

## Heirloom Tomatoes

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Heirloom tomatoes have become very popular. And for a good reason! They are beautiful, colorful and often very unusual. But most importantly, they taste like “real” tomatoes. The most accepted definition of an heirloom tomato is that it must be “open pollinated” and have been grown for at least 50 years, or introduced before 1940. Open pollinated basically means if you save the seeds from a particular fruit, plants grown from those seeds will usually produce the same fruit.

They have become known as “heirlooms” because the seeds have been saved and passed down from generation to generation. The earliest record of the use of the word “heirloom” to describe these varieties is 1940. There are currently more than 7500 heirloom tomatoes listed in the Seed Savers’ Exchange Yearbook.

There are many different characteristics of heirlooms to consider when choosing what to plant. Heirloom tomatoes come in many different sizes – cherry, small, medium and large. They also come in many different colors besides red, yellow & orange. Additional colors such as black, purple, pink, green, white and striped varieties are also available. Tomatoes come in many shapes besides the standard round fruit. There are also pear, plum and heart shaped, elongated, ruffle topped, and ridged fruit. The taste can vary substantially, depending on acidity levels and varieties.

The other thing to consider when choosing a variety is the difference between determinate and indeterminate plants. Determinates are short, bloom fairly early in the season and nearly all of their fruit ripens at the same time. They are bushy and do not require as much staking for support as indeterminate plants. Indeterminate vines have leafy shoots at their tips instead of flowers and these shoots continue to grow, flower and set fruit until the plant declines or is killed by frost. An indeterminate variety will bear over a long season and is generally more productive. They need to be staked unless you have a lot of room to let them sprawl. Indeterminates have been known to grow vines of 10 -15 feet and continue to produce fruit until late November along the coast and in protected areas further inland.

Some heirloom varieties can be purchased as transplants from local nurseries but most varieties are only available as seed. Seeds should be sown 8-9 weeks before planting time. Tomatoes should not be planted outdoors until the danger of frost has passed and the weather has started to warm, which is usually March or April in the San Diego area. Seed can be started in peat pots, seedling trays or recycled plastic “six packs” used to grow other plants. Always be sure to thoroughly wash any pots you are reusing with hot water, soap and a little bleach to sterilize them.

Use a seed starter mix, available at most nurseries, not potting soil or yard soil. Put some seed starting mix in a bucket and thoroughly moisten it. It should feel like a damp, wrung out sponge. Fill the containers with the mix and tap them on a hard surface to settle the soil. Using a pencil or a chopstick, make holes ¼” deep and place the seeds in the holes. Gently cover the seed with soil. Do not pack it down. Cover the trays with a plastic dome or plastic bags propped up with chopsticks to maintain humidity. Set the containers in a warm (70 degrees) area or on a propagation heat mat. This will speed up seed germination. Tomato seeds do not need light at this point. Keep the soil moist but not wet. If it is too wet, the seeds will decay and die. Check daily for the first sprouting seed which usually appears in 7-14 days.

After the first leaves emerge, make sure the plants get at least 16 hours of bright light each day. You can put them under fluorescent lights to do this. It's not necessary to use grow lights. Set the trays 2" below the lights. Leave the lights on for 16 hours and off for eight. Using a light timer makes this much easier. Continue to water the seedlings, but don't drown them. As the plants grow they will produce the first "true" tomato leaves. If they are on a tray begin to water from the bottom, allowing the plants to wick up the water as they need it. This will also encourage deeper root growth. As they continue to grow, move the lights up so the tops of the plants are 1-2" below the light. This helps the plants to grow strong upright stems. When the plants are about 4-6" tall they can be transplanted to 4" pots if desired.

Before seedlings can be planted outside they need to be hardened off. This can be done by slowly exposing them to being outside. Start by taking them out on a warm day (60 degrees) to a semi-shady area for several hours a day, preferably in the morning. Increase the time outside gradually over the course of several days, exposing them to more direct sun. Bring the plants in every night. After 5-6 days they can be left outside overnight, in their pots, for several twenty four hour periods (unless frost is predicted). They should then be hardened off and ready to transplant.

Tomatoes can be planted in the ground or in large containers. The plants should receive at least 6 hours of sun a day, so choose a sunny spot. Given a choice, morning sun is preferable to afternoon sun. It is almost impossible to successfully grow a tomato with less than 6 hours of sun. Plants in containers will need to be watered more often and may require more frequent feeding.

Tomatoes planted in the ground should be set at least 3 feet apart. Tomatoes can be planted deeper than they grew in the container and will form roots along the buried stem. Keep the top 3 sets of true leaves on a transplant and pinch off the lower leaves on the stem. Dig a planting hole deep enough so the lowest set of true leaves will be little above the surface of the soil. Mix some compost and organic fertilizer into the hole and fill with water. After the water has completely drained, gently loosen the soil of the root ball. Carefully set the tomato plant in the hole and fill the hole with loose soil. Don't pack the soil down. Leave a shallow bowl around the tomato or create a circular trench about 12" in diameter around the plant for watering. If you have a plant that has already started to flower, pinch the flowers off. More will come, but right now the plant needs to put its energy into growing leaves and roots. If you are going to provide support for your tomato put in the stakes or cage now so you don't disrupt the roots later. Give the plant a good soaking. Applying a layer of mulch around the plant will help the plant retain moisture, ward off weeds, and reduce watering.

If you are planting your tomatoes in containers, you should use a 15-gallon or larger size to allow for adequate root growth. Always use good quality potting soil, not soil from your yard. Partially fill the container with potting soil leaving enough space for the root ball and the portion of stem which will be covered with soil (below the lowest remaining set of true leaves.) Add some tomato fertilizer and thoroughly mix it into the soil. Place the plant in the container. Loosely fill soil around the plant and water thoroughly. Add additional potting soil if needed. Now place a cage or stakes in the pot so you will not disrupt the roots later.

Apply more fertilizer when flowers have formed and again when the fruit has set. Fish emulsion is stinky, but easy to apply and effective. You can also use other organic or chemical fertilizers according to label directions. Over-fertilizing will not produce more tomatoes. You will probably get big, leafy plants, with little or no fruit.

More plants probably die from overwatering than underwatering. Look at your plants early in the morning – never in the middle of the day. If they look wilted in the morning, then deeply water them. Don't water in the middle of the day – it wastes water. Water directly in the trench or pot. Try to avoid wetting the plant's foliage which may promote disease. If you can only check your plants in the evening, wait until the morning to water them if needed. Watering at night does not allow the plant to dry off sufficiently, and encourages diseases.

Following is a short list of heirloom varieties that have done well in coastal San Diego. The name of each is followed by either an I or a D to designate it as an indeterminate or determinate type.

### CHERRY

AUNT RUBY'S GERMAN CHERRY (I). Flavorful and unique green cherry tomato that was selected from the renowned "Aunt Ruby's German Green". The 1-2 oz. fruit are shaped like little beefsteak tomatoes and have the full-sized tomato flavor packed into these bite-sized snacks.

BLACK PLUM (I). A favorite Russian variety that produces a long and steady crop of 2-inch elongated plum-shaped fruits colored a beautiful deep-mahogany with dusky-green shoulders. Fruit resembles a small paste tomato but with thinner walls. Unique sweet tangy flavor.

ISIS CANDY(I). Golden yellow fruit with red marbling and cat's eye starburst at each blossom end. One of the sweetest and most striking of all cherry tomatoes.

BROWN BERRY (I). Vigorous, regular-leaf tomato plants yield exceptionally large crops of mahogany (brick-red) brown colored, 1-inch, round, open-pollinated cherry tomatoes. Has excellent semi-sweet, rich flavors with just a slight bit of acid finish over its fruity sweetness. Very juicy! A great snacking or salad tomato to mix with your other colored tomatoes.

WAPSIPINICON PEACH (I). Regular-leaf wispy, tomato plants yield a tremendous amount (thousands) of 1 1/2 to 2-inch, delicate, fuzzy-like-a-peach, pale-yellow (with a tinges of pink), juicy, tomatoes with wonderful, slightly-spicy, very fruity-sweet flavors. Harvest is good all the way to frost. A novelty tomato that is sooo sweet, it begs for eating right off the vine.

### RED FULL SIZE

BRANDYWINE (I). An Amish heirloom that dates back to 1885 and is generally considered to be the world's best tasting tomato! Potato leaf vines with good yields of extra large (1 -1 1/2 lb) fruit.

MARMANDE (D). A classic French garden tomato that bears well, even in cool weather. Abundant crops of large, beefsteak shaped, 8 oz. scarlet fruits with delicious flavor and firm, meaty flesh. Big red with "ruffled" top from Southern France. Great flavor. Also produced all fall and winter from plants set in August.

NEVES AZOREAN RED (I). Developed by Anthony Neves, who brought seed from the Azores. Seeds produce regular-leaf tomato plants with a large central stem with moderate to heavy yield of huge, 1-3 pound, deep-red, beefsteak tomatoes with terrific,

bold, complex flavors. This tomato packs such a wonderful flavor punch you will want to keep it as one of your favorite tomato varieties to grow each year. Great disease resistance and produces 'till frost.

STUPICE (I). This potato-leaf heirloom from Czechoslovakia is a cold-tolerant tomato that bears an abundance of very sweet, flavorful 2 to 3-inch, deep red fruit. A 1988 comparative tasting in the San Francisco area gave it first place for its wonderful sweet/acid, tomato flavor and production.

### COLORFUL & UNUSUAL

BIG RAINBOW (I). An astonishing feast for the eyes! The flesh inside is marbled with red in the bottom half of the fruit. Has a big, lumpy beefsteak shape with very mild, sweet flavor. The large fruits (often 22 ounces) are borne on tall plants.

BLACK SEA MAN (D). A hardy Russian heirloom that looks odd but tastes delicious. Rich, tangy tomato flavor in medium-sized, 4 to 8 oz. fruits with brown-black skins and pink shoulders. Fruits are slightly plum-shaped, revealing skeleton-like veins when blanched and peeled. Short, potato leaf plants. Does well in mid-size containers.

JAPANESE BLACK TRIFELE (I). In Russia the Trifelle varieties of tomatoes (of which there are several colors) are highly prized and command high prices. This short potato leaf plant yields prolific quantities of 6 oz. fruit that looks like a beautiful mahogany-colored Bartlett pear with greenish shoulders. Very tasty flesh with a meaty core that produces luscious fruit all summer long. A work of art sliced out on a plate.

KELLOGG'S BREAKFAST (I). Beautiful pale orange colored fruit are a solid and meaty 1-1/12 lb. beefsteak type fruit. Great flavor, few seeds. Long-season producing.

MANDARIN CROSS(I). A beautiful Japanese heirloom; has deep golden-orange globe-shaped fruits with a succulent, sweet tomato piquancy, yet low acid. The robust plants yield prolific 10-ounce, firm-fleshed slicing tomatoes that keep well.

PAUL ROBESON (I). This Russian heirloom tomato was named after the operatic artist who won acclaim as an advocate of equal rights for Blacks. This "black" beefsteak tomato is slightly flattened, round, and grows to 4-inches. Its deep, rich colors set it apart from others. A dusky, dark-red, with dark-green shoulders, and red flesh in its center. Very flavorful fruits with luscious, earthy flavors and good acid/sweet balance. Won "Best of Show" at 2000 Carmel Tomato Fest.

VIRGINIA SWEETS (I). This heirloom is one of the best tasting, best producing red-gold bi-colors. The fruit is stunningly beautiful and enormous, weighing at least 1 lb. each! Golden beefsteaks colored with red stripes that turn into a ruby blush. Abundant harvests.