

Vegetable Garden Success Starts with Picking the Right Plants

Why do you grow what you grow? This may seem like a silly question, but it's an important one worth answering. For many home gardeners, the decision comes down to nostalgia or simply choosing something that looked appealing in a seed catalog. Let me explain. Often, people grow what they know, they stick with the same vegetable varieties their granddaddy grew back in the '70s and '80s. Now I'm not here to knock granddaddy's vegetable gardening abilities, but here's the reality: many



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of those older varieties are now outdated, may be poor performers, and are often no longer the best choice for today's gardens. Others select varieties based purely on appearance. These individuals are what I like to call "seed catalog junkies." When those catalogs hit the mailbox, all sense of judgment seems to go out the window, and varieties are chosen willy-nilly simply because they look "pretty." While neither of these approaches is recommended, I can't fault anyone for wanting to relive childhood gardening memories or for enjoying the horticultural dopamine rush that comes from flipping through a glossy, colorful seed catalog. If you feel called out by the aforementioned statements but you are still willing to stick this article out, then consider yourself lucky. I'm going to re-train your gardening brain to abandon your woeful plant selection tendencies and give you a far better approach that'll ensure your garden is the envy of the neighborhood in 2026!

Let's start at the beginning by answering a few fundamental questions: What is a vegetable variety, and why are some better than others? Simply put, a variety is a type of plant that exhibits unique traits such as size, color, flavor, yield, and disease resistance. It's also important to make a clear distinction between heirloom, or open-pollinated (OP) varieties, and modern hybrid (F1) varieties. Heirlooms are plants that have not been intentionally crossed with other varieties. This means that if you save seeds from an heirloom tomato and plant them the following season, they will produce the same plant. That is not the case with hybrids. These plants have been selectively bred and crossed, so saving their seed will not produce an exact clone, but rather an offspring with a mix of the parent traits sometimes resembling one parent, sometimes another, and sometimes something in between.

Another key difference between the two is disease resistance. Tomatoes are a great example. ‘Cherokee Purple’ is a delicious heirloom, but it lacks disease resistance traits and often struggles due to its susceptibility to common garden diseases. On the other hand, a modern hybrid like ‘Celebrity’ has genetic resistance to a whole lineup of problems. When you look at a seed packet or plant label, these resistance traits are identified by a series of letters and numbers. ‘Celebrity,’ for example, carries resistance to multiple strains of fusarium wilt, verticillium wilt, root-knot nematodes, and tobacco mosaic virus, which are listed as the codes F1, F2, V, N, and TMV. Take a look at a label for ‘Cherokee Purple,’ and you won’t see those codes because the resistance genetics simply aren’t there. Those little resistance codes aren’t just for tomatoes, they apply to many other vegetable crops as well. You’ll commonly see codes like PM (powdery mildew) and DM (downy mildew) on cucumbers and squash, BLS (bacterial leaf spot) on peppers, and BCMV (bean common mosaic virus) on beans. While they may look like random alphabet soup, those letters are telling you exactly what problems a plant is equipped to handle, and choosing varieties with the right codes can save you a lot of headaches in the garden.

Disease resistance is just one important varietal consideration. Others include growth habit, yield, days to maturity, and fruit type, size, and flavor. Choosing plants with the right growth characteristics is especially important in small garden spaces like patio and raised bed gardens. For example, tomatoes are generally classified into two growth types: determinate and indeterminate. Determinate varieties are ideal for smaller gardens. They grow to a set size and produce most of their fruit over a short period. Instead of picking a few tomatoes every couple of days, you’ll often get a large flush of ripe fruit all at once, making them perfect for gardeners who plan to can or preserve their harvest. Indeterminate varieties, on the other hand, have no set growth limit. They continue to grow and produce fruit throughout the entire season. I saw this firsthand as a student at MTSU, where I managed a greenhouse growing hydroponic tomatoes. Some of those plants were over 10 years old, with vine bases nearly five inches in diameter and vine lengths stretching 40–50 feet. They had climbed into the greenhouse rafters and run back and forth multiple times. While very impressive in my greenhouse at MTSU, this may not be ideal for some home gardens. Indeterminate varieties take up significantly more space and can quickly overwhelm a small garden. It’s an important factor that should not be overlooked.

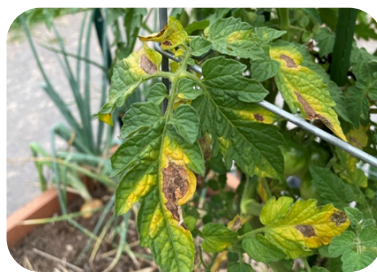
Other vegetables, such as cucumbers and beans, also have unique growth characteristics along with a wide range of fruit types, sizes, and uses. Beans, for example, grow in one of two ways: bush or pole. Bush beans stay compact and produce a crop quickly, while pole beans, as the name implies, have a vining growth habit, require trellising, and take up more space. However, if you have the room, pole beans will typically provide a higher overall

yield since they continue producing throughout the growing season. Bean varieties also differ in how they're used. Snap beans are harvested young for fresh eating, while others are grown for shelling or drying for later use. Cucumbers also vary in both growth habit and fruit type. Vining types spread and climb, requiring support and trellising, while bush types remain compact and are better suited for small gardens. They also produce different types of fruit, primarily slicing and pickling varieties. Slicing cucumbers are best for fresh eating, while pickling types are better suited for brining, canning, and preserving.

Days to maturity is another key consideration that is often overlooked. This refers to how long a given plant takes to produce a harvest from the time it is planted. Let's be honest, having the first ripe tomato of the season before any of your gardening buddies is a serious bragging right, and picking the right variety is basically a cheat code for success. 'Early Girl,' for example, can produce fruit in 50–60 days, compared to the more typical 80–90 days for many other varieties. Other crops show similar differences. 'Provider' bush beans can be ready in about 50 days, while pole types like 'Kentucky Wonder' may take 60–70 days. Leafy crops vary as well, 'Black Seeded Simpson' leaf lettuce can be harvested in as little as 30 days, while others may take 60 days or more to fully mature. Again, choosing early-maturing varieties can give you a head start, and those all-important bragging rights, but don't give away all your secrets, or the game is up.

Picking the right plants for your vegetable garden is essential for achieving success. While the number of available varieties can be overwhelming and grow in number each season, pun intended, knowing where to look for good information is just as important. Fortunately, UT Extension has an excellent website that is full of information related to gardening and varietal recommendations. Check it out at uthort.tennessee.edu. There you can learn everything you ever wanted to know about gardens, lawns, landscapes, and more. Also, if you are in the area, feel free to visit our demonstration vegetable garden located on the grounds at Lane Agri Park. Our address is 315 John R. Rice Blvd. Murfreesboro, TN 37129. You may also reach out to me directly. My email is jski@utk.edu and our main office line is 615-898-7710, just ask for Justin.

Happy Gardening!



(Picking better varieties can help reduce diseases such as early blight on tomatoes, pictured above. Photo J Stefanski)

Visit UT Hort at uthort.tennessee.edu and click on the Vegetable and Herb tab to learn more about recommended varieties for home gardens in Tennessee