's 3 gallons for an average tomato plant.
- To promote fruit ripening, stop watering 30 days before the first frost, generally in October (check for your location); remove new blossoms and immature tomatoes that won't ripen before frost.
- To extend the productive season, cover the plant with plastic to protect from late-season rain and cooler temperatures. Or harvest the larger green tomatoes, placing them in a single layer (not touching) in a warm (65° to 70° F), and dark location to continue ripening indoors.
- Remove all plant debris at season's end to help reduce future pests and diseases.
- Rotate crops – wait 3 to 4 years before planting tomato family (tomatoes, eggplants, peppers, and potatoes) members in the same spot.

OSU Extension Service Resources

Visit your OSU Extension Service office at 200 Warner-Milne Road, Oregon City, for these publications, or get them online at <http://catalog.extension.oregonstate.edu/>

Blossom-End Rot of Tomatoes FS 139

A Guide to Collecting Soil Samples for Farms and Gardens EC 628-E

Master Gardener™ Advice

- Call the Home Horticulture Helpline: 503-655-8631 (Clackamas County), 503-821-1150 (Washington County), 503-445-4608 (Multnomah County).
- For 10-Minute University™ handouts and class schedule, visit www.cmastergardeners.org

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