



grow it

Crop sheet



Tomatoes



Description

While tomatoes are an important crop in the vegetable garden, they are actually fruits. They are the fleshy berries of the tomato plant and often referred to as 'fruiting vegetables'. While we think of tomatoes as being red and round, they do come in other colours (yellow, orange, purple, green, stripy), shapes, and sizes (cherry, pear/teardrop, oblong, plum, beefsteak).

The Latin name for tomatoes is *Lycopersicon esculentum*. *Lycopersicon* is from the greek *Lycos*, meaning a wolf; *Persicon* means peach; and *Esculentum* means edible, or good to eat.

The tomato family *Solanaceae* is a large plant family. It includes many edible plants, including aubergines, peppers, chillies, tomatillos and even potatoes. This family also includes potentially harmful plants such as deadly nightshade, the mandrake and tobacco.

Sources: 'RHS Fruit & Vegetable Gardening' by Michael Pollock; 'Grow Your Own Veg' by Carol Klein; 'The New Oxford Book of Food Plants' by J.C. Vaughan & C.A. Geissler; 'Cabbages & Kings: the origins of fruit & vegetables' by Jonathan Roberts; and the RHS Website 'Grow Your Own Veg': www.rhs.org.uk/vegetables/crops/index.asp

History

Tomatoes are thought to originate from misty, riverbanks in Peru, where wild tomatoes still grow today.

The Spanish brought the tomato back to Europe in the 16th century. When it was first introduced in Europe, the tomato plant was regarded with suspicion owing to its resemblance to Deadly Nightshade and the Mandrake, a plant believed to have magical powers and to shriek when it was pulled up (a plant mentioned in Harry Potter). For many hundreds of years it was grown only as an ornamental

plant, as European herbalists said it was bad to eat, upsetting the stomach or causing fainting. By the 1800s, however, the tomato slowly became accepted in Europe as an edible crop.

Today, tomatoes are grown all around the world. In warmer countries they are an outdoor crop, whereas in countries such as the UK they are commercially grown in large glasshouses. There are many outdoor varieties that are suitable for growing in gardens and allotments in the UK in warm, sheltered or southern districts.

Interesting facts

fact! Tomatoes can be eaten raw or cooked and are used in salads, sauces, stews and soups. They are widely used in Mediterranean recipes, especially Italian and Spanish cuisines, and are also processed to make juice, pickles, chutney, ketchup, puree, pastes. They can also be tinned.

fact! China is the world's largest grower of tomatoes and grows about 20 million tonnes a year.

fact! Tomatoes are mainly made up of water (90%) and do not have many calories (23kcal per 100g). They are rich in vitamins A, B and C.

Varieties to try

- Outdoor Girl, Tigerella (stripy),
- Cherry: Gardener's Delight & Sungold.
- Outdoor Bush: Tornado, Tumbler (hanging basket)

Growing conditions

There are two main types of tomato plant: 'vine/cordons' and 'bush', which include hanging basket varieties. Choose varieties that are suited to growing outside.

Tomatoes prefer fertile, nutrient-rich, well-drained soil, to which you should add organic matter, such as compost. Tomatoes can also be grown in grow bags or pots. They need a warm, sunny site for the fruit to develop and ripen.

When to grow

Start growing the seeds indoors in late March to early April, (just after the Easter break). Sow them in seed/multipurpose compost, in either seed/module trays or small pots.

Place on a warm, sunny windowsill. Ideally, you should cover them with plastic propagator tops, or, if you have one, use a heated propagator. Tomatoes need at least 18°C to germinate.

Fill the pot almost to the top, tap the compost level, place the seeds on the surface and then cover with a thin layer of fine compost.

If you have a greenhouse at school, then you can start growing tomatoes earlier in the year, from January and February.

How to grow

Once two seed leaves have formed, prick out the small plants into 5-8 cm pots once two 'seed' leaves have formed. Biodegradable pots, such as coir pots, are particularly good as they will allow you to plant the tomatoes without disturbing the roots. Wait until the risk of frost has passed in your area (late May-mid June), until the roots of the tomatoes have filled the pots, and until the first flowers have formed, before planting outside in the ground, pots or growbags. Vine/cordon tomatoes will need to be supported by being tied to stakes or canes pushed firmly in the ground. Make sure you put toppers on canes to protect from eye injuries.

shoots grow where the base of the leaf joins the main stem. Those grown as bush or hanging basket types do not need to have sideshoots removed. 'Trusses' are the branches of yellow flowers that become vines of tomatoes. Once there are 4 trusses, then pinch out the top to stop it growing taller and to encourage the plant to put all its energy into forming the fruit.

Remove the sideshoots regularly, when they are about 2.5 cm long. This is called 'pinching out'. Side

Tomatoes need watering on a regular basis. Feed every 10-14 days with a balanced liquid fertiliser suitable for tomatoes. You'll need to make sure someone does this during the holidays.

Alternatively, grow them in large pots so that they can be taken home to be looked after.

Harvesting

Start picking when the fruit is ripe and fully coloured. At the end of the growing season, lift the plants and pick the green fruit.

These can be stored in a drawer next to a banana, or on a sunny windowsill until they ripen.

Pest and disease problems

Irregular watering can cause 'blossom end rot', where a black sunken scar develops on the bottom of the fruit. Such watering also causes splitting. Outdoor grown tomatoes can be prone to potato

blight and viruses and plants must be removed and not composted if they get these diseases. More information can be found on the RHS website: www.rhs.org.uk