

## TOMATO GROWING BASICS AT THE ARIZONA WORM FARM

### How and where to plant:

#### 1. Soil Health

- a. Go over the soil food web.
  - i. Soilfoodweb.com – Dr Elaine Ingham – learn about soil health
  - ii. The soil needs microbes to be healthy (incorporate amendments such as compost, worm castings, and mulch)
- b. Tomatoes are heavy feeders, so soil health is very important.
  - i. Practice good crop rotation, if needed - Fruit (Tomato), Root Crop, Green, Bean (replaces nitrogen)

#### 2. Planting Location

- a. 6 hours of AM/Morning sun
- b. Plant to the East side of homes, walls, and trees

#### 3. Choose which type:

- a. Determinate - Bushy, shorter plant, 1 large harvest. Great for sauces and canning. Use cages to support.
- b. Indeterminate - Vine type, grows and grows, and grows, several harvests, can live for 18 months but that is not recommended. Requires twine trellising.
- c. Most cherry tomatoes are indeterminate.
- d. In your box today: 2 sungold super sweet, 1 roma Determinate, 1 New Girl (Indeterminate)
- e. Heirloom tomatoes  
More difficult to grow 90- 120 days to maturity / harvest

#### 4. Planting in a raised bed

- a. The deeper the better because tomatoes send very deep roots. The deeper the roots, the taller the plant.
  - i. The depth of the raised bed needs to be *at least* 12" (again, the deeper the better)
  - ii. Hairs on plant stem will become roots once in contact with the soil.
- b. Layers:
  - i. Bottom – mulch / wood chips / undiseased trees (chipped)
  - ii. Middle – compost
  - iii. If using raised bed mix – this mix is ready to go no amendments needed
  - iv. Planting - Before adding your top layer mulch, plant your tomato transplants.

1. Dig a hole deep enough so the bottom leaves of the plant touch the surface of the soil once planted.
    - a. Put worm castings in the bottom of the hole
    - b. Bury the plant up to the base of the leaves
  2. Plant 12-18 inches apart minimum (more space is better)
    - a. Aim for height rather than width
    - b. Keep the ground moist for the first 3 – 4 weeks
- v. Top – mulch
1. Keeps the bed and plants cooler
  2. Breaks down into organic matter
  3. Multiple applications only improves the soil

## **Important Things to Consider about Tomatoes**

1. Temperature
  - a. Spring after Valentines Day and fall (Late August early September) are best
  - b. Can grow in the summer, but it is difficult. Tomato plants will need shade (at least 50%) early April- Summer
  - c. Tomatoes can tolerate heat, but not cold – they are unhappy below 50 degrees.
2. Watering
  - a. Tomato plants *do not* like to be wet. Focus on watering roots/soil *only*
  - b. Drip irrigation is recommended, as is drip tape and soaker hose
  - c. If watering with a can or sprinkler: always water at the base of the plant – never allow water on to remain on the leaves (encourages disease)
  - d. Spring and fall – 15 minutes every other day
  - e. Summer – 15 minutes every day
3. Growing
  - a. Remove any leaves below the first flowers to concentrate the plant's energy to flavor and fruit production.
  - b. Pruning
    - i. When the first flower cluster appears, remove all leaves below. Pushes the energy into fruit production.
    - ii. Always use clean pruner with sharp blades
      1. Bypass pruners are best
      2. Try not to squeeze the stem, but to cut it cleanly
      3. Sanitize blades between each plant to minimize the spread of disease
    - iii. Remove suckers

1. Identified as growing between the main stem and a lateral branch
- iv. Remove any curling or damaged leaves, anything that is brown or crunchy
- c. Supporting
  - i. Can use tie tape to attach a plant to a support such as a stake or trellis, or plastic, or hemp-like twine, or plastic twine
  - ii. Be sure to not strangle the stem, be gentle!
4. Protecting
  - a. Bird netting will assure that birds do not suck the moisture from mature fruit, a bird bath may also distract them
  - b. Plant basil or marigold near and among tomatoes to protect them from pests
  - c. Grow Bags are also acceptable
5. Feeding (Tomatoes are very heavy feeders)
  - a. Feed every 4 - 6 weeks, but really every 4 weeks.
  - b. Castings
  - c. BSFL fertilizer (Show with watering can) Do not get on the leaves.
  - d. Worm Tea - put on the leaves, do not dilute.
6. Common Problems
  - a. Splitting - Inconsistent watering



- b. Cat Facing - Caused from poor flower formation, which occurs during cold weather. This results in poor pollination which leads to deformed fruit.



- c. Leaf Curling - 7 Reasons Why Article



<https://www.thespruce.com/tomato-leaves-curling-5537249>

- d. Blossom End Rot - Calcium Deficiency. Can be fixed with application of powdered milk into the root zone, plant with powdered egg shells or plant on top of a fish head. Regular feeding (every 4 weeks) with BSFL fertilizer.

