

## **▼TABLE OF CONTENTS**▼

KNOW YOUR TOMATOES	3
Pick The Tomato For You	3
The Easiest Tomatoes to Grow	5
The Best Heirloom Tomatoes to Grow	7
The Best Hybrid Tomatoes	9
TOMATO PLANTING TIPS	10
Starting Tomatoes From Seed	10
Growing Tomatoes in Containers	12
Growing Organic in the Garden	13
TOMATO CARE	14
How to Feed Tomatoes	14
Three Ways to Support Tomatoes	16
How to Mulch Tomato Plants	17
What to Know About Pruning Tomatoes	18
What are Tomato Plant Suckers?	19
How Much Water Do Tomatoes Need?	20
PROBLEMS & DISEASES	21
Blossom End Rot	21
Keep Tomatoes from Cracking and Splitting	23
Protect Your Plants: 4 Common Tomato Pests	24
TOMATO CANNING	26
Harvesting Tomatoes Made Easy	26
Can, Save & Preserve Tomatoes	28
Saving Tomato Seeds	29



## For good reason, tomatoes are the popular kid in the garden.

Everyone wants to grow them, but not everyone knows how! So we have collected everything we know about tomatoes from choosing which tomatoes to grow to how to harvest—and put it in one place!

# ESPOMA'S TOTAL GUIDE to GROWING TOMATOES

includes everything you need to know from seed to table.









## **₩PICK THE RIGHT TOMATO**✓

**5 QUESTIONS TO ASK BEFORE DECIDING WHAT TOMATO VARIETIES TO GROW** 

# HOW LONG IS THE TIME TO MATURITY?

This number lets you know how long before your tomato seedlings produce their first crop. Some tomatoes mature in 50 days while others take 90 days. Consider how long your growing season is — and when you'd like to bite into that first, homegrown tomato.



## WHAT FLAVOR & TEXTURE DO YOU PREFER?

The most fun question to answer! Choose acidic or sweet, mealy or meaty and firm or soft skin. Many varieties even list the best uses—sauces, salsa, salads or snacks.

### WHAT'S THE DIFFERENCE **BETWEEN HEIRLOOM & HYBRID TOMATOES?**

Heirloom tomatoes come from seeds that have been handed down for generations, from farmer to farmer for their special characteristics. Varieties must be at least 50 years old. Because of this, heirloom tomatoes have minimal disease resistance. Popular varieties include Black Cherry, Brandywine and Cherokee Purple.

Hybrid tomatoes, sometimes called modern tomatoes, are bred from two different varieties to get the best traits from each parent. Traits can include disease resistance or thick skin. Seeds from hybrid tomato plants are essentially sterile since they'll never be as strong as the parents. Popular varieties include Roma, Early Girl and Beefsteak.



Grow both hybrids and heirlooms to find out which you like best.





### **DETERMINATE OR INDETERMINATE?**

Determinate tomatoes (DET), or bush tomatoes, ripen all at once. Within the same week or two, you'll have one, huge crop of tomatoes. Then, they're done!

Indeterminate tomatoes (IND), or vine tomatoes, produce tomatoes all season until the first frost.



### **HOW IMPORTANT IS DISEASE RESISTANCE?**

Modern, or hybrid, tomatoes are bred to resist diseases. Heirloom tomatoes, on the other hand, are mostly untouched, and can be more susceptible to diseases.

On the plant tag or seed packet, check the letters after the variety name to see how what diseases and pests they can be resistant to. Look for the V and F since they're the two most common tomato diseases.

Here are the most common tomato codes to look for in order to protect your plants:



Verticillium Wilt Fusarium Wilt



Nematodes



Tobacco Mosaic Virus













Variety is the spice of life. The easiest variety to grow...

Cherry Tomatoes are the easiest tomatoes for beginners to grow. They produce crop after crop and have very few problems! Here are a few of the best:



### **™THE EASIEST TOMATOES TO GROW ▼**

CHOOSE THE EASIEST TOMATO VARIETY FOR YOU TO GROW

Depending on what you're making and where you live, some tomatoes really are better!

With more than 7,500 varieties, you have to know exactly what you're looking for. So whether you say to-may-to or to-mah-to, we're here to help you choose the easiest tomato variety for you.

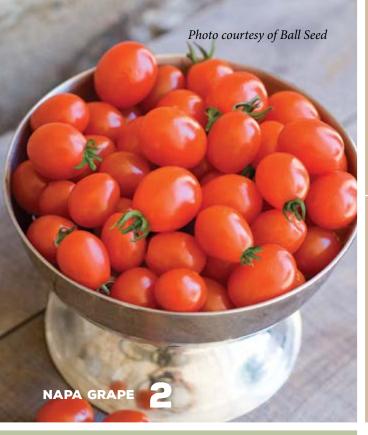
#### 1. SUPER SWEET 100

The name says it all—these are sweet and easy. Just one plant can bear more than 1,000 tomatoes. Super Sweet 100s grow in long strands of more than 100 tomatoes. You'll have thousands of tomatoes that are high in Vitamin-C by the end of the season.

Disease Resistance: V, F and N **Growth Type:** Indeterminate Time to Maturity: 60-70 Days Taste/Texture: Super sweet, juicy

and firm texture Light: Full Sun Plant Size: 8-12 Feet Spacing: 18-36 Inches Apart Staking: Cage or Stake





### 2. NAPA GRAPE

This classic tomato tastes and looks just like its bigger rivals, but has a higher sugar content than any other grape tomato. Known to be one of the tastiest tomatoes, the Napa Grape produces sweet tomatoes that taste yummy in salads or as snacks.

**Disease Resistance:** Very **Growth Type:** Indeterminate **Time to Maturity:** 65 Days

Taste/Texture:

Sugary with a firm texture

**Light:** Full Sun **Plant Size:** 4-6 Feet

**Spacing:** 24-36 Inches Apart **Staking:** Cage or Stake



#### 4. YELLOW PEAR

Tangy, beautiful and tiny, Yellow Pear tomatoes look charming in salads or as snacks. A favorite of chefs, these dynamic tomatoes love to sprawl, so contain them with a cage or stake.

**Disease Resistance:** Not susceptible to blossom end, but can develop early blight

**Growth Type:** Indeterminate **Time to Maturity:** 75-80 Days

**Taste/Texture:** Tangy yet mild w/firm

and mealy texture
Light: Full Sun
Plant Size: 6-12 Feet

**Spacing:** 24-36 Inches Apart **Staking:** Cage or Stake

### 3. GOLDEN NUGGET

These sweet tasting tomatoes love cool weather and can withstand the heat. Looking more like tangerines than tomatoes, Golden Nuggets ripen early and produce lots of fruit.

**Disease Resistance:** V and F **Growth Type:** Indeterminate **Time to Maturity:** 55-65 Days

Taste/Texture: Balanced, mild with a hint

of sweetness and a thin skin

Light: Full Sun Plant Size: 2-3 Feet

**Spacing:** 18-24 Inches Apart

Staking: No



### 5. SUN GOLD

These orange tomatoes taste like tropical fruit and thrive in hot, sultry climates. Grown in long clusters of 10-15 tomatoes, Sun Golds produce fruit well into fall. Plus, these cherry tomatoes can be grown in containers.

**Disease Resistance:** V and F **Growth Type:** Indeterminate **Time to Maturity:** 55-65 Days

Taste/Texture: Balanced, mild with a hint

of sweetness and a thin skin

Light: Full Sun
Plant Size: 6-12 Feet
Spacing: 24-36 Inches Apart
Staking: Cage or Stake



### THE BEST Heirloom Tomatoes TO GROW

### **CHOOSE THE PERFECT HEIRLOOM TOMATO VARIETY FOR YOU**



## WHAT IS AN Heirloom Tomato?

Heirloom tomatoes come from seeds that have been handed down for generations, from farmer to farmer for their special characteristics. Varieties must be at least 50 years old. Because of this, heirloom tomatoes have minimal disease resistance.

Heirloom varieties are open-pollinated-meaning that the seeds you collect will produce plants almost identical plants year after year. That's key to their survival.



### WHY GROW **HEIRLOOMS?**

We believe the flavor of heirlooms is so superior that no garden would be complete without them.



Try a variety this year, and we're sure you will agree. You will be tasting a little bit of history all summer long.



### 1. PINK BRANDYWINE

This is hands-down the yummiest and most popular heirloom. Dating back to 1885, these tomatoes ripen late in the season, but delight with huge tomatoes with even bigger flavor. Plus, Pink Brandywine tomatoes grow well in containers.

**Growth Type:** Indeterminate Time to Maturity: 75-85 Days

Taste/Texture: Intense, full flavor with a rich,

velvety texture Light: Full Sun Plant Size: 4-9 Feet

Spacing: 24-36 Inches Apart **Staking:** Yes - Cage or Stake

Have you wondered why heirloom tomatoes taste so much better than those conventional ones from the store?

Conventional tomatoes have been bred for long shelf life, disease resistance, high yield and even for their looks! Some say all the flavor and taste has been bred out of them, too.

#### 2. BLACK CHERRY

This black, heirloom cherry tomato is somewhat disease resistant and easy to grow—even in containers. The truly striking color makes these cherry tomatoes an instant conversation (or kabob!) starter.

**Growth Type:** Indeterminate **Time to Maturity:** 65-75 Days

**Taste/Texture:** Sweet meets smoky flavor

with a meaty texture **Light:** Full Sun **Plant Size:** 5-8 Feet

**Spacing:** 24-36 Inches Apart **Staking:** Yes - Cage or Stake

Photo courtesy of Bonnie Plants



#### 4. STRIPED GERMAN

This sizzling red and orange tomato looks like a work of art. Slice it open, and you'll be delighted by its intricate texture and pattern. Also called "Old German," this sunny tomato produces huge beefsteak tomatoes. It does need constant, proper care to thrive.

**Growth Type:** Indeterminate **Time to Maturity:** 75-85 Days

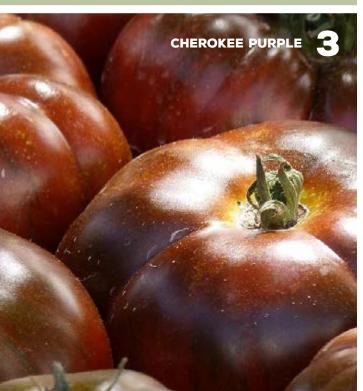
Taste/Texture: Incredibly juicy with a faintly

tart flavor and meaty texture

**Light:** Full Sun **Plant Size:** 4-8 Feet

**Spacing:** 24-36 Inches Apart **Staking:** Yes - Cage or Stake





### 3. CHEROKEE PURPLE

Cherokee purple tomatoes may look eccentric, but boy, do they taste good! Believed to be passed down from Cherokee Indians, this variety produces significantly more tomatoes than other heirlooms.

**Growth Type:** Indeterminate **Time to Maturity:** 75-90 Days

Taste/Texture: Sweet, juicy and savory

with a thick skin **Light:** Full Sun **Plant Size:** 4-9 Feet

**Spacing:** 24-36 Inches Apart **Staking:** Yes - Cage or Stake



### **5. WAPSIPINICON PEACH**

Bright in color and flavor, these tiny, fuzzy yellow tomatoes make the perfect snack.

Named for the Wapsipinicon River in Northeast lowa around 1890, Wapsipinicon Peach tomatoes are resistant to rot and field blight.

Plus, they are quite prolific!

**Growth Type:** Indeterminate **Time to Maturity:** 75-80 Days

Taste/Texture: Sweet flavor with little acidity

and fuzzy, thick skin **Light:** Full Sun **Plant Size:** 4 Feet

**Spacing:** 24-36 Inches Apart

**Staking:** Recommended - Cage or Stake



### **y**OUR FAVORITE HYBRID TOMATO VARIETIES **∀**

IF YOU WANT YOUR TOMATO TO HAVE IT ALL, TRY HYBRID TOMATOES

With over 7,500 varieties, picking the right tomato to grow can seem overwhelming. If you want your tomato to have it all—flavor, disease resistance, texture and more—try modern, hybrid tomatoes.

The term hybrid means tomatoes are bred from two different varieties to get the best traits from each parent. Kind of like you!

Hybrid tomatoes are bred for traits such as long shelf life, disease resistance, high yield and even for their looks. After WWI, hybridization made tomatoes easier to grow, sell and transport to restaurants and grocery stores across the county.

### 1. BETTER BOY

A Guinness Book of World Records champion, yielding nearly 350 pounds of tomatoes from a single plant over one season, Better Boy really is better! This disease-resistant, flavorful and easy-to-grow tomato is a classic with the perfect balance of acid and sugar.

Disease Resistance: F. V. N. T. **Growth Type:** Indeterminate Time to Maturity: 70-75 Days Taste/Texture: Beefsteak

Light: Full Sun Plant Size: 5-8 Feet **Spacing:** 36 Inches Apart Staking: Yes - Cage or Stake





### 2. EARLY GIRL

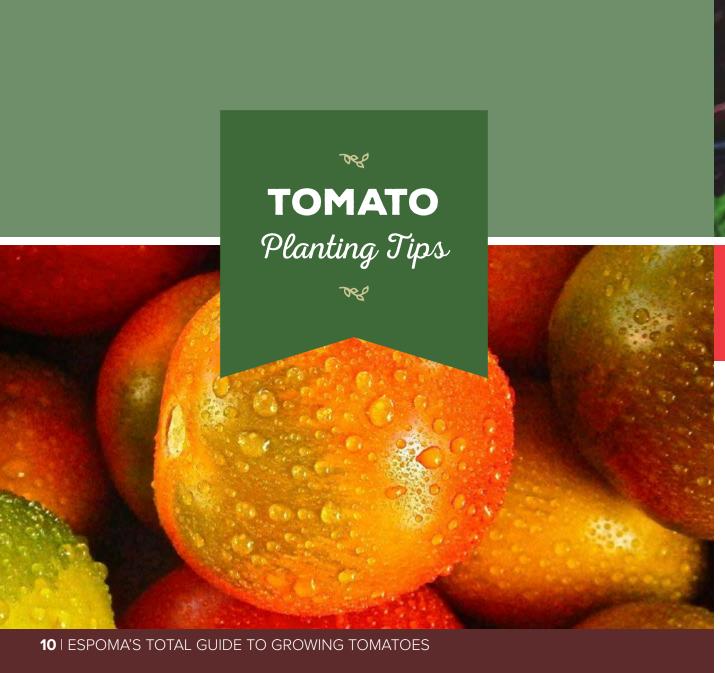
If you want tomatoes ASAP, this is the plant for you. This disease-resistant and flavorful plant is a favorite of many gardeners. Its little sister, Bush Early Girl, is perfect for growing in containers.

Disease Resistance: F. V **Growth Type:** Indeterminate **Time to Maturity:** 50 Days

Taste/Texture: Meaty with a Great Aroma

Light: Full Sun Plant Size: 6-8 Feet Spacing: 36 Inches Apart Staking: Yes - Cage or Stake

Photo courtesy of Mika Matsuzaki





## **STARTING TOMATOES FROM SEED™**

**PLANT TOMATO SEEDS IN 4 EASY STEPS** 

Nothing beats that first bite into a delicious, ripe tomato—even better when it's fresh out of your summer garden! Just talking about tomatoes has us craving homemade salsas, Caprese salads and a delicious medley of fresh summer veggies.

If you're as excited about tomato season as we are, why not get started now?

In practically no time at all, you can start tomato seeds. The best way to get a head start on growing tomatoes is to start seeds indoors 4-6 weeks before the last spring frost date in your region.



### START YOUR SEEDS IN **4 EASY STEPS**



### **PICK YOUR PLANT**

The first step to starting seeds is deciding which tomato is the one for you.

With thousands of varieties, it can be hard to choose just one! To make your decision simple and stress free, check out our top "Easiest Tomatoes to Grow" (in the first section of this book).

### START SEEDING

When starting seeds indoors, you need only three simple things: warmth, light and an organic plant food.

Fill seed trays to within 1/4 inch of the top with Espoma's Organic Seed Starting mix. Follow instructions on the seed packets to see how deep and far apart to plant. Cover with soil, press down and lightly water.

Place tray in a larger pan of shallow water so the water seeps up from the bottom.

Place seeds in a warm spot between 65-75°. Try the top of the fridge, or purchase a heat mat.

Loosely cover tray with plastic wrap or the cover from your seed-starting kit. Check seeds daily for moisture and water as needed.

Once tomato seeds begin to sprout, give seedlings 12-16 hours of light daily. Supplement sunlight with grow lights if needed.





### **GETTING BIGGER**

Once you see sprouts, remove the cover and move seeds to a sunny, south-facing window that is 65-75°F. Then, turn the container a little each day to prevent leaning seedlings.

Add Espoma Organic Tomato! or Tomato-tone®, premium plant food formulated specifically for growing plump and juicy tomatoes, once seeds have sprouted. Espoma's organic plant foods feed your plants naturally and will not force rapid growth at the expense of blooms and tomato yield.



### **READY TO PLANT**

Once the last frost date has passed, you're almost ready to plant! Start by hardening off plants and placing seedlings outdoors for seven to 10 days for a few hours each day. Cut back on watering, as well. Now that

plants are good and strong, it's time to plant! Gently remove plants from containers without damaging the roots. Plant in a prepared bed and mix in organic starter plant food, such as Bio-tone® Starter Plus, to keep roots strong.



### Now you'll have delicious tomatoes in no time!

Go forth, and grow! When you're organic gardening, be sure to feed tomatoes lots of Tomato-tone during the growing season.

For more information on making the most of your tomatoes and other garden variety tips, visit us at www.espoma.com and tag us at #EspomaGrown!



### **GROWING TOMATOES IN CONTAINERS**✓

**GROW SCRUMPTIOUS TOMATOES IN EASY CONTAINERS** 

True love is biting into a juicy tomato you've just picked off the vine. Even if space is limited, you can still grow delicious tomatoes in pots.

Tomatoes grown in portable containers are just as tasty and satisfying as garden grown. Plus, containers are versatile and can easily be moved from one spot to another to suit your gardening needs.

It takes just a few minutes to plant and maintain for a summer of delicious fruit.

### MAKE SPACE FOR TOMATOES WITH THESE **EASY PLANTING TIPS**

In addition to watering, feed tomatoes with **Espoma's Tomato- tone®** every other week. Organically fertilizing tomatoes with Tomato-tone produces larger, plumper tomatoes all season.



### Growing tomatoes in containers is easy. Tomatoes just need soil, sun and a little care.

Whether you live in an apartment or farm, containers are the perfect solution when space is limited or soil is tough to work.

- 1. Start by choosing a sunny patio, driveway, walkway, stairway or deck. Tomatoes need 6-8 hours of full sun a day.
- 2. Pick a pot big enough for your variety. A container 18 inches or larger in diameter with drainage holes will work. Tomatoes can grow 6-8 feet tall and 2 feet across. Place drainage material (like gravel) in the bottom of the pot before you add soil to provide air pockets so roots don't drown.
- 3. Select the right tomato variety for containers. While any variety will perform, determinate varieties such as Patio Princess, Baxter's Bush cherry tomato and Balcony are great choices.
- Fill container 3/4 full with **Espoma's Organic Potting Mix**.
- Add an organic starter plant food, such as **Bio-tone® Starter Plus,** to keep roots strong.
- 6. Moisten mix slightly.
- 7. Add tomato plants. Sit the plant in the hole so its lowest leaves are below the soil level. Pinch off lower leaves.
- 8. Fill with potting soil.
- **9. Mix compost** into top few inches of your container.
- **10. Place container in a sunny spot** that's easy to access so you can regularly monitor plants.
- **11. Water tomatoes generously** for the next few days. Give tomatoes about 2 inches of water at their base each week.
- 12. Add stakes or cages to your container to keep tomatoes from growing out of control and to prevent diseases.





### **GROWING TOMATOES IN THE GARDEN**▼

THE DEFINITIVE GUIDE TO GROWING ORGANIC TOMATOES

If there's one vegetable that needs to be in your organic garden, it's tomatoes. Juicy, red tomatoes are the taste of summer.

In a salad, drizzled with olive oil, sliced with fresh mozzarella or even eaten like an apple, homegrown tomatoes make every summer meal taste better.

Like all homegrown food, they're picked when they're the juiciest and most flavorful. And since you care for tomatoes all season, you appreciate the organic tomato care and work it takes to ethically raise them!



- 1. Since tomatoes love the sun, they need a spot that gets at least 6 hours of sunlight a day.
- 2. Then, boost your soil. Mix in 3 inches of home made compost or organic peat moss into the top 6 inches of your soil.
- 3. While you're at it, mix in 9 cups of Espoma's Tomato-tone® per 50 square feet. For single plants, use 3 tablespoons of Tomato-tone per plant.

An organic plant food like Tomato-tone provides tomatoes the nutrients they need to grow big and plump. Since this is a slow-release, organic fertilizer, Tomato-tone never forces rapid growth, which reduces tomato yield.

- 4. Now dig a hole larger than the tomatoe's original container. Look at the plant tag to see how far apart each tomato plant should be.
- 5. Situate the plant in the hole so its lowest leaves are below the soil level. Go ahead and pinch lower leaves off.
- 6. Then fill the hole with amended soil or Espoma's Organic Garden Soil.

To set your tomatoes up for success, stake them now to increase air circulation and sunlight exposure.

You can support them with a tomato cage, trellis or container. Or hammer 6-8 foot stakes 1 foot into the ground about 3-6 inches away from the plant. When tomatoes begin blooming, tie them to the stake.

- 7. Right now though, all they need is some water! For the next few days, water tomatoes generously. Then, give tomatoes about 2 inches of water around their base each week.
- 8. In addition to watering, feed your tomatoes twice each month. Organically fertilizing tomatoes with Tomato-tone produces larger, plumper tomatoes all season.
- 9. In 3-5 weeks, add 2-3 inches of mulch to reduce water consumption.

It won't be long now until you're biting into the first, fresh tomato of the season!

For more garden variety tips, visit our website and tag us at #EspomaGrown!







## **™HOW TO FEED TOMATOES**

### **SPRINKLE A LITTLE MAGIC**

You've planted your organic tomatoes! These homegrown veggies should be starting to flower—which means fruit isn't far behind.

Now, it's time to sprinkle a little magic.

Tomatoes have big appetites, so they need plenty of organic food. Since plants get all their nutrients from the soil, their all-you-can-eat buffet runs out quick.

Feed them right, and they'll burst full of fresh produce.

#### **CREATE A BALANCED DIET**

- **1. Go Organic.** Since you're eating this food and feeding it to your friends and family, you'll want to ensure it's the cleanest and healthiest possible. Choose an organic fertilizer.
- Take it slow. Chose a slow-release fertilizer. Artificial, rapid growth results in tall, lanky plants. Slow-release, organic fertilizers actually improve the soil as they break down.
- 3. Plants need vitamins, too. Find a balanced food with calcium to help prevent blossom rot. Espoma Tomato-tone® has 8% calcium! Be careful that you do not use too much nitrogen which will result in a lush, green plant with very little fruit.
- 4. More Magic. Tomato-tone also includes Bio-tone®, a blend containing more than 3 million beneficial microbes. Sounds cool, right?

## Don't take it from us — Veggie Gardener had this to say:

"Bio-tone works magic with this fertilizer. These beneficial microbes do the dirty work of creating big and healthy plants which in turn grow large, plump, and juicy tomatoes.

Beneficial microbes support good root growth by helping the roots absorb nutrients from the soil. Well producing tomatoes, or any plant for that matter, starts with a healthy and strong root system. Since I started using Tomato-tone, my tomato plants have grown faster, stronger, and produced more tomatoes."

Ok, you get it. Fertilizing tomatoes is like sprinkling them with magic dust that makes them grow bigger, better produce. Now get growing!







## TIPS FOR FEEDING TOMATOES

- **1. Measure out the fertilizer** according to instructions on bag.
- 2. Feed single plants with 3 tablespoons of Tomato-tone.
  For rows of plants, apply 1 cup on each side per 5 feet. Feed potted plants 1.5 teaspoons per 4 inches
- **3. Sprinkle Tomato-tone**® starting approximately 6 inches from the base of the plant.
- 4. After feeding, water well.

pot diameter.

**5. Feed tomatoes twice each month** during the growing season.

Feeding tomatoes takes just a couple of minutes and drastically increases your harvest.

To feed your family lots of organic, homegrown tomatoes this summer, you'll need to first keep your veggies well-fed!

Get ready for the biggest, yummiest tomatoes you've ever grown.

While you're at it, take a selfie with your Tomato-tone! Tag us in the picture with #EspomaGrown!



### **™3 WAYS TO SUPPORT TOMATOES** ₩

HELP THEM GROW BY GIVING THEM SOME EXTRA SUPPORT

Soon your tiny tomato plants will transform into gigantic bushes. Help them grow by giving them some extra support. Tomato plants often bend, lean or even break as fruit matures.

> To help your plant from being damaged, get to know the tomato you're planting.

Indeterminate plants will continue to grow and will benefit from some support, while determinate tomatoes may be just fine on their own. Use tomato cages, wood or metal stakes, or a trellis to give plants extra support. It's really a matter of preference which one you choose. The most important thing is that you're keeping plants off the ground to avoid pests, diseases and rot.

### HAVE ANY OF YOUR OWN DIY IDEAS? TAG US AT #ESPOMAGROWN!

#### STAKE

Choose 6 foot to 8 foot-tall stakes made of wood, plastic or bamboo. Or, create your own from recycled materials.

- **1.** Pound stake firmly into the ground, about 12 inches deep, beside tomato plant.
- 2. Tie stalk loosely to the stake using twine as soon as flowers appear. Stakes will bear the weight of plants as they grow, preventing branches from tipping and breaking.
- 3. Continue tying plants to stakes as they grow.
- **4.** Water tomatoes regularly and fertilize with Tomato-tone® every two weeks.

#### **TRELLIS**

Trellising your tomatoes offers them support and is a great way to maximize small spaces. They keep tomatoes off the ground and allow for easy pruning.

- **1.** Push two 6 foot poles or wooden posts into the ground about 10 feet apart. Poles should not wobble.
- 2. Tie wire or twine between posts, adding lines across the top, bottom and middle.
- Plant tomatoes along the length of trellis.
- 4. Water tomatoes regularly and fertilize with Tomato-tone every two weeks.
- **5.** As plant grows, train stems by attaching stems to the trellis using twist ties, wires or twine.

Soon your garden will be filled with delicious ripe tomatoes! For more tips on growing tomatoes, check out our organic gardening guide!

#### CAGE

Cages can be purchased at your local garden center and they're easy to remove at the end of the season and store for next year's use.

Choose metal, wooden or plastic tomato cages. Metal cages often hold up better and last longer, but are prone to rust.

- 1. Choose 6 foot cages for indeterminate and heirloom varieties.
- 2. Plant tomatoes and center the cage over the center of the plant.
- 3. Depending on the full grown size of your tomatoes, set cages about 4 feet apart.
- **4.** Push the tomato cage legs into the dirt until the bottom rung is even with the base of the tomato plant.
- 5. Water tomatoes regularly and fertilize with Tomato-tone every two weeks.





### THE 5 BEST ORGANIC MULCHES FOR TOMATOES

SHREDDED LEAVES Composted leaves are great for vegetable gardens because they provide natural weed protection and increase moisture retention.



#### **NEWSPAPER OR CARDBOARD**

Newspaper is best for blocking weeds. Cut or tear into strips that fit easily around plants.

**GRASS CLIPPINGS** If you apply organic lawn fertilizer, dry grass clippings are a great option. They mat together to protect plants and retain heat.

5

#### **PEAT MOSS**

Peat moss slowly decomposes over the growing season, adding nutrients to the soil. Water plants thoroughly before spreading peat moss, however, because it sucks a lot of moisture from the soil.

Straw
Straw makes great mulch for tomatoes.
But stay away from hay, as it's full
of seeds. Spread a 3-6 inches layer
around tomatoes.

Have any of our your own mulching suggestions? We would love to hear them, tag us at#EspomaGrown!

### **YHOW TO MULCH TOMATO PLANTS**▼

### **MULCH TOMATOES NOW TO SAVE TIME LATER**

Add mulch, a natural covering on top of soil, to keep moisture in, block weeds and provide added nutrients. But did you also know that mulch is particularly important for tomato plants?

If you grow tomato plants, then you have to understand the importance of mulch. **MULCH**: PROTECTS, BLOCKS WEEDS, SAVES WATER AND KEEPS PLANTS CLEAN.

Mulch adds an extra barrier of protection against rot, disease and moisture loss.





### **™PRUNING TOMATOES ™**

### LESS IS MORE: HOW TO SUCCESSFULLY PRUNE TOMATOES

Tiny tomato seedlings can vigorously turn into huge bushes in no time. In fact, they've even been known to bend cages and pull stakes out of the ground!

However, when it comes to growing tomatoes, less is more. Fewer leaves mean air circulates better and leaves dry quicker, reducing the risk of disease.

Plants with less density direct energy toward producing bigger fruit. Plus, tomatoes often ripen earlier after a good pruning, allowing you to enjoy your harvest sooner.

### PRUNING 101

### HERE ARE SOME HELPFUL TIPS FOR PRUNING YOUR TOMATOES THIS SEASON

- 1. Find out if your tomato plant is a determinate or indeterminate variety. Determinate varieties often thrive with less attention because they produce only one crop of tomatoes. Indeterminate varieties, on the other hand, require frequent maintenance because they produce tomatoes all season.
- 2. Pinch or snip flowers until plants are 12-18 inches tall. When the first green fruit appears, remove all suckers, ie leaves beneath that cluster.
- 3. Feed throughout the season with Tomato-tone®.
- 4. As the plant continues to fruit and flower, chose a few strong stems to produce tomatoes and prune the rest. Though this results in less fruit, tomatoes will be bigger and juicier.
- 5. Continue removing unnecessary suckers and flowers at least once a week during peak growing season. Eliminate suckers while they are still small enough to remove by hand. If you need to use a tool, be sure to use a sharp pruner blade to make a clean cut.

### **GROW UP, NOT OUT**

Tie tomato plants to a support such as a stake or a trellis to promote upward growth. The upright position prevents tomatoes from touching the ground, which helps keep pests and diseases at bay. Vertically grown tomatoes are ultimately easier to prune because unnecessary suckers and leaves are more visible.

Though plants may now be better protected from insects and disease, staked and pruned plants may be more susceptible to blossom end rot and sunscald.





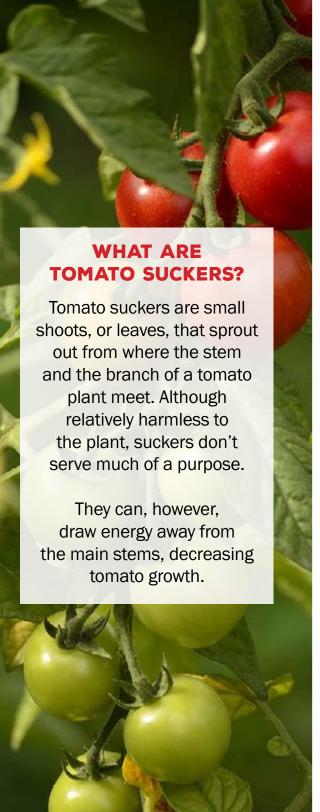
### **™TOMATO SUCKERS**

### TODAY'S GARDEN TIP: WHAT TO DO WITH TOMATO SUCKERS?

Tomatoes are one of the easiest things to grow in your organic garden. Plant, feed, water and eat!

Yet a few simple tricks will help you be more successful and produce a ton of fruit!

> What to do with tomato suckers? First, let's determine what tomato suckers are. Then, you can choose whether or not to keep them.



#### TO PRUNE OR NOT TO PRUNE

Some argue that tomato suckers are beneficial because more leaves can lead to more fruit.

This is true, however, less dense tomato plants may produce larger, juicier tomatoes. (Don't forget to also use Espoma's organic Tomato-tone® to promote growth of plump tomatoes.)

Removing tomato suckers can also decrease risk of disease caused by prolonged moisture. With fewer leaves, plants receive more air and leaves dry quicker. Fewer leaves also provide fewer places for insects to nest and gnaw.

Because suckers can potentially cause more harm to the garden than good, consider pruning those suckers.

To learn more about specific pruning techniques, here is everything you need to know about pruning tomatoes.

#### **HOW TO PRUNE TOMATO SUCKERS**

Keep a close eye on your tomato plants. Eliminate suckers while they are just a small ½ inches stem.

Remove by simply snapping them off at the stem. If you need to use a tool, use a sharp pruner blade to make a clean cut.

During peak growing season, pull unnecessary suckers and flowers at least once a week.

Pruning is especially important if you are growing indeterminate tomatoes. This variety produces fruits all season long, as opposed to a single harvest. They require more attention and maintenance in order to encourage growth.

Pruning tomato suckers is one of the keys to a successful harvest.

For more garden variety tips, visit our website and tag us at #EspomaGrown!



## **™HYDRATING YOUR TOMATO PLANTS**▼

### **HOW MUCH WATER DO MY TOMATO PLANTS NEED?**

Imagine having a successful, bountiful tomato harvest every season juicy, red tomatoes ready for the kitchen.

The good news? You can! Tomato care isn't hard.

When it comes to growing tomatoes in your organic vegetable garden, the secret is in the soil. Maintaining consistent soil moisture is crucial for a successful harvest.

When, and how frequently, you should water your tomato plants depends on the variety, size and location.

### **CONTAINER TOMATO PLANTS**

Tomato plants grown in containers need more water than garden tomatoes. Soil in containers heats up faster which leads to more water evaporation.

A good rule of thumb for containers is to water until water runs freely from the bottom. Water in the morning and check the soil moisture levels again in the afternoon. If soil feels dry about 1 inch below the surface, it's time to water again.

> For more garden variety tips, visit us at www.espoma.com

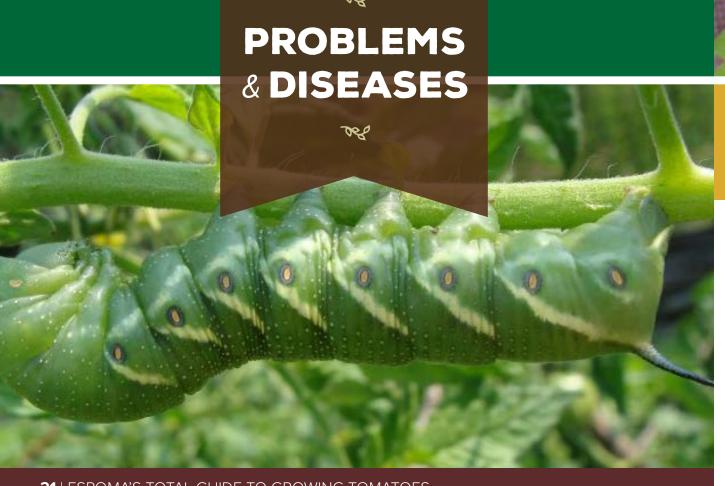


### **GROWING IN THE GARDEN**

When you plant tomatoes right in the ground, the roots can extend deep into the soil as they seek out water. Water newly planted tomatoes well to make sure soil is moist and ideal for growing.

Early in the growing season, water plants daily in the morning. As temperatures increase, you might need to water tomato plants twice a day. Garden tomatoes typically require 1-2 inches of water a week.







### **STOP BLOSSOM END ROT ▼**

### BE SURE TO CHECK THIS BEFORE YOU TAKE YOUR FIRST BITE

You're on your way to growing the perfect tomatoes. Once you've selected your favorite varieties, planted and cared for the seedlings, all that's left is to take a bite into your first harvest.

### But wait. That tomato doesn't look so appetizing.

If a dark, water soaked spot has formed on your tomato you may have blossomend rot. This problem is likely caused by an imbalance of calcium in the plant. You may also see this on peppers, squash, cucumbers and melons.

The spot enlarges and darkens rapidly as fruits develop.

Large spots will dry out and appear to be leathery.



# TIPS TO KEEP BLOSSOM END ROT AWAY

Maintain consistent soil moisture throughout the growing season. When the weather is dry, water at least twice a week and moisten the soil to a depth of at least 6 inches.

**Plant tomatoes in warm soil.** Seedlings planted in cold soil are likely to have limited nutrient uptake.

Fertilize with Tomato-Tone® to make sure plants are getting the nutrients they need.

Amend soil to maintain soil pH at or near 6.5.

Add a layer of mulch to minimize evaporation and help maintain consistent soil moisture. Remember not to volcano mulch.

The reasons are many as to why the plant may not be able to take up enough calcium to support the fruit, but most lie in the soil.

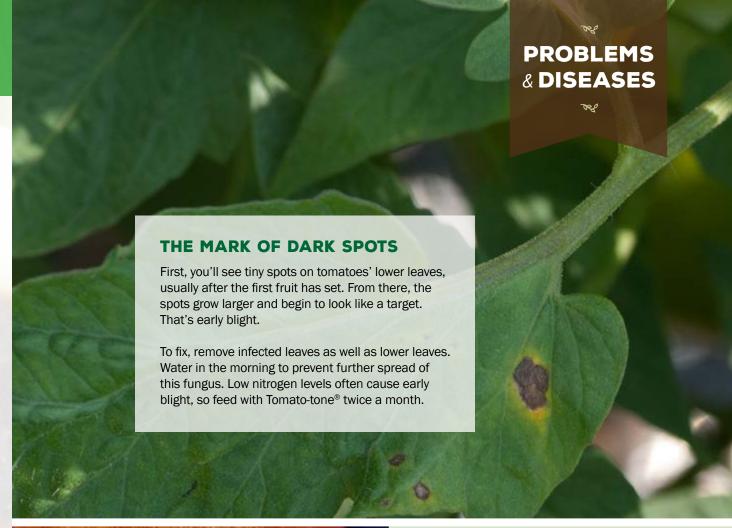
The best way to prevent blossom end rot is to have a soil test done before planting to determine if the soil has adequate calcium.

#### Other reasons include:

- 1. Fluctuations in soil moisture
- 2. Excess of nitrogen in the soil
- 3. Root damage
- 4. Soil pH that's either too high or too low
- 5. Soil that's too cold
- 6. Soil that's high in salts

Unfortunately there's no use saving these tomatoes. Pick off damaged fruit as soon as you notice the rot and compost them.

For more garden variety tips, visit our website at www.espoma.com and tag us at #EspomaGrown!





### THE BRUISE BLUES

If small, sunken spots or what looks like bruises appear on your ripe tomatoes, that's anthracnose. This fungus emerges as the weather gets hot and humid - usually 80° or warmer.

So, harvest ripe tomatoes as soon as possible. These are safe to eat if you cut off the bruises. Then water tomatoes in the morning.

Next time, when you're growing tomatoes, select disease-resistant varieties to avoid some of these common problems.



#### **SO MANY SPOTS**

If tiny, greyish-brown dots cover your tomato leaves, Septoria leaf spot is to blame. Soon, leaves will fall off. Though, a harvest will usually still happen.

To remedy, remove all infected leaves. Then apply a copper fungicide—if you're organic gardening.

### **BROWN BOTTOM**

See circular brown spots on the bottom of your half-grown tomatoes? That's blossom-end rot, which is usually caused by a lack of calcium in the soil. Blossom end rot should only happen to a few tomatoes early in the season, not the whole bunch.

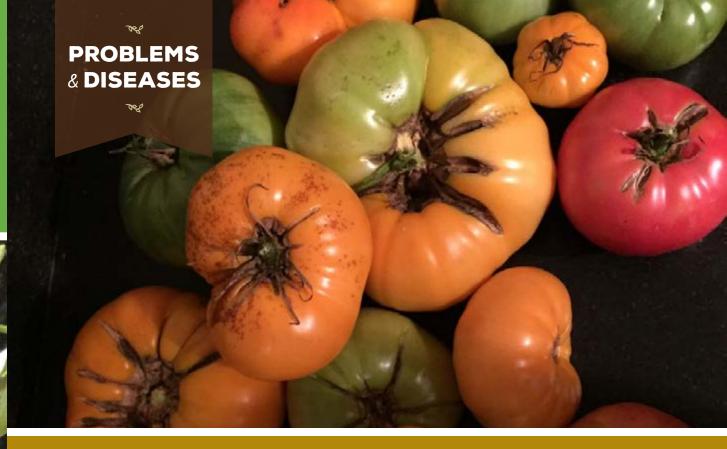
To fix, use an organic tomato fertilizer with calcium, and keep moisture levels consistent.



### **BUILT TO WILT**

Wilting, curling leaves could be bad news for your tomatoes. If paired with stunted grown or browning veins or blotches, your tomatoes have Fusarium or Verticillium wilts. These diseases are caused by a super vicious fungus in the soil.

And, there's no cure for it. Remove and rid your garden of these tomatoes. Do not compost. Then, solarize the soil to kill the fungus. Otherwise, when you plant veggies in the same area, they, too, will get this disease for the next 4-6 years.



### **☞ PREVENT CRACKING AND SPLITTING ☞**

**SOLVE THE MOST COMMON PROBLEMS WHEN GROWING TOMATOES** 

Cracking and splitting are one of the most common problems when growing tomatoes. The good news: those unsightly cracks aren't caused by pests or disease!

Tomatoes split open when the fruit outpaces the growth of the skin—usually after a heavy rain. The bad news: split tomatoes can introduce bacteria into the fruit and cause them to rot.

But wait, there is good news: this is an easy problem to remedy and you can start now.





### **™PROTECT YOUR PLANTS** ▼

### **4 COMMON TOMATO PESTS**

When it comes to insects in your garden, don't be quick to kill.

Not all insects are enemies. In fact, most insects are essential players in your organic garden's success. Others are neutral and don't cause any harm. Yet some will ruin your harvest.

Spotting the difference between the good and the bad can be tricky, so keep your eyes peeled.

It doesn't matter if you're growing hybrids or heirlooms, there are a few pests you don't want around. Identify harmful pests early before damage is done.



#### **HORNWORMS**

These destructive caterpillars can grow to about 3-3½ inches at full size, but their green color makes them difficult to spot. If you spot hornworms, spray with water or remove by hand. However, where there is one, there are usually more. If there is a large infestation, consider spraying tomato plants with an organic approved pest control.

#### **FRUITWORMS**

Adult tomato fruitworms are moths, typically yellow or olive in color. They often lay eggs near the leaves of the plant. If you see fruitworms, check leaves for eggs. Larvae feed on leaves and foliage before moving to the tomato, giving you more time to stop potential damage.





### **POTATO APHIDS**

These tiny insects are usually found in dense clusters. Potato aphids are typically not serious enough to kill plants, but a large enough infestation can stunt growth and lead to mold and disease. If you spot an infestation, remove it and be sure to throw in the garbage. If thrown on the ground, aphids will re-infest the plant. To control, apply insecticidal soap.

> Photo courtesy of Whitney Cranshaw, Colorado State University (www.bugwood.org)

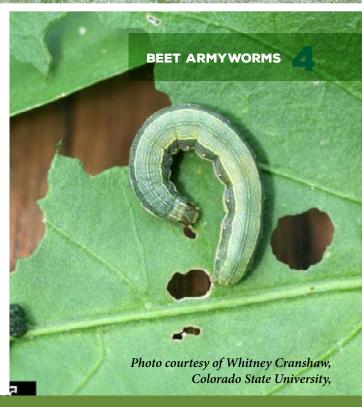
**POTATO APHIDS** 

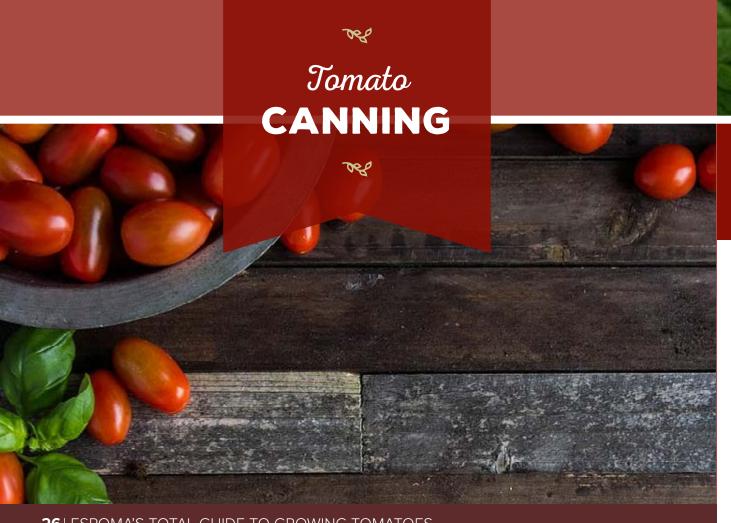
### **BEET ARMYWORMS**

Similar to the fruitworm, beet armyworm adults are moths with gray and brown upper wings and white or pale gray lower wings. They typically lay eggs on the underside of leaves. When larvae hatch, they feed on foliage before attacking the tomato itself. Remove beet armyworm caterpillars by hand before they become moths.

When it comes to tomato pests, the best way to stop damage is to spot pests early. Keep a close eye on your tomato plants, especially in the early stages. Introduce beneficial insects such as lacewings or ladybugs into your garden to naturally control common pests.

Pruning tomato plants and giving them the right support can also make pests easier to spot and keep bugs at bay.







### **₩HARVESTING TOMATOES MADE EASY**

HARVESTING TIPS TO ENSURE YOUR TOMATOES ARE RIPE WHEN PICKED

It's the moment you've been waiting for—tomatoes are ready to harvest! You can almost taste the delicious flavors of that first bite.

Whether you're cooking, canning, freezing or simply eating your tomatoes raw, you'll want to pick them at the perfect moment.

These harvesting tips will ensure your organic tomatoes are ripe when picked.



### TIMING IS EVERYTHING

One of the first steps to a successful harvest is keeping a close eye on your tomatoes to determine the best time to pick. Tomatoes are typically ready to harvest 60-85 days after planting seedlings outdoors. However, timing can change depending on your climate and the variety of tomatoes you're growing.

If you're planting determinate tomatoes, be ready for a large harvest all at once. These varieties typically set and ripen their fruit within about two weeks.

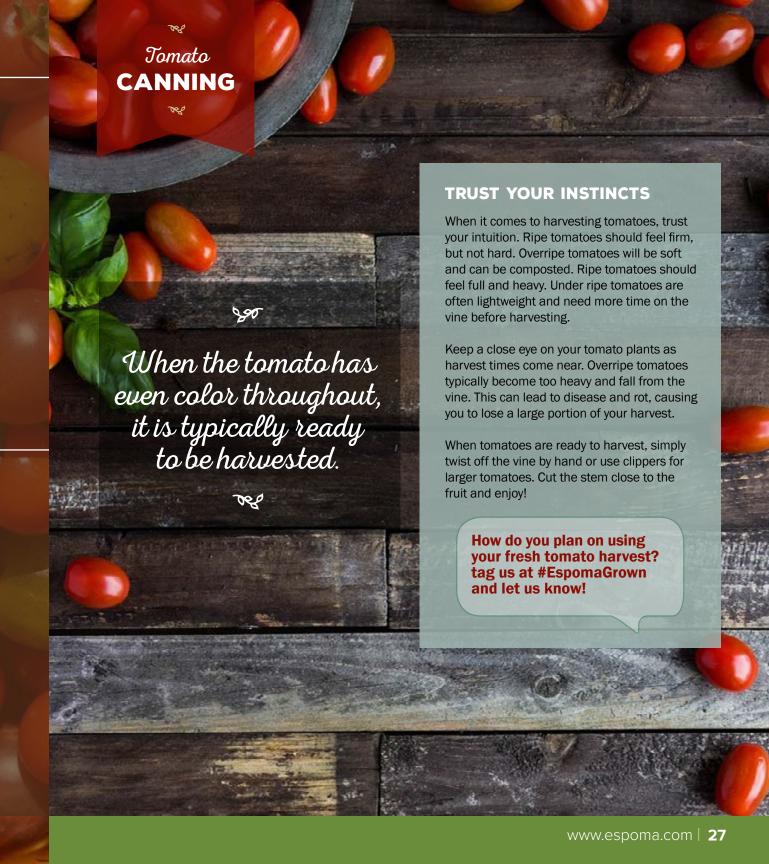
Indeterminate tomatoes can ripen all summer long, so keep an eye on these varieties throughout the season to ensure peak harvesting times.

### **COLOR IS KEY**

When the tomato has even color throughout, it is typically ready to be harvested. Tomatoes often ripen from the bottom up, so check the bottom of the tomato first for mature growth color. Once the entire tomato has reached this color, it is ready to be harvested.

Tomatoes need heat to harvest, and not necessarily light. They continue to ripen on overcast or cloudy days, as long as the temperature is warm. Tomatoes can even continue to ripen off the vine. If you live in an area with an especially hot climate, it's better to pick the tomato from the vine before it reaches its mature color.

Tomatoes will continue to ripen and change color as long as they are stored in warm temperatures.





### **GAN, SAVE AND PRESERVE TOMATOES ▼**

### **ENJOY THE FRUITS OF YOUR LABOR EVEN AFTER HARVEST SEASON**

Your summer veggie garden is in full bloom, and your tomatoes are doing great. The only problem? Your garden may be producing more tomatoes than you can eat! (What a catastrophe!)

Don't waste your harvest.

Preserve tomatoes now to enjoy the sweet rewards of your summer veggie garden long after harvest season is over.

### STEP-BY-STEP INSTRUCTIONS TO **CAN, SAVE AND PRESERVE TOMATOES**



### PERFECT PICKING FOR PRESERVATION

- You'll want to allow tomatoes to ripen on the vine, so they reach peak flavor.
- Harvest when they have colored evenly and are a tiny bit soft when squeezed. Remember, tomatoes stop ripening in temperatures above 86° F. If your area is consistently warm, tomatoes may stop ripening when they reach an orange/yellow color. So, don't wait for them to turn completely red before picking.
- To remove tomatoes from the vine, grasp them gently and firmly. Twist the tomato until it snaps off the vine, or slice the stem close to the fruit.

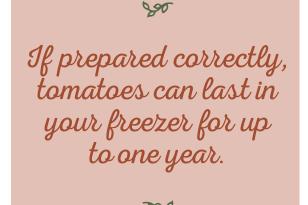
### FREEZE TOMATOES

- Remove tomato skins by cutting an X through outside skin and carefully lowering the tomato into boiling water for 30 seconds. Then, plunge it into ice water for a few seconds. Skins will slide right off.
- Allow tomatoes to cool. Cut into quarters and fill freezer bags, removing as much air as possible before sealing.
- If you don't mind the skins, stick sliced tomatoes or whole cherry tomatoes in a freezer bag and place in the freezer.
- Season tomatoes after they are defrosted and right before they are served.
- If prepared correctly, tomatoes can last in your freezer for up to one year!
- Preserve tomatoes now to enjoy the sweet rewards of your summer veggie garden long after harvest season is over.



#### **CAN TOMATOES**

- Sanitize jars in boiling water. Keep warm until ready for use to avoid breakage.
- Blanch tomatoes in boiling water for 30 seconds.
- Cool, peel, core and halve or quarter tomatoes in a strainer placed over a bowl to catch juices. Remove the seeds.
- Add salt and herbs such as basil, tarragon and oregano to each jar. Include 1 teaspoon of each.
- Place tomatoes in jars and fill the jars with left over tomato juice, leaving 1/2 inches head room. Press down to remove the air bubbles. Wipe the rim, put on lid and screw on ring until fingertip tight.
- Place tomato jars in boiling water and cover them with 1-2 inches of water. Then cover the pot and let simmer for 40-45 minutes, or until the lids pop.
- · Remove pot from heat and let it sit for 5 minutes.
- Place the jars upright on a towel undisturbed for at least 12 hours.
- Test lids within 24 hours to make sure they don't pop.
- If a lid pops, you can immediately reprocess after making sure the jar is full, the rim is clean and the seal is tight. Or, you can refrigerate them for use within a few days.





Tomato

**CANNING** 



- Arrange pieces on dehydrator trays so they are not touching.
- Sprinkle with salt and herbs of your choice. Use herbs grown in your own garden for the freshest flavor.
- Dehydrate tomatoes until moisture is removed. Dehydrating can be done in a dehydrator or conventional gas or electric oven.
- Time varies based on the moisture in the tomatoes, thickness of the slices, the dehydrator itself and the humidity in the air. They're finished when tomatoes are flexible, but not brittle.
- To store, seal in an airtight container or plastic bag in the refrigerator.

### **SAVING TOMATO SEEDS**✓

A SEED AHEAD: PRESERVING TOMATO SEEDS

You've had a great season tending to your tomato plants! But with the summer winding down and chilly days coming soon, you may be wondering what to do with your tomato plants now.

Get a head start by preserving the seeds from your tomatoes.

Tomato seeds might be available at the store year-round, but saving your own is satisfying and easy.

Fall is the perfect time to begin planning for next year!



#### **METHOD 2: FERMENT**

It's not absolutely necessary to ferment your tomato seeds, but fermenting makes it easier to completely separate seeds from the gel that surrounds them. Fermenting also eliminates the bad seeds and reduces the possibility of seed-borne disease for next season.

#### 1. Wash the tomatoes.

Slice each in half across the middle (not the end with the stem). Squeeze the seeds and juice into a (labeled) glass or plastic container.

- 2. Set containers aside when half-full. Place containers in an area that is out of direct sunlight and out of the way, so the fruit flies and odor will not bother you.
- 3. Let the seeds sit for three to five days or until the surface of the container shows a whitish mold. This is a good thing! The seeds should be floating at this point. In warmer climates, you may need to add some water to keep the seeds afloat.
- 4. Gently scrape the mold off with a spoon. Do not remove the seeds.
- 5. Fill container with water and then stir it. The seeds you want will sink to the bottom.
- 6. Pour off the excess to remove floating seeds and pulp.
- 7. Repeat the process until the good seeds, at the bottom, are cleaned.
- 8. Pour the good seeds into a strainer, then rinse and drain them.

