

Growing Tomatoes in the Home Garden

Deciding what 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 without 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 choice of varieties, it costs less than potted plants, and 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"), firm the soil and drop in one seed, cover it with 1/8" peat or starter mix. Keep the seed starts warm (65-70° F) using bottom heat pad and a cover to keep them from drying out. They should germinate in 6 to 10 days.
- **Repot small seedlings** to 3-4" pots once the second set of true leaves mature. This is the first of two repottings before setting the tomato plant outside. Using seedling mix, place the plant deeper in the new pot. Tomato plants grow roots all along the stem that is buried. Water plants thoroughly prior to repotting, using room temperature water. Handle the seedling by its leaves, not the stem. Firm soil around the plant; leave 1/2" at the top, and water to assure good contact between roots and seedling mix. Keep the plants in a warm, sunny location.
- **Second repotting** is into a gallon-sized pot when plant is 6"-10" tall. Before transplanting, hydrate the plant by floating it in a bucket of water until it stops bubbling and sinks to the bottom. Remove and pinch off leaves that will be below the soil level. Gently remove the plant from its pot and place it deep in the gallon pot. Fill pot with potting mix to 1/2" below the rim; water to assure good contact between roots and potting mix. Give the plant 8+ hours of sun in a warm location. Protect the plant from cold temperatures by surrounding it with water-filled milk jugs, covering it with fabric or plastic wrap, or putting it next to a wall or fence.

Planting into the Ground

- **Transplant** when plants are 10 to 15" tall and soil temperature is 60° F, usually in June.
- **Select a site** with 8+ hours of sun, loamy soil, and little wind. Avoid low areas; water and cold air settle in low spots, which can harm plants.
- **Work the soil** 10" deep by turning it with a shovel. Add 2" compost and work it in well.
- **Hydrate the plant** 1-2 hours before transplanting using the bucket float method above.
- **Remove leaves** that will touch the soil or be below the soil level, and all suckers (leaf sets that grow where the stem and a mature leaf join) below the first blooms.
- **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" deep; add fertilizer and lime (based on soil test) to the bottom, cover amendments with 1"-2" soil to prevent burning roots. Lay the plant on its side and cover with 2-3" of soil. Water well, and push dirt up to pillow the stem. The plant will straighten up quickly. Place a marker at the root ball end to help prevent disturbing the roots when cultivating. Add the support structure at transplanting to avoid root damage.

Vertical method: Pros – larger reservoir of moisture available to roots, less cracking; Cons - deeper soil is cooler, causing slower growth & fruit ripening.

Dig a 10" deep hole, add fertilizer and lime, and cover the same as with the Trench method. Place plant deeper than it was in the pot, to promote new root growth along the buried stem. Add soil to ground level and water well. Add the support structure.

Cultural practices

- **Support** both determinate and indeterminate tomato types for our climate to improve air movement and to discourage diseases and pests. Supports vary from commercial hoop style tomato cages, to lattices and stakes, and cages made from concrete reinforcing wire. Anchor cage supports using 2"X2" stakes to keep them sturdy.
- **Mulch** helps minimize weeds, retains soil moisture, and prevents soil born diseases. Plastic mulch (clear, black or red) helps warm the soil, and can go down when the tomato is planted. Organic mulch helps improve the soil, but must go down after the soil is warm in late June.
- **Pruning** helps ripen fruit and prevent disease. Remove all suckers below the first flower cluster, and keep 2-5 main stems. Also remove dead or sickly leaves (yellow or brown), and leaves that are close to or touching the ground. As the plant grows, 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" of water every 7-10 days.
- In early- to mid-August stop watering to promote fruit ripening, and remove new blossoms and immature tomatoes that won't ripen before frost.
- Cover the plant with plastic to protect from rain and cooler temperatures to extend the productive season. Or harvest the larger green tomatoes, placing them in a single layer (not touching), in a cool, dark location to continue ripening indoors.
- Remove all plant debris at season's end, to help reduce future pests and diseases.
- Rotate crops --- wait 3-4 years before planting any member of the tomato family (tomatoes, eggplants, peppers, and potatoes) again 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://extension.oregonstate.edu/catalog/html/ec>

Pacific Northwest Insect Management Handbook and *Pacific Northwest Plant Disease Management Handbook*.
Soil Sampling for Home Gardens and Small Acreages EC 628

For Master Gardener advice

- Call Home Horticulture Helpline: 503-655-8631 (Clackamas Co), 503-725-2300 (Washington Co), 503-445-4608 (Multnomah County)
- Visit Clackamas Chapter Master Gardeners website www.clackamascountymastergardeners.org for 10-Minute University™ handouts and schedule
- Look for Master Gardeners at Farmer's Markets