Keys to growing tomatoes in Florida

Florida farmers produce more tomatoes than any other state. Yet Florida home gardeners find it difficult to grow tomatoes. By changing a few basic practices, home gardeners can increase their chances of success.

My philosophy of growing tomatoes in Florida (mixed with science) is outlined below.

First, I choose mostly determinate varieties that have resistance to key diseases.

Most home gardeners are accustomed to growing indeterminate varieties. Farmers mostly grow determinate types. Determinate varieties are more compact and produce most of their crop at one time. You can usually harvest all the fruit in two to five pickings and then pull up the plants. Indeterminate varieties, sometimes referred to as “everbearing” tomatoes, set fruit along a vine stem that continues to grow all season.

Correct variety selection is a must for success with tomatoes in Florida.

One reason home gardeners have a difficult time growing tomatoes in Florida is because of incorrect variety selection. Most popular (indeterminate) tomato varieties lack resistance to Tomato Spotted Wilt Virus (TSWV) and bacterial wilt. These two diseases wreak havoc in home as well as commercial plantings. Amelia, a determinate variety that has TSWV resistance, has started showing up in some retail outlets. For a list of other varieties to look for, contact the Okaloosa County Extension Office.

Secondly, I plant reasonably early – usually after April 1. Tomato plants will grow only when the temperature exceeds a specific base temperature for a certain number of days (referred to as heat units or degree days). Tomatoes are heat-loving plants that need a long warm growing period to grow from seed to fruit. Optimum fruit set occurs within a narrow night temperature range. Tomatoes produce the largest yields of highest quality fruits when day temperatures are in the range of 80 to 85°F and when night temperatures remain above 62 but below 72°F.

Thirdly, I fertilize to produce a healthy, sturdy plant when the plant is young. With the first open flowers, I reduce fertilization to about half the original rate. When the first fruits are about two inches in diameter, I reduce fertilization a little more. Once I harvest the first tomatoes, I further reduce the fertilizer to about ¼ the original rate or completely quit fertilizing. Many home growers fertilize tomatoes too much. This results in a big green plant with few tomatoes.

As heat, humidity, rains, diseases and insects increase during summer months, tomato production naturally declines. Entire plants may begin to die. At this point, I’m thankful for any production I got. I do away with the plants and find something else to do other than grow tomatoes.

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