

Growing Tips for Tomatoes and Peppers



Dr. Charlie Barden

Diseases are a major problem with tomatoes

- ◉ Blossom end rot- physiological
- ◉ Early Blight + Septoria leaf spot
- ◉ Tomato spotted wilt virus
- ◉ Tobacco mosaic virus
- ◉ Verticilium and Fusarium wilt
- ◉ Bacterial leaf and fruit spots



Blossom End Rot of Tomato

- Physiological disorder caused by calcium deficiency brought on by dry weather.
- Certain varieties are more prone to damage (roma)
- Damage more severe early in growing season.
- Avoid rapid vine growth, excessive nitrogen fertilizer, (especially urea) and soil moisture fluctuations.



*Also on pepper

Leaf blight (Early Blight and Septoria Leaf Spot) are leaf spots and don't infect the soil. If you have had problems in the past, use chlorothalonil (Fertilome Liquid Fungicide, Ortho Garden Disease Control) when the tomatoes are about the size of walnuts.



Fortunately, many modern hybrids have resistance to these diseases

- ◉ With the exception of blossom end rot and early blight.
- ◉ This is the big advantage hybrids have over older heirloom varieties, in addition to bearing ripe fruit earlier, with heavier yields.

Two types of vines, **determinate**, (short vines, and **indeterminate** (tall vines)

Indeterminate vine

Determinate vine



Advantages of Compact Vines

- Short cages or stakes
- More stable in wind
- Use less water and fertilizer
- Closer spacing-more plants per row
- Yields close to large vined types, but over a shorter season



Advantages of tall vined types

- Will continue to bear later into the fall (September-October).
- Much of crop will be borne 3' feet or higher above ground, less stooping.
- Sometimes can “outgrow” early blight.

Supporting Tomatoes

- Space 30" apart with cages
- 3 foot tall cages for short vined types
- 5-6 foot tall for tall vined types
- No pruning needed except for branches that grow outside cage



Supporting Tomatoes “Stake & Weave”

- ◉ Space 18-30” apart when staking
- ◉ Pruning out of basal suckers is needed



Heat Set Tomatoes

Blossoms drop from excessive summer heat if the daytime temperature hits 95 F or night temperature stay above 75 F

Excessive N and hot, dry winds make problem worse

A genetic trait- usually referred to as the Heat Set gene allows tomatoes to set under hotter conditions.

Many new varieties now are being developed with the Hot Set gene incorporated.

Sun Leaper, **Florida 91** and Sunmaster have done well in trials.



Recommended tomato varieties

SHORT VINED DETERMINATE

- Celebrity
- Crista
- Mt. Fresh
- Mt. Spring
- Primo Red (early)
- Scarlet Red
- Florida 91 +
Sunmaster(heat set)
- Roadrunner III

TALL VINED INDETERMINATE

- Jetstar
- Jetsetter
- Big Beef
- Beefmaster
- Conestoga (medium)
- Country Taste
- Grandma's Pick

Peppers



Similar growth requirements to tomatoes

- ◉ Much less prone to foliar diseases and wilts.
- ◉ More sensitive to poor drainage, leads to phytophthora root rot.
- ◉ Needs more frequent watering, more shallow rooted.
- ◉ Will set peppers even in heat.
- ◉ Produces over a longer season.

Stakes or small cages work well



Recommended Bells

Bell Cultivar	Performance exceeds check	Description	Sources
Flavorburst	4/4	Starts out pale green, turns yellow early, no disease resistance	Seedway, Johnny's
Alliance	2/4	Many XL-Jumbo fruit, best disease resistance package	Harris, Seedway, Stokes
Revolution	3/3	Excellent disease resistance	“ “
Declaration	2/2	Excellent disease resistance	“ “
Karisma	2/2	Excellent disease resistance	“ “

Recommended Long Horn types.

Long horn cultivars	Performance exceeds check	Description	Sources
Carmen	Check	Very sweet when red	Harris and others
TI-100 (Yellow Crest)	2/2	Thick walled green turns yellow-orange	Harris
Marcato	1/1	Thick walled green turns red	Harris
Hybrid Sweet Banana types: Pageant, Boris, Ringo, Banana Bill	5/5	Yellow turns orange to bright red	Various

Outstanding grilling peppers

- TI-100 or Yellow Crest shown here, TI-098 similar but turns red
- Marcato



Novelty peppers

- Yummy Gold or Yummy Mix. Mini almost seedless peppers. Very sweet. Green to orange, yellow and red.
- Flamingo- medium sized, slightly elongated, starts pale yellow, turns orange and red. TMV.

