

Tomato (*Lycopersicon esculentum*) is popularly grown in most parts of the country. It's a good source of Vitamins A and C. It also contains dietary fiber, beta carotene, iron, lycopene, magnesium, niacin, potassium, phosphorous, riboflavin and thiamine. It is also rich in anti-oxidant, good for the heart, helps prevent premature aging and reduces the risks of chronic diseases.

Climatic and Soil Requirement

- Tomatoes require a cool and dry climate with temperature ranging from 21 to 24 °C. For colder areas, plant from September to January and November to February in lowland areas.
- Tomatoes grow well in sandy-loam to clay-loam soils with rich organic matter, good drainage and a pH ranging from 5.5 to 8.0.
- A well-pulverized soil promoted good aeration and enhances root formation.



Soil Preparation

- Prepare a potting medium by mixing 1 part garden soil, 1 part carbonized rice hull and 1 part compost or organic fertilizer.
- Use potting medium measuring 8 inches in diameter with 10 inches in height. The bigger the pot the better.

Raising Seedlings and Planting

- Before sowing, soak seeds overnight, sow immediately or air-dry the seeds before sowing.
- Fill the seeds tray with mixed media then sow one seed per hole at a depth of 0.5cm, cover the seeds with fine soil then water.
- Transplant the seedlings 25 days to one month after emergence.

Water and Nutrient Management

- Tomato is sensitive to excessive moisture because it triggers disease development like blight. That is why the occurrence of blight in rainy season is prevalent. Make sure the pot should have enough holes for good drainage. Water the plants regularly every after 1-2 days and every time you apply fertilizer.
- Before transplanting, add a handful of compost/vermicast/manure to the hole as basal fertilizer. To boost plant vigor, apply weekly (spray or drench) organic probiotics preparations like IMO, Vermitea, FAA, OHN and FPJ during vegetative stage. During reproductive stage, apply FFJ, CalPhos or OHN to support flower & fruit development.

- For non-organic production, to boost seedling growth dissolve 1 tbsp. of urea in 1 gal. of water and drench this to the seedlings 1 week before transplanting. During transplanting add 1 tbsp. of complete fertilizer (14-14-14) in the hole then cover it with a handful of compost prior to planting. Two weeks after planting, apply 1 tbsp. of urea (46-0-0) and 1 tbsp. of muriate of potash (0-0-60) by burying them in a 1-inch deep hole 3-4 inches away from the stem. Repeat application of urea and potash at 30DAT.

Trellising

- Tomatoes grown in containers usually require support to hold them upright. Support the seedlings with trellis at 15 days after transplanting using locally available materials.

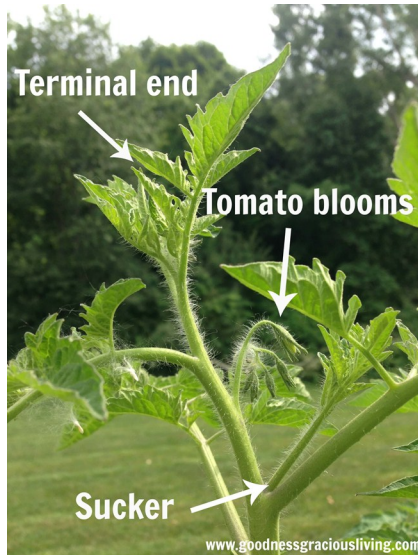
Water Management

- Water the plants as the need arises. Tomato is very sensitive to flooding, hence, watering must be done just to moisten the root zone especially during the start of flowering up to the last harvest.



Pruning

- Pruning is done to attain better plant growth. It can be done 10 to 20 DAT or when the side shoot or suckers start to elongate.
- Pinch or cut suckers using pruners while these are small. Prune in the morning to hasten healing of plant wounds.



Pest Management

- Whiteflies, thrips and fruit borer are the common insect pests of tomatoes, while bacterial wilt, blights caused by fungi and mosaic virus are its common diseases. For insects, you can use OHN and other botanical pesticide preparations such as hot pepper and lemon grass extracts, ginger extract, tomato extract and others. For diseases, you can use OHN and other botanical fungicides such as extracts of onion, ipil-ipil, kamantigi and takip kuhol. There's no remedy for the mosaic virus but to uproot the plant to lessen sources of inoculum (causal agent).

- Aside from spraying botanical pesticides, growing aromatic crops like basil, allium, ginger, lemon grass and marigold can help repel insects. Likewise, growing cosmos, sunflower and zinnia attracts beneficial insects. Sanitation or removing diseased or damaged plant or its parts and burying them also helps.

- For non-organic production, you can use appropriate chemical pesticides available in the market.

Harvesting

- The key to harvesting the most flavorful tomato is to wait for the fruits to fully ripen on the plant.
- The fruits are ready to harvest when it starts to change color from green to pinkish red or yellow, depending on the variety.



Source:

- Tomato Production, DA-RFO 2

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TOMATO PRODUCTION

(For Urban and Home Gardening)

