



Heirloom vs Hybrid - An Age-Old Garden Debate

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Seed catalogs can be overwhelming, but many have keys to help identify various traits among their products. Photo by Heather Zidack

Temperatures are dropping, the holidays are over, and gardeners are starting to look towards the next growing season with excitement. Many gardeners swear by the tried-and-true heirloom varieties, while others are drawn to the disease resistance or increased vigor of hybrids. The debate over which is “best” can get heated between gardeners. Do you know the differences?

Pollination is a key factor. Successful pollination occurs when pollen meets the sticky central part of a flower, known as the stigma. Fertilized seeds develop in the ovary, which will then form into fruit. Over the span of thousands of years, tasty fruit has proven to be a good way to help with seed dispersal in the environment. And taste, along with many other traits, have helped humans decide what plants to cultivate.

Hybrid seeds, also commonly referred to as “F1” or “F1 hybrids,” have been developed through selective breeding. To create an F1 hybrid, breeders have selected parent plants with desirable traits and pollinated them under controlled conditions. While it sounds easy enough, lineages can be tricky. It can be time consuming for plant breeders and some will spend years of their career trying to achieve a specific outcome.

F1 hybrids are often praised for their environmental resilience and higher yields, among other traits. They may be less reliable for seed savers, though, as the offspring of the F1

hybrids are not guaranteed to come back with the same traits as the original plant from your first season, a term we call “true to seed.”

Hybrid seed should not be confused with GMO or genetically modified seeds. Hybrid seed is a product of breeding and selection and does not undergo the laboratory interventions that are needed for genetic modification. Currently, there is only one GMO product available to home gardeners, known as “The Purple Tomato.” All other GMO seed is only available commercially and farmers using these products must sign agreements that lay out the terms of use for the seed purchased.

You may find the term “open pollinated” in your search for seed. These seeds are created without direct human intervention. They have stable genetics and produce predictable traits in their offspring year after year, since they are naturally pollinated. This is great news for those gardeners who enjoy saving their own seed.

It is best to plant open pollinated varieties of similar species away from each other to avoid random cross-pollination. Alternatively, gardeners can hand pollinate a few flowers and keep them covered. For this, I recommend mesh party favor bags that allow for the fruit to expand. Allow the fruit to develop and harvest them specifically for their seed.

Heirloom seeds are open pollinated plants that have been passed down usually over generations. Often, there is a local history or cultural significance that comes with them. You can find interesting physical traits and some beneficial resistances from heirloom seeds. Since they are open pollinated, their genetics are more likely to be stable and produce true to seed offspring for seed savers, as well.

At the end of the day, I always advise gardeners to look beyond the title and really assess what is going to meet your needs and make your experience most enjoyable. If you love to tell a story with your garden, and enjoy saving your seeds year after year, an heirloom variety might be the perfect fit! On the other hand, if you bring home a packet of tomato seeds that have been bred for small space gardening, and you plan to buy new seeds every year, then enjoy that tomato to its fullest! There are many gardens out there with a beautiful blend of both.

If you have questions about seed selection, or for other gardening questions, contact the UCONN Home & Garden Education Center, toll-free, at (877) 486-6271, visit their web site at www.homegarden.cahnrc.uconn.edu or contact your local Cooperative Extension Center.