

*Growing Tomatoes in the*

# EDIBLE GARDEN



Ag *for* Life



# Growing Tomatoes in the Edible Garden

When you think of summer suppers, you might call to mind cherry tomato salads or thick slices of beefsteak tomatoes on top of your freshly-grilled burger. Food would be pretty bland without tomato ketchup, salsa, or pasta sauce! There are so many ways to use tomatoes in cooking and nothing beats the taste of one fresh out of the garden. Tomatoes come in all shapes (round, oblong), sizes (from tiny currant-sized to whopping one pounders), and colours (red, yellow, orange, black, green, speckled, and striped). Try these tips to successfully grow tomatoes in your garden!

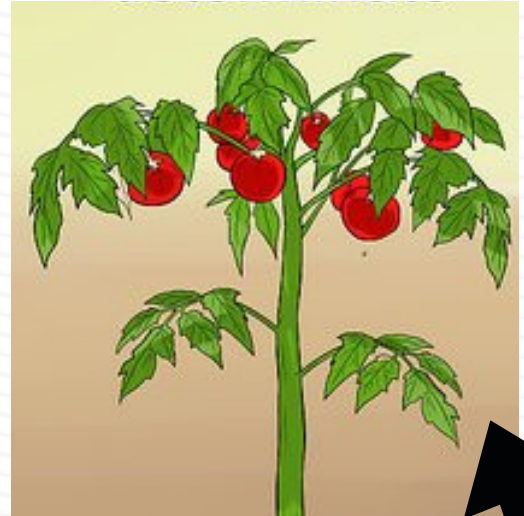




# Indeterminate and Determinate Tomatoes: What is the Difference?



**Indeterminate**



**Determinate**

There are two main types of tomatoes: indeterminate and determinate. Determinate tomatoes stop growing at a fixed point, according to the cultivar, and they produce fruit all at once, usually over a couple of weeks. Indeterminate tomatoes keep growing throughout the whole growing season and produce tomatoes over a longer period of time. Determinate tomatoes usually top out at 1.2 metres or less, while indeterminate tomatoes can grow 1.8 metres or more.

## Sowing and Cultivating Tomatoes

Most tomato cultivars need a long growing season, which means that in cold climates, unless you have a greenhouse, you will need to start the seeds indoors approximately 8 weeks before transplanting them out into warm soil. If you direct sow your tomato seeds, frost may arrive before your plants are ready to harvest. When starting tomato seeds indoors, use of a grow light will be necessary to ensure the plants have enough light to grow into robust, sturdy specimens. Be careful not to overwater, which may encourage rot and mould.

Be sure to harden off your tomato seedlings before planting them outdoors. They need to acclimatize to the more exposed, harsher conditions. Place the flats of seedlings outdoors during the day, in a location sheltered from bright, hot sunlight, and drying winds. Bring them inside at night. Gradually increase the amount of hours the plants are outside over a period of approximately two weeks. By the end of this timeframe, they should be able to stay out all day and all night.

Do not transplant tomatoes until the soil and ambient temperatures are warm enough. Cool temperatures will cause the plants to stop growing. Wait for a consistent daytime temperature of +15°C and a nighttime temperature hovering around +10°C. Keep some old bedsheets handy to cover plants if the temperatures suddenly dip.

Offer tomatoes a location in full sun (at least 6 hours per day), but keep them out of intense heat, which may cause issues such as sun scorch.

If you are planting tomatoes in raised or in-ground beds, prepare the planting area by amending it with a 2.5 centimetre layer of compost. Determinate tomatoes should be spaced at least 0.6 metres apart in the garden. Allow 0.9 to 1.2 metres of space between indeterminate tomato plants.

Tomatoes tend to be hungry and thirsty plants, requiring regular inputs of nutrients and water. Maintain a consistent watering schedule, especially if you are growing them in containers, which dry out more quickly than raised or in-ground beds. Fertilize with diluted (half-strength) liquid kelp or fish emulsion every two weeks throughout the growing season.

Mulch tomato plants in raised or in-ground beds with a 5-centimetre layer of clean, weed-free straw. This will help maintain consistent soil temperatures and moisture levels, and control weeds. Weeding around your tomato plants is important to minimize competition for nutrients, water, sunlight, and space. Indeterminate tomatoes will require staking, or the use of a cage to help keep them upright. If tomatoes are left to lay on the ground, they may be more susceptible to problems such as rot and mould. Many gardeners choose to prune indeterminate tomato cultivars to control the growth of the plant and to improve air flow. To prune tomatoes, use a pair of pruning shears to remove the tiny suckers (leafy side stems) that grow where the branch and main stem meet. If you leave the suckers alone, they will grow into more branches.



## Growing Tomatoes in Containers

Tomatoes are excellent candidates for containers, which offers the flexibility needed in small space gardening (it also means they are more portable if you have to move them out of severe weather). For container growing, select cherry or grape cultivars, as the plants are small. Impose proper spacing in containers – don't cram them in too tightly. Ensure your containers are large enough to support sizeable plants, particularly if you are growing indeterminates. The containers should also have sufficient drainage. Fill them with container potting mix and amend with compost if it doesn't already contain some.



# Harvesting and Storage of Tomato Fruit



Some gardeners will leave tomatoes on the plants as long as they can, with the goal that the fruits will ripen to their full colour before frost. It is just fine to pick the fruit while it is still green, however, it should have a blush of colour beginning at its base. If you decide to pick the tomatoes while they are still green, you can place them in a single layer in a shallow tray and keep them in a warm place to ripen. (Light isn't necessary to ripen tomatoes, but warmth is.) Check on them every three or four days to see if they are ready. Picking them while they are still green may sometimes prevent cracking.

Some gardeners will pull up entire tomato plants at the end of the season and hang them upside down in the basement. Any remaining fruits on the plants will ripen over the next few weeks and you can harvest them.

Store freshly-picked tomatoes at room temperature. They lose flavour and texture in the refrigerator. Tomatoes are excellent for canning, dehydrating, or cooking into various dishes.





# Potential Problems when Growing Tomatoes

If you notice what looks like a blackened, water-soaked blotch at the base of your tomato fruit, it isn't due to a fungus. This is a physiological condition called blossom end rot. Blossom end rot is often caused by inconsistent or uneven watering. It can also be a sign of calcium deficiency. Enough calcium may be present in the soil, but it cannot be taken up by the plant if the plant is not watered properly. Sometimes too much fertilizer causes blossom end rot. To prevent this common issue, maintain a regular watering schedule and avoid fertilizer containing high amounts of nitrogen.

Cracking of tomato fruit is a common problem many gardeners face. Some cultivars are more prone to cracking than others, but generally, cracking is caused by rapid fruit growth brought on by inconsistent irrigation (either due to weather or through the fault of the gardener). Try to keep to a regular watering schedule with even applications of water.

On occasion, you may notice that the flowers of your tomato plants fall off, which prevents fruit from setting. Blossom drop may be caused by over-application of high nitrogen fertilizer, or prolonged periods of drought. Swings in temperature may also lead to blossom drop. It can happen if the daytime temperatures are too high (over 30°C for several days) or the nighttime temperatures are consistently too low (13°C or less). Another issue could be poor pollination. While tomatoes are self-fertile, self-pollination is not always very efficient, and if the plants are not pollinated, the blossoms will drop. You can counter this problem by manually pollinating the plants. Use a cotton swab or an artist's paintbrush to gently move the pollen from one plant to another.

While tomatoes can be one of the more challenging plants to grow in the edible garden, they are also one of the most rewarding and productive.



