

Victory Garden 101: Tips for Great Tomatoes

Notes Page

Choosing the right tomato

- Factors to Consider
 - Size of garden area
 - Planting plan/schedule
 - Days to maturity
 - Seeds or transplants?
 - Intended use/harvest stage
 - Insect/disease tolerance
 - Crack resistance!!!
 - Other desired characteristics

Types of Tomatoes

- Determinate
 - Shorter, more compact
 - 2-4' tall
 - Large harvest in short time
- Indeterminate
 - Taller, vigorous
 - 5+' tall
 - Harvest spread out

Days to Maturity

- Sometimes abbreviated DTM
- Read the catalog, seed packet, or label
- Transplanted – DTM from transplant
- Tomatoes range from 53-120 days

Intended Use

- What do you plan to eat?
- Do you want to preserve?
- Do you want to store the harvest?

Types of Tomatoes

- Cherry or Grape
- Roma, Plum, or Saladette
- Slicers
- Beefsteaks

Disease Resistance

- Especially important for small gardens
- Disease resistance for soil-borne diseases and nematodes
 - V, F, N

Other Desired Characteristics

- Flavor
- Color
- Texture
- Size/Shape
- Yield

- Easy to grow

Heirlooms vs. Hybrids

- Hybrids
 - A hybrid is a vegetable variety that has been developed by crossing at least 2 parents and selected for the best combination of characteristics.
 - F1 hybrids are first generation
 - Cannot save seeds
- Reasons to Select a Hybrid
 - Consistency or Uniformity
 - Disease tolerance/resistance
 - Compact plant habits/traits
 - Quality
- Heirlooms
 - An heirloom is a vegetable that is open-pollinated and has been around for at least 50 years.
 - Often have "stories"
 - Can save seed
 - May or may not have improved traits
- Reasons to Select an Heirloom
 - Unique traits
 - Flavor characteristics
 - Quality values
 - Ability to save seed

Some thoughts on tomato varieties...

Slicers & Beefsteaks:

- Chef's Choice Orange
- Big Beef
- Beefy Boy
- Mountain Series
- Steak Sandwich

Romas:

- Martino's Roma
- Little Napoli
- Tiren
- Golden Rave

Cherry/Grape/Saladette:

- Esterina
- Juliet
- Chocolate Cherry
- SunSugar
- Honestly, almost anything that doesn't crack!

Heirlooms:

- Cherokee Purple
- Black Krim
- Variable success with most due to weather!

Notable Disappointments:

- Most newer striped cherry tomatoes

- Either cracked or tough skins
- Most of the “Indigo” series varieties – poor fruit set
- Most of the “short season” or “early” varieties we have tried

Caring for Your Tomatoes

Planting Tomatoes

- When: late April to early May
- After danger of frost
- Warm soil – at least 55 degrees
- Harden off your plants first!

Planting Tomatoes

- Fertilizer?
- Planting depth?
- No problem to plant slightly deeper
- Yes, you CAN bury your plants

Watering with Care

- Types of Irrigation Systems
 - Flood or furrow
 - Overhead / Sprinkler
 - Drip / Trickle

Fertilization

- Generally heavy feeders
- Don't over-fertilize with Nitrogen!
- Can show Phosphorus deficiency early
- Best to ensure good fertility before planting!
- Fertilize after fruit set
- Or if a deficiency is seen
-

Mulches & Soil Temperature

Cages

Staking & Tying

Trellising

Harvesting

- Harvesting Green Tomatoes

Common Tomato Pests & Problems

General Pest Control Practices

- Sanitation
- Appropriate Plant Spacings
- Crop Rotation/Cover Crops
- Mulching & Watering Practices
- Minimize Plant Stress
- Regular Scouting!

Insects

- Spider Mites
 - Suck the juices out of plant leaves
 - Stippled appearance
 - Horticultural oils and insecticidal soaps
 - Hard stream of water
- Flea Beetles
 - Tiny black beetles
 - Very small holes in the leaves in the early spring
 - Tomatoes usually outgrow damage
 - Controlled with neem oil or permethrin.

Diseases

- Septoria Leaf Spot
 - Tiny black spots on lower leaves
 - Leaves yellow and die from the bottom up
 - Favored by warm, wet weather
 - Caging or staking, mulching, and rotation will help prevent the disease.
 - Preventative fungicides:
 - Chlorothalonil or fixed coppers, Serenade?
- Early Blight
 - 1/2" circular lesions on lower leaves
 - Leaves yellow and die from the bottom upward
 - Favored by wet, warm weather
 - Caging or staking, mulching, and rotation will help prevent the disease.
 - Preventative fungicides:
 - Chlorothalonil or fixed coppers, Serenade?

Environmental & Physiological

Wind Hail Heat Watering

Blossom End Rot

- Brown-black, leathery spots on fruit bottom.
- Prevent by proper watering practices
- Some varieties are very susceptible

Physiological Leaf Curl

- Leaves curl when the weather changes from cool and moist to hot and dry
- The plants will be fine in a few days.

Cracking

- Tomatoes in Kansas crack due to weather
- Harvest tomatoes as soon as they start to color, then ripen indoors
- Some varieties are more crack resistant

2,4-D Herbicide Injury

- Leaves are cupped, thickened or leathery, and develop an uncharacteristic fan shape.
- Plants will overcome moderate damage.
- Poor production is likely
- 2,4-D can spread on the wind for a few miles

Over-watering

Hot Weather

- Daytime temperatures are above 85-90 degrees
- Overnight temperatures above 75 degrees
- Prevents good pollination
- Gap in fruit production

Questions?

- For More Information:
 - Master Gardener Hotline
 - sgemghotline@gmail.com - preferred
 - 316-660-0190
 - M-F, 9-12 and 1-4
 - Walk-In Clinic (not right now, but eventually)
 - Extension E-Newsletter
 - Text: EXTENSION to 42828
 - Horticulture Information Center:
 - <http://hnr.k-state.edu/extension/info-center/>
- Social Media
 - Facebook Page: <http://facebook.com/sedgwickextension>
 - Instagram: @ksresedgwickco
 - The Demo Garden blog: <http://thedemogarden.org>

References & Resources for Additional Learning

Find Your Local Extension Office & Resources:

Kansas: <https://www.ksre.k-state.edu/about/stateandareamaps.html>

Other States: Do an internet search for “*your state* extension” or “*your county* extension.” It is usually affiliated with the land grant university in your state.

Horticulture Information Center: <https://hnr.k-state.edu/extension/info-center/>

Kansas Mesonet Soil Temperature Map: <http://mesonet.k-state.edu/agriculture/soiltemp/>

Kansas Garden Guide: <https://bookstore.ksre.ksu.edu/pubs/s51.pdf>

Vegetable Garden Planting Guide: <https://bookstore.ksre.ksu.edu/pubs/mf315.pdf>

Recommended Vegetable Varieties: <https://bookstore.ksre.ksu.edu/pubs/L41.pdf>

K-State Fact Sheets:

Tomatoes: <https://bookstore.ksre.ksu.edu/pubs/mf312.pdf>

Tomato Leaf & Fruit Diseases & Disorders: <https://bookstore.ksre.ksu.edu/pubs/L721.pdf>

Wilt, Nematode, and Viruses of Tomato: <https://bookstore.ksre.ksu.edu/pubs/L723.pdf>

Spider Mites: <https://entomology.k-state.edu/doc/misc.-extension-document/spider-mites-on-tomatoes.pdf>

Tomato Hornworm: <https://bookstore.ksre.ksu.edu/pubs/MF3075.pdf>

Other Tomato Issues: <https://hnr.k-state.edu/extension/info-center/plant-pest-problems.html#T>

Growing Vegetables in Pots: <https://bookstore.ksre.ksu.edu/pubs/MF2873.pdf>

Videos:

Common Tomato Problems, Part 1: <https://kansashealthyyards.org/all-videos/video/common-tomato-problems-part-1>

Common tomato Problems, Part 2: <https://kansashealthyyards.org/all-videos/video/common-tomato-problems-part-2>

Spider Mites on Tomatoes: <https://kansashealthyyards.org/all-videos/video/spider-mites-on-tomatoes>

Stake and Weave Tomatoes: <https://kansashealthyyards.org/all-videos/video/stake-and-weave-tomatoes>

Tomatoes Need Support: <https://kansashealthyyards.org/all-videos/video/tomatoes-need-support>

When to Pick Tomatoes: <https://kansashealthyyards.org/all-videos/video/when-to-pick-tomatoes>

Preserving Your Tomatoes (& other veggies) for Later Use:

Preserve it Fresh, Preserve it Safe: <https://www.rrc.k-state.edu/preservation/index.html>

Salsa: <https://bookstore.ksre.ksu.edu/pubs/MF3171.pdf>

Tomatoes: <https://bookstore.ksre.ksu.edu/pubs/MF1185.PDF>

Recipes: <https://www.rrc.k-state.edu/preservation/recipes.html>

National Center for Home Food Preservation: <https://nchfp.uga.edu/>

Preserving Food at Home Blog: <https://preservingfoodathome.com/>