Master Gardener Program Puget Sound Gardening Tip Sheet # 7

Tomatoes

Tomatoes are easy to grow in Puget Sound, if preferred conditions are met and our climate considered. The following guidance is based in part on our growing experience at our King County Master Gardener Demonstration Gardens.



Choosing Transplants and Hardening Off

To ripen well in our climate, choose tomatoes with "days to maturity" of 75 days or less for best results. The following varieties have been popular in our annual tasting trials at our Bellevue Demonstration Garden: cherry types *Sungold*, *Sweet Million*, and *Juliet*; good standard varieties include *Oregon Spring* and *Stupice*. You can find these and many other varieties at local plant sales in late April and May each year. Even though some nurseries begin to stock tomatoes in early April, it is far too early to plant them in the ground at that time.

Select short, sturdy plants and avoid those that are tall and leggy. There are two basic types of tomatoes. Determinate varieties are bush-like with fruit that ripens over a 4 to 6-week period, while indeterminate varieties are vine-like and continue to grow and produce tomatoes until the end of the season. Dwarf indeterminate tomatoes are a recent introduction that provide a long season of tomato production on a shorter and stockier plant. We've grown these in our Bellevue Demonstration Garden and found them to require less staking than traditional indeterminate tomato varieties.

Prior to planting out, gradually condition (harden) the plants to the outside weather conditions over the course of a week or so. Start with just a few hours in a partially sunny area, bring them in at night, and increase their time outside each day.

Location, Planting, Staking & Watering

Choose a warm site in an area that receives a minimum of 6 hours of sun per day. Raised beds or gardens next to a south-facing wall are good choices. Work amendments and balanced fertilizer into the soil prior to planting, avoiding high nitrogen products. Plant transplants after the soil temperature is 50 degrees or above, typically around the middle of May. To encourage root development and a healthier plant, bury up to six inches of the stem as you plant the tomato. Taller plants can be trenched by removing the leaves on the lower two-thirds of the plant and placing the transplant on its side in a 3" deep trench. Water thoroughly after planting. Plants must be well spaced to enable harvesting and to avoid disease.

Determinate tomatoes may need only minimal staking. Indeterminate tomato plants can get very large and will need staking, caging or trellising. Install the stakes or large cages at the time you plant the tomatoes. Tomatoes need about one inch of water a week. If tomatoes are in the ground, water thoroughly at the base of the plant twice a week. Tomatoes in containers may need more frequent watering. Never use overhead irrigation, as wet leaves cause the plant to be susceptible to disease. Plants that are well spaced and staked also reduce the opportunity for disease to take hold.

Weeding and Pruning

Mulch the tomato bed once the heat of summer arrives to discourage weeds, retain moisture, and reduce disease. Avoid disturbing the roots if weeding is needed. Prune axillary shoots (suckers) from indeterminate varieties for a more manageable plant size and larger fruit. Suckers are the leafy shoots that emerge from the joint between the branches and the main stem of the plant.

Ripening Fruit

Starting in mid-August, blossoms on large-fruited varieties will not mature and ripen before the end of the season. Remove blossoms and small fruit to encourage ripening of the remaining tomatoes. Reduce or stop watering about mid- to late-August to stress the plant and encourage ripening.

Common Problems

Late Blight is a fungal disease that usually occurs toward the end of summer when cooler, wetter weather arrives. The initial symptoms are dark greasy-looking spots on the leaves that then progress to the stems and fruit. The vines may succumb in a matter of days and infected green fruit rots before it can ripen. Preventive and corrective action: avoid overhead watering; promote good air circulation by staking and pruning; remove leaves touching the ground; remove infected plants; rotate crops.

Blossom End Rot (BER) causes a soft, dark lesion on the bottoms of ripening tomato fruit. It is most prevalent in Roma-type tomatoes, but can occur with many varieties. BER is considered a nutritional disorder due to lack of calcium uptake, but in a practical sense the cause is usually irregular watering. To avoid problems, have your soil tested to ensure that it contains appropriate nutrients and pH and keep plants adequately watered. Use a thick organic mulch around plants to help maintain soil moisture.

Physiological Leaf Roll is a common cosmetic issue seen early in the season, but does not impact fruit production or the health of the plant. Some varieties are more susceptible than others. Ensure adequate watering and avoid over-fertilizing and over-pruning of young plants.

Catfacing is a development disorder that causes fruit to appear puckered, lumpy, or zippered. It is usually limited to early fruit or fruit developing during cool periods. High levels of nitrogen may increase the problem: Do not over-fertilize.

Cracked fruit is most common when significant rainfall follows a period of dry weather. Sudden, rapid growth during fruit ripening causes the tomato to outgrow its skin. Mulching and regular, even watering can reduce cracking. Harvesting fruit in advance of forecasted rain is also advisable.

Sunscald causes soft white or yellow spots on fruit exposed to south-facing sun. Some varieties are more susceptible, simply because they produce less abundant foliage. Avoid pruning of upper leaves from tomato plants and cover plants or fruit with lightweight shade cloth if needed.

For more information about tomatoes, including helpful photographs, see **WSU publication FS145E, "Growing Tomatoes in Home Gardens"**, available as a free download at <u>pubs.extension.wsv.edv</u> You'll also find many other vegetable and home gardening publications there. Visit our demonstration gardens during the growing season. You'll find a location listing at <u>extension.wsv.edu/king/gardening/garden-and-clinic-locations</u>

Additional Master Gardener Tip Sheets, including "Gardening Websites" and "Gardening Publications" are available at kingcountymg.org Also see WSU's "Gardening in Washington State" at mastergardener.wsu.edu/resources/gardening-in-washington-state and free downloads of WSU gardening publications at pubs.extension.wsu.edu/resources/gardening-in-washington-state and free downloads