

CHOOSING THE RIGHT TOMATO FOR YOUR GARDEN

Debbie Allen, Yavapai County Master Gardener

March, 2021

SIZE - Tomatoes can be small (grape, cherry), medium, or large (beefsteak). Smaller fruit tends to ripen significantly earlier than the larger ones. Generally the small-size tomato plants are prolific, something to consider when deciding on the number of plants. Another category is plum tomatoes. Plum tomatoes, like the Roma tomato, have a higher solid content, and are generally used for cooking or canning.

SEASON - Tomatoes are described as early, mid, or late season. Generally early season tomatoes ripen in 60-69 days after transplanting, mid-season is 70-80 days, and late season is greater than 80 growing days. The dry climate in Yavapai County leads to cooler nights, which shorten the time between frosts. Cool nights also lead to slower fruit development toward the end of the season. In 2015, Prescott had only 136 days between frosts and Cottonwood a more luxurious 189 days. By comparison, Chicago had a 159-day season and chilly Boston 193 days.

DETERMINATE (D) VERSUS INDETERMINATE (I) - Determinate tomato varieties grow to a pre-determined size, and once they determine that they have reached that height they set their fruit over a very short period of time. Indeterminate tomatoes set fruit and then put out suckers from leaf nodes. These will continue to grow and produce more tomatoes and more suckers as the plants get larger and larger. Commercial growers tend to grow determinate plants that can be harvested at one time. Home gardeners generally prefer the indeterminate varieties with their extended season. Tip-offs for determinate types: “will not need staking” and “bush.”

GMO - Like the sign on the dairy counter saying “gluten-free,” hyping tomatoes or tomato seeds as “non-GMO” is unnecessary. There are currently no GMO tomatoes, tomato plants, or tomato seeds available to the public. Oddly, the first GMO food approved by the FDA was the Flavr Savr tomato, which was available in markets from 1994-1997. It did not succeed partly because of a lack of marketing savvy by the developers and partly because it did not live up to its goals of a longer shelf life.

HEIRLOOM VERSUS HYBRID - There is no single definition of “heirloom tomato,” but generally heirlooms have been around for years – something your grandmother may have grown – and they are “open pollinated,” meaning the seeds will breed true to the variety. (If you are collecting seeds from hybrids, it is worth remembering that while tomatoes self-pollinate around 95% of the time, they can hybridize with neighboring tomatoes if it is windy or bees abound.) Hybrid tomatoes are a cross between two different tomato varieties designed to get the best traits of each. Hybridization can increase disease resistance, heighten plant vigor and reliability, and increase the crop size. Hybrid tomato seeds will *not* breed true to the parent, and usually the second generation, called “F2,” is an inferior plant. With so many heirloom varieties now available, many people become “heirloom snobs,” but tests at the University of Florida show that while some heirlooms have amazing flavor, others simply taste bad. As one Master Gardener said, “If heirlooms are so good, why did they develop hybrids?”

GRAFTING - For the best of both worlds, there is the option of grafted tomatoes. These might be available at local nurseries. While they can be purchased online, shipping the Arizona is currently not allowed. Grafted tomatoes combine a hardy reliable rootstock with a flavorful heirloom. Grafted tomatoes are understandably much more expensive and have to be treated gently so the graft does not break. The graft and the upper part of the plant have to stay safely above ground. Tomatoes, unlike most plants, are normally planted as deep as possible, since the buried stem will put out additional roots. This cannot be done with grafted plants. Grafted plants are reported to have excellent results.