Hybrid and Heirloom Vegetables

By Christina Muller, Master Gardener

What are some differences between hybrid and heirloom vegetables?

~Donna B., Atascadero

Hybrid vegetables result from crossing two different varieties. This F1 generation consists of plants, which are uniform and have traits from each parent. A tomato hybrid might get disease resistance from one parent and superior flavor from the other. However, seed grown from F1 hybrids will not breed true, yielding plants with a mishmash of traits. To grow hybrid vegetables, new seed or plants must be purchased each season.

Hybrid vegetables often outperform their parent varieties due to hybrid vigor, growing larger and stronger with higher yields. They are often very disease resistant. Many hybrid tomatoes withstand verticillium and fusarium, soil pathogens to which tomato plants can fall prey. Hybrids can also offer uniform ripening and harvests, an advantage to the gardener who wishes to pick and preserve the season's tomatoes all at once rather than canning small batches throughout summer.

'Heirloom' generally refers to varieties in existence for 50 years or more and has often arisen from specific regions. The tomato 'Black From Tula' has its origins near the city of Tula in Russia . Heirloom vegetables are open-pollinated, producing seed without human intervention. Because heirlooms are stable varieties, seed can be saved and grown the following season.

Many people grow heirlooms because they find the taste superior. Home gardeners can grow varieties with exceptional flavor even if they don't ship well, ripen after picking, or produce flawless blemish-free fruit. And certainly, the lore of heirlooms is intriguing to many as well. The tomato 'Mortgage Lifter' was so named after the developer paid off his mortgage during the Great Depression with proceeds from the sale of his tomato seedlings.

Deciding whether to grow hybrids, heirlooms or a combination comes down to comparing the traits of individual varieties. Choose those with qualities you desire and which will suit your garden's conditions. And if your choices don't work out as you'd hoped, there are countless varieties to choose from next season.