

# Nature \& Nurture Seeds Guide to Growing \& Using Tomatoes 

## Starting, Transplanting, Growing and Eating Tomatoes!

In northern climates, tomatoes should be started indoors so that the seedlings are ready to plant outside just after the last spring frost. This allows a gardener to get about 2 months of tomato harvest in the summer before the arrival of the fall frost.

Tomato seeds are relatively easy to start indoors. Most importantly the plants need good quality soil. Tomato plants are tough and can withstand sub-standard light such as a sunny window or a cheap fluorescent light fixture; however, they will grow better under 16 hours of light from a quality light fixture (see below).

Once your seedlings are ready to go outside, be sure to follow the instructions for "Hardening Off" to ease the transition to outdoors; otherwise your plants will be highly stressed. Follow these tips below for the best success!

## 1. Seed Starting

- Supplies:
- Soil: we recommend Vermont Compost's Fort Vee or Fort Light soil products. For beginners, we recommend this seed starting kit: https://www.highmowingseeds.com/seed-starting-kit.html
- Tomato seeds will germinate at any temperature between $65^{\circ}-90^{\circ} \mathrm{F}$, though they will germinate best at $80-86^{\circ} \mathrm{F}$. To provide this heat we recommend using a seed heating mat https://www.hydrofarm.com/p/MT10006
- Container: any type of container with a drainage hole in the bottom will do
- Starting seeds
- In USDA growing Zone 5, start seeds April $1^{\text {st }}$.
- Sow several seeds per container
- Seed depth: $1 / 4^{\prime \prime}$
- Label with variety name and date
- Keep seeds evenly moist but not overly wet until germination
- Once germinated
- Remove plants from heating mat
- Remove all but the one strongest seedling in each container


## 2. Growing Tomato Seedlings

- Light
- Tomato plants are tough and can be started indoors in sub-standard light such as a sunny, south-facing window.
- Ideally, provide 16 hours of light per day with a light fixture such as T5 fluorescent or High Pressure Sodium; if you use a light fixture, be sure to follow the instructions regarding the distance between plants and light bulbs because too close will burn plants
- Plug light fixture into a timer and set it for 16 hours on per day (timer available from your local hardware store)
- Provide air circulation with a small oscillating fan set to low blowing air between your plants and the light
- Plant growing temperature $\rightarrow 65-75^{\circ} \mathrm{F}$; if you are using lights, be sure it does not get too hot (> $83^{\circ}$ ) under the lights
- Water: keep plants moist but not wet
- Fertilizing:
- If you used a compost based soil mix (such as Vermont Compost's) you do not need to fertilize your plants
- Otherwise, use fish/seaweed liquid fertilizer weekly as directed on product


## Prepare Plants For Planting (aka "Hardening Off")

- Be sure to Harden-Off your plants before planting them outside. This process takes at least 1 week and is necessary to acclimate your "wimpy" indoor-grown seedlings for new outdoor conditions (wind, strong sunlight, and temperature fluctuations)
- To harden-off plants:
- Start by placing your plants outside in a sunny location for 2 hours then put them back under the indoor lights. Each day, increase the amount of time (by 1.5 hours) that the plants spend in the sun until they spend all day and night outside.
- Alternatively, place plants outdoors in a protected (non-windy) location where they will receive only 2 hours of morning sunlight and be in the shade for the rest of the day. Bring them in at night for the first few nights. Each day, place your plants in a location that will receive more sunlight and wind so that in 7 days they will be spending all day and night outside (this can be accomplished by locating them farther and farther away from the source of shade/wind protection)


## 3. Soil Fertility

- Incorporate compost or decomposed manure into soil. Consider using a general purpose organic fertilizer if you think your soil fertility is low.


## 4. Planting

- Choose a location in full sun where soil has been amended with organic compost/fertilizer.
- Plant spacing: 1.5-2 feet apart
- Planting depth: plant deep so that tomato stems are buried (with some stem and leaf sticking out)
- Label plants with variety name (if desired)
- Water immediately after planting
- Water the root area of each plant several times
- Record in garden journal if desired (date, variety(s), number of plants planted, location). Labels in the garden always seem to disappear so we recommend making a map of your varieties so you know which is which!


## 5. Watering

- Tomato plants should be watered 2-3 times weekly, including rain. It's best to water them with soaker hoses or drip irrigation (to avoid getting foliage wet which helps to minimize fungal diseases like blights).
- Be sure to water frequently during a drought. This helps to keep tomato fruits from splitting when a big rain comes.


## 6. Common Pests \& Disease

- Early Blight - Early Blight causes spots on lower leaves. The leaves turn yellow and eventually fall from the plant. Prevention: use mulch, crop rotation, and remove tomato plants in the fall. It also helps to remove leaves as they become sick.
- Tomato Hornworms - hand remove caterpillars (if you can find them!) or spray with BT spray.


## 7. Staking Options

- Tomato cages: They tend to be weak and fall over, and are therefore not the best option. However, they are relatively easy to find in garden stores.
- Tall stakes: Place $2 \times 2$ stakes so that you have 1-3 stakes per plant. Then tie tomato plants to stakes.
- "Basket-weaving": If growing more than 5-10 plants, consider the "basket-weaving" method. For more information, check out this video.


## 8. To Prune or Not to Prune?

- There are many benefits to pruning tomatoes. By reducing foliage and increasing air flow, you reduce fungal diseases, including Early and Late Blight. However, pruning is time-consuming, so do it if you have time. Check out this video for more detailed instructions on pruning tomatoes.


## 9. Recipes

- There are so many ways to enjoy your bounty of tomatoes at the end of the season! Click here to find some of our favorite ways to eat these fruits of our labor.


## If you've followed all of these guidelines, you will very likely enjoy tons and tons of tomatoes this year!



## Happy Growing!

