# The Complete Guide to Tomato Care

From Sowing to Harvesting

# envii

# CONTENTS



**Getting Started** 



**Soil Preparation** 



**Sowing & Planting** 



#### Maintenance



**Flowering & Fruiting** 







**Common Problems** 



Conclusion

### WHY GROW YOUR OWN?

Eating seasonally is the key to enjoying the freshest, tastiest, and most nutritious food. Cultivating your own produce not only allows you to align with local, seasonal availability, but also ensures no harmful additives are being used on crops and significantly contributes to minimising your food miles. Tomatoes stand as one of the UK's most popular vegetables.

Yet, have you ever picked up a pack in the supermarket, only to realise they were grown over 10,000 miles away? Well, did you know that throughout the summer months here in the UK, you can effortlessly harvest your very own perfectly plump tomatoes right at home.

#### WHAT IS INCLUDED IN THIS GUIDE:

Hidden inside this exclusive eBook is your comprehensive guide to growing your own tomatoes, tailored for both beginner and seasoned gardeners.

Whether your leaves are looking limp, your flowers are fading or you simply want to maximise your harvests, we've got you covered.

This comprehensive guide spans from choosing varieties and sowing seeds to disease management and troubleshooting, offering a range of helpful tips along the way to ensure your growing journey is successful and rewarding.



Choosing which Tomato variety to grow can be a challenge but we cover a range of topics in this chapter to help you decide.

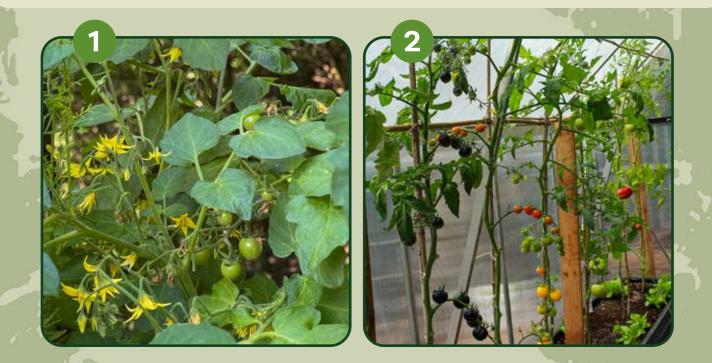


### DIFFERENT TOMATO VARIETIES Determinate & Indeterminate

#### Tomatoes can be broadly split into two categories:

Shorter, determinate types, known for their bushy growth.

Taller, indeterminate types, also referred to as cordon or vining tomatoes.



While determinate tomato plants tend to set all fruits at one time after reaching maturity, indeterminate tomatoes continually set fruits as the vine extends, progressing upwards.

In terms of differences in care, determinate tomato plants, being more compact, require no pruning of side shoots. Conversely, it's essential to regularly remove side shoots (suckers) from indeterminate tomato plants to facilitate the ripening of existing fruits, particularly when cultivated in temperate regions such as the UK.

### **TOMATO PLANT CHARACTERISTICS**

#### Determinate

**Dwarf & Bush Type** 



From 2-4 foot tall Lower yielding Fruit ripens at once Bushy, outwardly growth Doesn't require pruning Fruits at the end of branch Good for small spaces Requires little support Shorter lived plants Common varieties: Cherry Falls, Micro Cherry, Patio Plum & Veranda Red.

#### Indeterminate

**Cordon & Vine Type** 



Over 6 foot tall Higher yielding Fruit ripens gradually Vining, upwardly growth Requires pruning Fruits produced along stem Good for larger gardens Requires strong support Long lived plants Common varieties: Sungold, Moneymaker, Shirley & Black

Russian.

#### CHOOSING THE RIGHT TOMATO FOR YOUR CLIMATE AND SPACE

Several factors play a crucial role in influencing the development of tomato plants. For ideal growth, tomatoes require warm temperatures, typically ranging between 20 and 27°C. This, combined with an evenly watered, nutrient-rich soil medium and a minimum of 8 hours of daily sunlight contribute to optimal development.

Your selection of seeds should be dependent on what your growing set up is like, so be sure to examine packets for detailed information on specific varieties. In general, smaller cherry tomatoes tend to ripen more quickly compared to larger beefsteak varieties.

Additionally, some varieties demonstrate increased tolerance to cold, particularly beneficial for those growers without access to a greenhouse, while others have been bred for compactness, ideal for smaller, patio gardens.

Best Varieties for Sauces/Passata

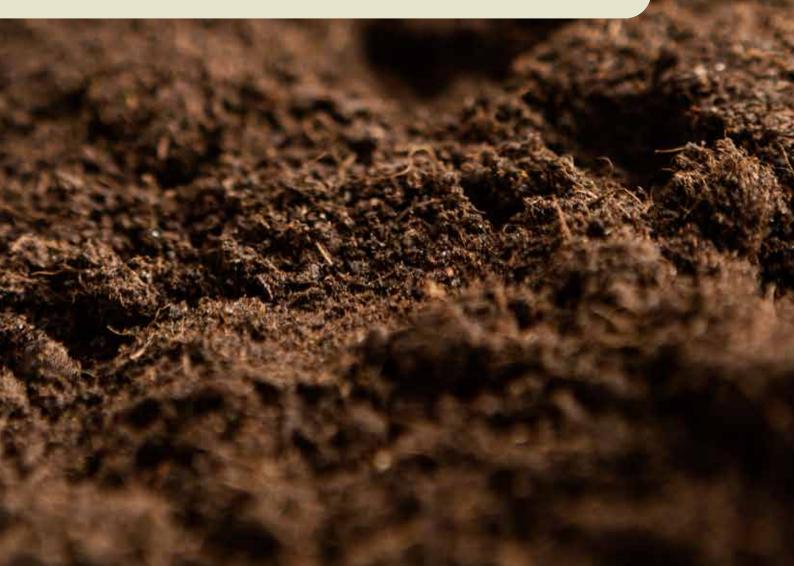
Amish Paste Super Italian Paste Roma San Marzano Fresh Salsa

#### Best Varieties for Salads Cherry Plum Grape (Any named after small fruits)

### Chapter 2 SOIL PREPARATION

Like many plants, tomatoes love a free-draining, slightly acidic, moisture-retentive soil: uncompacted richly nutritious with organic matter added to feed the rapid growth.

Preparing your soil should happen ahead of any planting.



# TO DIG OR NOT TO DIG?

Digging in your nutrients is the traditional method of soil preparation. Begin by loosening and turning your soil. This simple process allows more air to penetrate the soil, which is vital for robust root growth.

Well-aerated soil ensures your plants get the oxygen they need for healthy development. Dig in some nutrient-rich and well-rotted organic matter such as compost, manure or leaf mould.

Without digging or tilling, lay your organic matter as a mulch (4-6 inches or 10-15cm) over your entire patch. This will protect the soil underneath whilst suffocating the weeds. The mulch acts as a source of nutrients that worms digest and excrete while moving around, which enriches and aerates the soil. This method is less labour intensive and does not disturb soil ecosystems in the process.



Utilise a probiotic soil improver, such as Envii <u>Activearth</u>, in your prep which will populate your soil with beneficial bacteria, particularly useful if you are adding sterile shop-bought compost. These micro-organisms play a crucial role in nutrient absorption and overall soil health.

Activearth will also play a role in increasing earthworm activity for better aeration and drainage.

# **TOOLS AND EQUIPMENT**



**Garden Fork** 



#### **Organic Matter**



#### envii ACTIVEAR

Organic soil conditions, millionnu cuil from dambil et compact to biologically 360% and nutrient (35%

www.envii.co.uk

#### Soil Improver

### Chapter 3 SOWING & PLANTING

Knowing when and how to sow your tomato plants is key to achieving successful growth. In this chapter we cover sowing, transplanting and spacing.

## WHEN TO SOW TOMATO SEEDS

Start tomato seeds indoors, roughly six weeks before the average last frost date. In the UK, this is generally from mid to late April depending on your specific region.

Seeds do not need light to germinate but will require upwards of 12 hours once germinated to avoid leggy growth. Temperatures of 18-30°C are best for germination, this can be achieved by using a heated propagator for the first 2-3 weeks before the first leaves emerge.





### HOW TO SOW TOMATO SEEDS

1. Begin with a seed starting compost which is fine in texture, adding the compost to seed trays.

2. Apply gentle pressure to the compost trays to firm the compost and remove any air pockets.

3. Then use either your finger or a small pencil-like tool to poke two holes into each cell, roughly 1/4 inches deep.

4. Plant a couple of seeds in each tray to increase your chances of a successful germination.

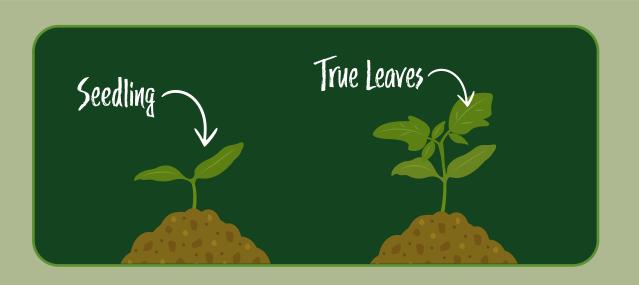
5. Finish by covering the cells with a light amount of compost and firm again.

6. Finally, lightly spray the cells with moisture as this is very important for seed germination.

### 13

### **TRANSPLANTING SEEDLINGS**

Upon germination, all seedlings will emerge from their casing with seed leaves (cotyledons) before they produce their next set of "true leaves". The tiny plants can be gently lifted from their seed trays once at least one pair of true leaves have been produced.



HOW TO TRANSPLANT: Gently dig around the base of the plants to loosen soil and lift the seedlings, holding onto their leaves, rather than the more delicate stems while disturbing the roots as little as possible. Tomato plants will grow rapidly once germinated, so moving them to a new, richer growing medium will ensure they have all of the nutrients they need for success.

Transplant the seedlings into a larger 9cm pot with this new growing medium and gently firm the compost around them. Leave the plants in a sunny indoor spot.

"Leggy" = seedlings grown without enough light will look very tall as they focus on growing upwards to search it out. These seedlings will not be as strong, but often this can be fixed by planting out seedlings deeper in the soil where new roots will be produced from the stem and anchor the plant more strongly into the soil.

## **SPACING & PLANTING**

Once all sign of frost in your area has passed, start acclimatising your tomatoes to the colder, outdoor environment by hardening them off gradually moving them outside during the day and inside at night for around 1 week.

Following this, you can move plants outside permanently.



In case of unexpected late frost forecasts, add any protection you can to seedlings. Bring plants inside or place layers of fleece over your plants and insulate your greenhouse or cold frame.

Greenhouse tomatoes can be planted out slightly earlier than outdoor tomatoes due to the warmer, less exposed micro climate. Tomatoes will cease all growing if temperatures are below 10°C, so make sure not to plant too early. They can be planted in large containers, directly in the ground or in raised beds once daily temperatures exceed 10°C and plants have several sets of true leaves or are roughly 20cm tall.

Healthy roots are the foundation of strong tomato plants. To best establish your plants, be sure to apply a sprinkling of <u>Envii Root Well</u> around the base of each plant, a combination of mycorrhizal fungi and beneficial bacteria to enhance nutrient uptake and root development.

## Chapter 4 CARE & MAINTENANCE

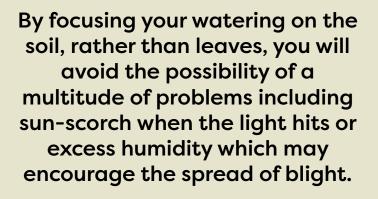
From watering to feeding, tomato plants can be high maintenance so we have put together our top tips.



### WATERING TECHNIQUES

To keep the soil around your tomatoes evenly moist, try watering deeply into the soil which will enable penetration to the lower layers. Morning or evening watering is preferable to midday, as the water is less likely to evaporate in the sun.





**TOP TIP** – If you struggle to water consistently, try using an olla or reuse a large plastic jug filled with water and minute holes to slowly release water into the surrounding soil. Tomato halos are also useful forgetting even watering, even when growing in a shallow grow bag.

### TOMATO FEEDING

Tomatoes are heavy feeders and if you want to get the most out of your plants, regular feeding is a must. A seaweed fertiliser such as <u>SeaFeed Xtra</u> is perfect for early season growing.

Seaweed contains vital, stress-resisting compounds that can enhance tolerance to drought, disease or salinity pressures.





Specialised tomato feeds are best for mid-late season growing. Those liquid feeds such as Maximato have been formulated specifically with high levels of NPK (the main plant building blocks) and enhanced calcium to reduce the effects of blossom end rot on your crops by boosting water absorption into plants.

## **SUPPORTING TOMATO PLANTS**

Most tomato plants will need some support system in place but this will differ depending on the variety has a sprawling habit (determinate) or is more of a tall, vining type (indeterminate). Supports are best introduced at the planting out stage, so there is less chance of damage to the root ball.

For the bushier, determinate tomatoes, a simple cage made with bamboo canes or stick can be easily constructed to keep plants off the ground.



The cordon, indeterminate tomatoes require much stronger supports, as the plants tend to grow larger.

Indoor, greenhouse plants can be supported with a heavy-duty twine or reusable wire which is suspended from loops in the frame and the end either loosely tied around the base of the plant or buried underneath the root ball to ensure stability. As plants grow they can be twisted round the wire.

An alternative for outdoor tomatoes would be staking plants against a tall trellis, obelisk or bamboo canes then tying in branches to the support as they grow upwards.



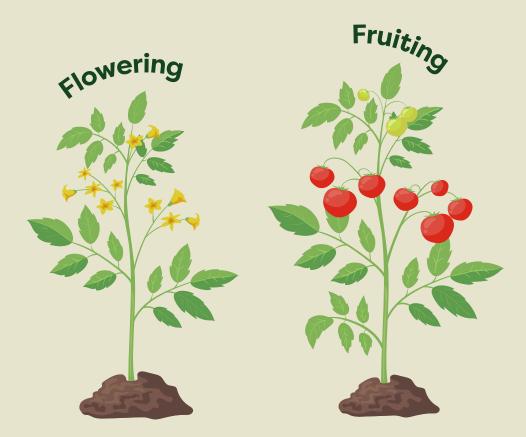
## Chapter 5 FLOWERING & FRUITING

The flowering and fruiting stage is the best stage of growing (in our opinion) as you begin to reap the rewards of all your hard-work.

### **PLANT POLLINATION**

Tomato flowers are primarily self-fertile, meaning that each flower has female and male parts, making pollination a breeze. For outdoor crops, manual hand-pollination is not as important as the wind and insects will move the pollen from the anthers to the stigma.

You can easily help this pollination process along for any less-exposed greenhouse crops by gently tapping flowers rhythmically for a few seconds.



Fruits will form from the pollinated flowers, Unsuccessful pollination will result in flowers falling off before the fruits form, which is uncommon for earlier on in the season or may be an indication that the tomato plants are stressed, for example, lacking nutrients or water.

## FEEDING AT THE FLOWERING STAGE

During the flowering and fruiting stage, feeding should move from a nitrogen rich to a high potassium fertiliser, just as the plants are focusing less on producing lush leafy growth and more on fruiting.

Most fertilisers will contain a mix of the three major plant nutrients, Nitrogen, Phosphorus and Potassium, all of which play key roles in growth.

Potassium-rich tomato fertiliser such as Maximato, with an NPK of 4-2-6 and a full spectrum of other micro-nutrients, not only highly nutritious but also harnessing the protective anti-stress power of seaweed solids.



# Chapter 6 HARVESTING & STORAGE

In this chapter we cover ripening, storing and preserving so you can make your harvests last all year round.

### **RIPENING GREEN TOMATOES**

A juicy, ripe tomato can be unrivalled in flavour, but how do you know when to pick them at the right time? There are several indicators: a full colour change from green to red, yellow or black, with no green spots visible, a softer texture (but not too squishy or split, which would indicate over ripeness) and an ease for being able to pick from the vine.

However, if you have ever got to the end of the season, with Autumn on the horizon and your greenhouse is full of green tomatoes, you need to know this top tip to ripen them up FAST!

#### THE PAPER BAG METHOD

We love this method because it's simple and hassle-free. What you will need:

- 1 Banana
- A handful of ready to ripen tomatoes (Less than 10)
- An eco-friendly paper bag
- **1.** Harvest-ready to ripen tomatoes. They should feel firm but bouncy on the surface and range from green to amber in colour.
- 2. Place them in a paper bag with a ripe yellow banana
- 3. Make sure the bag is slightly breathable but can be closed securely

**4.** Keep the paper bag in a dry place, indoors or in a greenhouse at a temperature above 10°C

5. After 24 and 72 hours, check the bag to see the progress. Your tomatoes might have completely ripened already.

- 6. Periodically check the bag to see the progress.
- 7. Given a good 7 days, your tomatoes will be ripe and red-y to eat!

The key to this method of ripening tomatoes is a naturally occurring gaseous plant hormone called ethylene. Unripe fruits generally give off low levels of ethylene compared to ripe fruits which is why you will often see many fruits ripening after one begins to turn. Apples, bananas and melons are some of the best to encourage ripening.

## **STORING & PRESERVING**

Storing your tomatoes can be as easy as you make it.

#### **OPTION 1 – 10 MINUTES – FREEZING WHOLE**



Give your tomatoes a rinse under the tap and pat dry, discard any visibly mouldy fruit and take off stems before placing into a freezer bag and storing whole. These tomatoes can be easily defrosted by placing them in a bowl of boiling water. The skins can then be gently peeled off and the whole tomatoes can be cooked down and used for sauces.

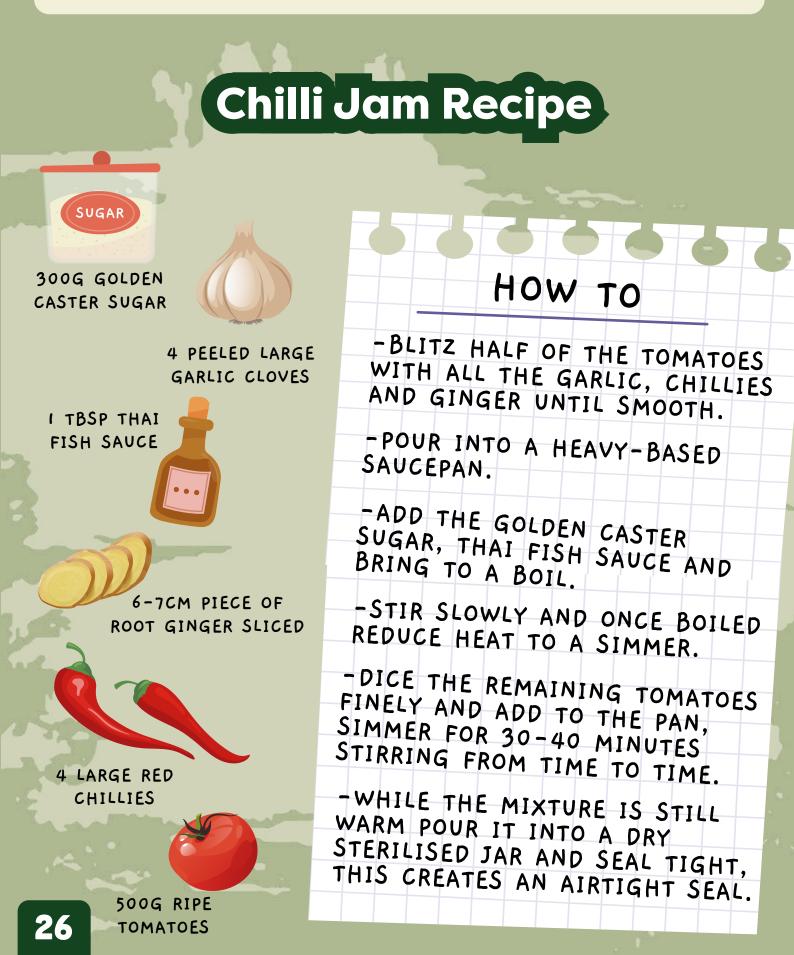
#### **OPTION 2 - 2 HOURS - MAKING SAUCE**

If you have more time, why not make a big batch of sauce which can be divided up into Tupperware and frozen into portions that can be defrosted and used as and when you need them.

#### **OPTION 3 – 3 HOURS – CANNING TOMATOES**



For those more experienced in canning, tomatoes can be preserved in their own juices which will be shelf-stable for up to 2 years. Jams and chutneys are another great way of preserving. This is the process of cooking the produce down with either sugars or spices and storing them in a sterilised jar.



## HOW TO SAVE SEEDS



### Extract the seeds from your chosen fruit or vegetable.

2

Put the seeds into a bowl and add water.

Stir around the mixture to help separate the seeds from the pulp. 4

6

Rinse out the mixture using a sieve or muslin.

5

Place the seeds on a paper towel to dry them off.

Seeds



Add the seeds to a storage

bag or box and seal shut

## Chapter 7 COMMON PROBLEMS

Knowing what problems to look out for when growing tomatoes can be a challenge so in this chapter we cover the most common issues you may face.



#### **Blossom End Rot**



Blossom end rot is a very common tomato ailment caused by a lack of calcium within the plant. It appears as a brown patch on the underside of fruits, which if cut off, will not affect the taste of the fruit but does affect storage. A tomato feed supplemented with extra calcium, such as Maximato, alongside a more regular watering regimen will allow calcium to get to those fruiting extremities of the plants. Calcium also plays a key role in the cellular membrane and cell wall, which will in turn go on to allow for improved water movement through the plants.

#### Late Blight

Blight at the middle to end of the season is usually caused by the fungus-like oomycete, Phytophthora infestans. This serious pathogen spreads very quickly throughout the tomato and potato plants unless controlled so it's important to spot the signs and act when you see them. The most obvious signs are rounded, brown lesions that are usually found on the leaves, before spreading to stems and fruits.



#### **Fertiliser Burn**



Smaller seedlings need less nutrients and are therefore at risk of fertiliser-burn caused by too much nitrogen. Fertiliser burn can appear as defoliation (loss of leaves), leaf curling and browning of tips or root rot. This can happen when you use fresh manure or bombard your plants with too many nutrients. We recommend feeding your plants with an immune-boosting seaweed fertiliser, such as SeaFeed Xtra only once they have reached 3 sets of leaves and with a tomato feed such as Maximato once flowers begin to form.

By following the steps outlined in this eBook, you are well-equipped to embark on your journey of tomato growing, whether you are a novice or an experienced gardener. As you nurture your tomato plants from seed to harvest, relish in the satisfaction of cultivating your own delicious, nutritious produce.

Experiment with different varieties, techniques, and growing methods to find what works best for you and your garden. With proper care and attention, you'll soon be enjoying the fruits of your labour, quite literally.

Happy gardening, and may your tomato harvests be bountiful and flavourful!

Team Envii 🕐

Need more advice? Get in touch with us via email, phone or chat.

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