

## Grafted Tomatoes

Kevin Milaeger



A few years ago, when I first heard about the new trend of grafting tomatoes, my first response was "Why bother?" It seemed to me that most everyone was getting along just fine growing regular tomatoes, and most people had too many of them, at least in August. Well, it turns out there are a number of good reasons for growing grafted tomatoes (and other vegetables), but first let's define grafting, so everyone knows exactly what I am talking about. Simply stated, it is the attaching of the top part (called a scion) of a



Juliet

(usually) special plant to the bottom (rootstock) of another, related plant. Grafting is an ancient horticultural technique, known to have been practiced in China prior to 2000 BC. I can't help but wonder what sparked the brain of some early plantsman to make that first graft. For vegetables, a tube graft is often used. This is done when the plants are very young. A temporary tube clasp is used, to hold the two plant stems in place until they fuse, usually in a couple of weeks. The



San Marzano

result is a plant that is superior in many ways, without having to resort to genetic engineering, which is very controversial.

So, if you wanted to produce a grafted 'Brandywine' tomato, you would take the scion from a 'Brandywine' plant, and fuse it to the rootstock of another variety that has been selected for its superior roots. The resulting grafted plant would produce fruit that is identical to the scion part of the original plant, in terms of fruit size, flavor, etc---just more of it! The rootstock part of the new plant contributes improved disease resistance and vigor. Incidentally, any tomato variety can be grafted.



Mortgage Lifter

The benefits of grafting are significant.

Disease resistance is very much improved. The improved plant vigor helps fight off the various soil borne diseases that plague our gardens. Next, there is marked improvement in overall vigor and a resulting increase in yield---reports vary, but we think you'll have a minimum of 20% increase in production; some gardeners have reported an increase of 50%. The superior roots deliver more water and nutrients from the soil, resulting in more flowers and the subsequent higher yield. Lastly, improved vigor makes the plants less susceptible to environmental stress, such as extreme heat.



Cherokee Purple

The growing culture for grafted plants is identical to regular plants, with one exception. Grafted plants should be planted at the same soil level as in the pot in which it was grown. (Regular tomatoes are planted somewhat deeper.) This is to discourage roots from sprouting out of the scion, which would affect the plant's performance and defeat the purpose of the graft. You should remove any roots that sprout above the graft, and any shoots that emerge from below the graft. Like other tomatoes, it is important to stake grafted plants. The graft is the weakest part of the plant, and staking reduces stress on the graft. It is a curious irony that the graft that makes a superior plant is also its greatest weakness.



Pineapple

For 2013 we will be offering nine varieties of grafted tomatoes, plus one pepper and one eggplant. We have chosen some of the more popular varieties, both hybrid and heirloom. Of course, grafted plants are more expensive than traditional vegetables, but many feel they are worth it. The increase in per square foot production is especially desirable for those gardeners with limited space. Grafted vegetables are very popular in some Asian countries. In Japan, over 45% of all vegetable plants are grafted (750 million plants)---in Korea, 81% (540 million plants.) I think it sounds like they are worth trying, don't you?



Brandywine