

## **Tomato Terms**

<u>Determinate-</u> Often early bearing, these types of tomatoes produce a large initial flush of fruit, and then taper off. This is the best type for containers. Some examples of determinate types include Roma, Oregon Spring and Legend.

<u>Indeterminate</u>- This type continually grows until the cold weather sets in. They set more fruit over a longer period. They also benefit from staking or trellising. Some examples include Early Girl, Brandywine and Better Boy.

## Planting & Culture

Tomatoes originated in the warm climate of Mexico. Keep this in mind when planting and growing these plants.

**Timing**- In May, fluctuating day/night temperatures influence seed planting time for tomatoes. Count back 6-8 weeks before planting time, start seeds indoors with 12 hours of light and bottom heat. When the seedlings show their first true leaves, pot them into 4" containers. Ideal starts will have four to six true leaves. At this point (usually in May) harden off the plants in a sheltered area outdoors before planting. An easier route is simply to purchase seedlings at the nursery. Protect tomatoes planted in May with hot caps or cloches. Night temperatures below 55 can delay flowering. Generally, by mid June temperatures are warm enough for unprotected planting. Plant tomatoes through July, and short season varieties into August.

**Soil Preparation**- Work a ½" of manure and/or compost into the soil. Mix ¼ cup of balanced fertilizer into each hole when planting.

### Balanced Organic Fertilizer Recipe

4 parts seed meal or fishmeal
1 part dolomite lime
1 part bone meal
1 part kelp meal

Inorganic amendments such as pumice or gravel are also beneficial, improving drainage and raising soil temperature.

#### Sun exposure- Full sun is necessary.

Pick the hottest part of your garden for these plants. Areas that receive reflected heat from pavement or buildings are especially beneficial.

Planting- Tomatoes root along the stem. Therefore, plant tomatoes sideways or vertically up to their first true leaves. The exception is grafted tomatoes which should be planted at the <u>same level</u> as in the pot! Plant determinate types 2-3' apart and indeterminate types 3-4' apart.

**Water**- Water has a major impact on the fruits. A consistent water supply is necessary. Depending on the retentiveness of your soil and the weather, water your plants deeply at least once a week. Drying out, or large fluctuations in soil moisture, can cause leaf curl and blossom end rot.

**Feeding**- There are many ways to fertilize tomatoes. Most programs recommend amending your soil before planting, and using a starter solution (such as kelp or B1) upon transplanting. When growth slows, side-dress with ½ - ½ cup of complete fertilizer. A simpler method is to use a time-release fertilizer when planting. This will feed the plant the entire season.

Mulches- Mulching helps stabilize soil moisture and prevent soil borne fungal diseases. Compost and straw are two natural mulches commonly used. Black plastic will create a physical barrier between the plants and soil fungus and heat up the soil temperature. Red plastic mulch offers these qualities and also reflects red light to help ripen the fruit.

Supports- Determinate tomatoes are often self-supporting, or simply need a single stake. Large growing, indeterminate varieties benefit from a sturdier support system such as large circular or square metal cages. You can also use a single stake for indeterminate varieties by pruning plants to a single leader, though the fruit may sunburn due to sun exposure. Tomato spirals do not require tying. The spirals work best with plants trained to a single leader. You can also build a trellis for your tomatoes using a variety of materials. With a trellis system, the vines need to be tied to the support structure.







Containers- Tomatoes are quite suited to container culture. Indeterminate varieties need a pot of 5-15 gallon capacity, larger being better. Determinate and patio types are fine with 5-7 gallon pots. Mix ½ - ½ cup of balanced fertilizer with the soil. Add more fertilizer when growth slows. Container grown plants will require more water, about three to four times a week. Compact, determinate varieties such as Better Bush and Patio are very manageable in pots. You can even try one in a hanging basket for fun!

#### **Diseases & Disorders**

#1 Blossom End Rot- Dark, soft spots appear at the end of ripe and unripe fruits, sometimes coupled with leaf curl. This is caused by a sudden change in soil moisture, inconsistent watering or a calcium deficiency. Watering is usually the culprit. Crushed eggshells or dolomite lime added to the hole when planting can help counteract the calcium deficiency. Calcium sprays are also available to help during the season. Once the rot has established on a fruit it will not go away. The good news is that the rest of the fruit is still perfectly edible.

#2 Blight, Early & Late- Due to our cool, wet climate, blight is very common. Irregular brown spots develop on the leaves stem and sometimes fruits of the plants. Early blight coincides with cool spring and summer rains. Late blight occurs in muggy weather with cool nights. Both fungi are soil borne, and can be prevented with plastic mulches. Always avoid overhead irrigation and keep lower leaves and limbs off the ground. After diagnosis, use a copper based fungicide to prevent the fungus from spreading. Apply every 2-3 weeks. Avoid planting tomatoes and other solonaceous crops (eggplant, peppers, potatoes, etc.) in areas where blight has occurred.

#3 <u>Fruit not setting or ripening</u>- Both of these situations are weather related. If night temperatures are below 55 or above 75, the blossom will drop with its immature fruit. Ripening is greatly slowed by night temperatures below 55. This can be prevented by covering your plants with a portable cold frame to modify those chilly nights.

## Recommendations



We have chosen some of our favorite varieties of tomatoes for different purposes to share with you.

#### **Early**

Bush Goliath, Early Girl, Oregon Spring

#### Saucing

Amish Paste, Early Cascade, Italian Gold, Roma, San Martzano

#### **Drying**

Principie Borghese

#### Cherry

Sungold, Matt's Wild Cherry, Yellow Pear

#### Heirloom

Black Krim, Lemon Boy, Brandywine

#### Low acid

Black Prince, Green Zebra, Mr. Stripey, Yellow Pear

#### **Beefsteak**

Better Boy, Striped German, Taxi

#### Slicing

Better Boy, Black Prince, Early Girl, Fantastic



#### Sources

<u>All About Tomatoes</u>, by Walter Doty & A. Cort Sinnes. Through Ortho Books.

<u>Growing Vegetables West of the Cascades,</u> by Steve Solomon.

# Tomato Tips

Ideas for Planting & Maintaining Healthy Tomatoes



