

Q. My tomatoes were a failure last year. How can I increase my chances of having a decent crop?

A. Home grown tomatoes are the most popular vegetable, and with good reason. The varieties that can be grown in the home garden can reward with superior flavor and great texture. There are varieties that will grow in whatever space you can provide from 8'+ to small compact patio plants.

Several environmental criteria must be met to have a decent crop, with the first and probably most important being the amount of light the tomatoes will receive. Plant your tomatoes in the sunniest area in your garden. The plants must have 6 hours of light a day, with 8 being most optimal. This can be difficult to find in neighborhoods filled with large trees. Check the garden carefully for your sunniest location. If light is limited, the plants will grow but may not set fruit.

Prepare the soil by double digging; digging to a 12" depth, piling that soil to the side of your planting hole, then digging out another 12". Place the pile of soil from the first 12", mixed with compost, back into the hole and top with the soil from the last 12", again amended with compost. Do not add too much manure or too much slow-release nitrogen. If there is too much nitrogen, the plant will produce ample foliage and no fruit.

It is late for starting seeds, but you can plant the seedlings available from nurseries or local plant sales directly into your prepared holes as soon as the soil temperature reaches 70F (21C). Choose stocky seedlings about 6-8" tall. Strip off all the leaves except those in the top couple of inches. Plant your seedlings deeply in the soil, with only the top leaves above ground. Plant peat or paper pots directly in the soil, slitting the sides with a utility knife (carefully). Press the soil firmly around the roots, and water in well with a dilute fertilizer solution. Place the cage or staking system you want to use around the plants. Large cylinders 30" by 6' (76cm x 183cm) made out of concrete reinforcing wire are the best and are reusable for many years.

If cool weather is predicted, provide some form of protection like floating row covers or water insulators. Tomatoes like temperatures between 70 and 90 F (21-32C). When temperatures rise above that, the blossoms abort and fruit set is affected. If day temperatures fall below 68F (20C) or night s below 50F (10C) plant growth and fruit set are seriously inhibited. This can be mitigated to some extent by the use of hormonal fruit set sprays. If hot weather is predicted, water plants deeply. Hormone sprays are ineffective in hot weather.

One other urban problem can significantly affect your plants ability to produce tomatoes, and that is ozone levels in air pollution. There is little you can do in your own garden to fix this. Bike to work!