

What's in Season from the Garden State

Bi-weekly Highlights from Rutgers Cooperative Extension

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In Search of the *Real* Jersey Tomato (Part I)

Even if you're not from New Jersey, you've likely heard about the legendary taste of the Jersey Tomato. Many of us can close our eyes and remember holding a firm deep red tomato, still warm from the sun, with that fresh off the vine smell. The flesh is smooth and juicy and each tangy bite is full of luscious flavor. Is this just a memory or can you still find this tomato?

You may notice that many Jersey Tomatoes currently seem more like the regular kind you find in the supermarket. There's a reason most Jersey Tomatoes are different now. In an effort to compete with other states in the wholesale fresh tomato market, New Jersey growers switched to commercial varieties that handle well during shipping and are more disease resistant. These varieties are firmer and have a good shelf life – qualities more desired by supermarkets to satisfy most consumers. Many of the tomatoes labeled Jersey Tomatoes in supermarkets and even at farmstands are these commercial varieties. They may "look" like a classic Jersey Tomato, because they have still been vine-ripened, but they lack some of the elements of the old-time varieties.

There is not *one* variety that is the "real" Jersey Tomato, but several varieties that are early, mid, and late season varieties. Since some of the old-time varieties are old seed strains that are no longer produced commercially, currently there are no early season varieties to meet those criteria. Hence, early in the tomato season it is very difficult to find the old-time Jersey Tomato. Some farmers carry the new varieties early season, and then grow their own old-time varieties mid and late season. So, what does this mean for the consumer? If you are looking for the "real" Jersey Tomato, it may vary from grower to grower and what time of the season it is. This may require a hunt for the classic tomatoes, but scoping out different farm markets can be a "fruitful" summertime activity!

Capturing the Taste of a Memory

Jack Rabin, Associate Director for Farm Services, New Jersey Agricultural Experiment Station (NJAES) provides us with the following "refresher course" in Tomato Tasting:

The best tomato flavor, aroma, and texture are memorable. We know it when it hits our mouth, but how do we describe it, and search for it in our local markets? Pursuing the best combination of "Jersey Tomato" flavor is a trial and error experience.

For a NJ/Philly/NY metropolitan region "east coaster," our ideal tomato creates a fresh, juicy mouth experience in addition to its wonderful smell and texture. This Jersey Tomato taste comes from a sweetness balanced by tart fruit acids that leave the sides of the mouth and tongue with a memory we strive to recapture every summer. It's in our memory, and we know it when we get a real Jersey Tomato, but how can we describe it?



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New Jersey Department of Agriculture's Jersey Fresh Availability Report

Current:

Arugula and Cilantro
Baby Arugula & Baby Spinach
Basil
Beets
Blueberries
Cabbage
Cantalopes

Dill & Parsley
Cucumbers
Eggplant
Greens: collards, kale, Kholrabi, mustard & Swiss Chard
Leeks & Green Onions
Nectarines
Peaches

Peppers
Radishes
Snap beans
Squash: yellow & zucchini
Sweet corn
Tomatoes
Turnips
White Potatoes

Winter squashes:
acorn, spaghetti



Forecast (start date):
Butternut squash - August

Where to find Jersey Fresh? Ask for it where you shop or dine or go to <http://www.jerseyfresh.nj.gov>



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The table below tells us that a true Jersey Tomato has high acids, not just high sugars. Identifying varieties that provide this juicy sweet-tart Jersey Tomato experience means first finding seeds of varieties that produce sweet-tart ripe tomatoes, then testing which reliably grow in New Jersey, producing healthy profitable crops for farmers.

Tomato Flavor as Influenced by Sugar to Acid Ratio		
Tomato Sugars	Lower (less than 3%)	Higher (above 3%)
Tomato Acids		
Lower (less than 0.32%)		
Higher (above 0.32%)	A tart mouth puckering tomato	Best tomato flavor combination

Table courtesy Adel A. Kader, Univ. of CA Davis.

The Rutgers NJAES used to receive a small New Jersey Legislative stipend each year specifically dedicated to our quest; pursuing the true Jersey Tomato for you and the Jersey farmers who labor, grow and sell them, but funds were cut a few years ago.

Why is finding the Jersey Tomato so difficult? Because tomato eaters in other regions, notably west coast US and Asia, prefer lower acid tomatoes and fruits. Additionally, some people begin to prefer lower acid fruits as they age, and our US population certainly is aging. For the last 30 years or so, the art and science of tomato variety breeding has focused on creating a continuous parade of improved varieties targeted to these markets.

To passionate Jersey Tomato lovers, these “sub-acid” tomatoes are ripe, they are sweet if harvested vine-ripe, but they are dry, boring, and “missing something” – that juicy refreshing mouth presence we remember. They are missing an ideal sweet-tart combination from the last box in the table above. Thus, while tomato varieties improved for those markets, and they truly are improved varieties, they do not satisfy those of us missing Jersey Tomato taste, aroma, and texture.

Some tomato lovers turned to buying heirloom tomato varieties in hope of recapturing the sweet-tart Jersey Tomato juiciness they remember. Heirloom tomatoes became a proxy for the Jersey Tomato. But, even heirlooms vary widely and require variety testing to identify which provide an ideal sweet-tart profile as well as being well adapted to New Jersey’s climate and soils.

Most heirlooms just do not produce tomatoes as reliably as the hybrid commercial tomato varieties yielding Jersey Tomato quality fruit available for New Jersey farmers to grow just a few decades ago. At Rutgers NJAES, we recently completed a five-year evaluation of over 150 heirloom and older tomato varieties. A select list of 13 varieties, which grow reliably under New Jersey conditions, yield well, and produce fruits New Jerseyans’ love to eat in our taste tests was identified (this list will be provided in Part II).



To illustrate the difficulty in bringing Jersey Tomatoes to markets, one of the most consumer taste-test admired tomatoes in our five-year Heirloom testing was the older Rutgers NJAES developed tomato variety “Ramapo”. Ramapo is a hybrid, technically not an Heirloom, but has real “Jersey Tomato” taste, color, aroma, beautiful fruit quality, and yields well enough for farmers to grow. It is a true “Jersey Tomato.”

To date, we have not been able to find a company interested in commercially producing seeds, and since public support to Rutgers NJAES has declined, we cannot produce enough seeds for distribution to farmers. We hope people interested in farms, farmers, and great tasting local food will encourage renewed public Legislative support for “Jersey Tomato” research at Rutgers NJAES.

Part II of “In Search of the Real Jersey Tomato” will continue in the next issue.



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