

## **Blessed Be Tomatoes!**

How we deplore those tasteless tomatoes manqué that are available in winter months and how we delight in the genuine article from our summer gardens. The tomato, once called love apple, is *Lycopersicon esculentum*, actually a perennial grown as an annual. It was taken from the Andes to Europe in the 16<sup>th</sup> century and grown as a curiosity. For generations the fruit was thought to be poisonous, as is the foliage. We finally began to eat tomatoes in the 19<sup>th</sup> century and have relished them in increasing quantities since – spurred perhaps by the spread of the golden arches.

There is little unanimity on the best-for-here tomato. Some gardeners prefer tomatoes that are best for slicing into sandwiches; others prefer the ones that fill their rows of canning jars. Some cooks chop tomatoes into freezer bags destined for spaghetti sauce. Among the hundreds of varieties are determinate and indeterminate types.

In compact, determinate cultivars each stem ends in a cluster of fruit and grows no farther. Most cultivars are indeterminate with tomatoes grown along ever-lengthening stems. Determinate varieties are low growing so you do not have to wrestle with cages. If you have a windy spot, you can spread a blanket of straw over the planting site and let them roam, safe from broken branches. Determinate types ripen within a short space of time so they are perfect for those gardeners who want to can them, pull up the vines, and go on holiday. They also tend to be early ripening and will decline during the Virginia summer.

The indeterminate cultivars will continue to grow and ripen fruit until their production is shut down by frost or disease. When frost threatens, the remaining green tomatoes can be picked and wrapped in newspaper and stored at room temperature to gradually ripen. These stored fruits may not be as tasty as those picked at high summer but they are better than what is available in supermarkets, and they are your own which adds to their flavor.

About disease: all you really need to know is to choose those varieties from the seed catalogs that have disease resistance in their genetic makeup. Some of the ills to avoid are early blight, septoria leaf spot, verticillium and fusarium wilts, late blight, tobacco mosaic virus, and bacterial spot. Even with built in resistance, good cultural practices are essential.

Contrary to our instinct to water copiously is the news that moisture-stressed tomatoes can have marvelous flavor because of the increase in sugars and solids as well as being richer in lycopene, one of the ingredients in tomatoes that makes for healthy eating in the first place. In places where it does not get blistering hot growers water for the first few weeks after transplanting and then the plants are on their own. In hotter regions the plants are watered well until they flower and then either watered sparingly or not at all. This may be an interesting thesis to try out in your own garden.

Temperature is another factor in growing tomatoes. The optimal daytime temperature is between 70 and 80 degrees and at night it is between 60 and 70 degrees. (Do we have a lot in common with the tomato?) When the temperature is over 100 degrees the pollen is infertile and embryos are destroyed.

Another curious bit of information is that in Italy tomato growers have experimented with watering plants with ocean water, salty water. New Jersey, called 'the garden state', grows a lot of tomatoes and taste tests at Rutgers University showed a preference for the tomato that had been given a single watering with water from the Atlantic Ocean. Equally curious is the appearance of a product called "sea-90". If you want to try salt at home the recipe is four teaspoons of sea salt in two gallons of water applied to one plant when transplanting.

The other suggestion contrary-to-what-we-have always-been-told-to-do is to refrain from rotating our garden crops. The Master Gardener Handbook doesn't say anything about rotating the planting site but it has been customary to rotate any solanaceae, i.e. eggplants, peppers, and tomatoes. Now gardeners are saying that tomatoes grown in the same place taste better every year. They do say to top dress each year with compost and graft disease-prone cultivars on disease resistant root stocks.