

Rotating Extension Column

May, 18, 2009

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Bring Back Good Tasting Tomatoes – Part 2

Some claim that tomatoes don't taste as good anymore. Is this true, or are we experiencing the "good old days syndrome" as it applies to our favorite vegetable?

In an earlier article we discovered that it's probably true that today's commercial tomato varieties have a less desirable balance of specific sugars, acids and aromatic volatiles. Good tomato taste however, appears to be much more complicated than just growing one of the older varieties. The modern ways that we are growing, harvesting and storing them could be partly or mostly responsible for poor taste.

Is it in the Fertilizer?

Field trials and studies from New Jersey, as well as Israel and Italy indicate a lack of sodium and chlorine could be limiting good tomato taste. In the past, sodium nitrate, known as Chilean nitrate, was the widely used nitrogen source for tomatoes. It has now been mostly replaced with other sources of nitrogen such as urea and ammonium nitrate that do not provide sodium.

Commercial growers sometimes use potassium chloride, known as muriate of potash. Though the main reason for its use is to supply potassium, chlorine is also provided to the soil. Some fertilizers that are currently used however contain little or no chlorine.

Even those of us with little knowledge in chemistry know that a source of both sodium and chlorine is plain table salt or sea salt. To determine if these ingredients will make a difference in tomato taste, a scientist at Rutgers is conducting experiments using a sea salt type product for a soil treatment. As an alternative he states that sea water can also be used.

This is a one time treatment of tomato plants and must be carefully done in order to supply these two elements without causing damage. The procedure is described in a paper from Rutgers entitled "Soil, Salt and Tomato Taste." It includes step by step instructions for those who would like to try this treatment. If interested go to: njfarmfresh.rutgers.edu/documents/TomatoSalt2009.pdf.

Other nutrient deficiencies that might affect tomato flavor are sulfur and boron. Sulfur is most commonly lacking in sandy soils that are low in organic matter.

Good sources include compost and gypsum. There are also other commercial products available.

Boron deficiencies in tomatoes are common and the lack of sufficient boron is known to decrease yield and fruit quality. When needed boron is only applied in very small quantities.

Other Growing Practices

Tomato plants that are loaded with fruit require a lot of water from the soil. The soil should be kept uniformly moist, not fluctuating from very dry to extremely wet. On the other hand excessive irrigation, along with too much nitrogen can result in rots, fruit cracking and poor flavor due to a dilution of sugars or acids in the fruit.

Pick ‘Em When They Are Red – Really Red!

Aside from varieties grown, the stage of ripeness at harvest is possibly the most important factor in obtaining flavorful tomatoes. If possible, they should be left on the plants until they are dead ripe – a deep red color, but before extreme softness and decay sets in.

Avoid Practices that Reverse Good Tomato Flavor

Resist the urge to place tomatoes in a sunny window to finish ripening. It’s the plants that need sun, not the ripening tomatoes. Just place them at room temperature on a countertop until they are ready. Also, don’t refrigerate tomatoes unless it is absolutely necessary.

So, How Do We Get Good Tomatoes?

The short answer: Buy from a local farmer or grow them yourself. As discussed in Part One, the old timey varieties with a reputation for excellent flavor are more difficult to grow in our Gulf Coast region. However, as one grower recently told me, “I grow the old, heritage varieties and am willing to have some of my plants die in order to have a few left that bear really good tasting fruit.”

The Heirloom Tomato All Stars from Rutgers Taste Tests

<u>Large fruited:</u>	Cherokee Purple	<u>Cherry-size fruit:</u>	Green Zebra
	Mortgage Lifter		Snow White
	Hawaiian Pineapple		Isis Candy
	Prudents Purple		Yellow Pear
<u>Medium-size fruit:</u>	Eva Purple Ball		
	Arkansas Traveler		
	Box Car Willie		
	Lemon Boy		
	Costoluto Genovese		
	Ramapo (hybrid)		
	Brandywine Red		