



Garden q & a
STEPHEN BROWN

Grapefruit Scion/Rootstock Determination

March 15, 2008

Question: I bought and planted a grapefruit tree in December, 2006. It made a few tiny grapefruits but drop a lot of its leaves that spring. By the time we went north, there wasn't much green left on it. When we returned in October it had no leaves and all the top branches were dead. I was going to pull it out but my neighbor suggested I leave it for a while. It is now sprouting green leaves in small clumps from the main trunk below the dead area. I want to know what to do with the top half of this tree and how to keep this new growth in hopes it will continue to form a new tree.

- Marcia H., e-mail

Answer: The grapefruit tree is not a deciduous tree. Losing all its leaves meant that the roots were not properly functioning. Since the tree was planted in the dry season, the undeveloped roots were incapable of supporting top growth without continued irrigation. This could have resulted in complete leaf loss. However, a root-bound tree and improper planting could have also contributed to its distress. Commercially produced grapefruit trees are grafted trees consisting of two parts. The scion will eventually become the canopy and was selected for its preferred fruits. The rootstock makes up the very lower trunk and the root-system and was selected for its tolerance of diseases. Where they meet is called the grafted union. The fusion should be noticeable. The tree apparently died back to the area of emerging new growth. One needs to determine where the new growth originates. If your tree is sprouting above the grafted union, then proper and dedicated pruning will recreate it into the tree you bought. However, if the new growth is sprouting below the grafted union then the result is rootstock dominance and inferior fruits and is not the tree you bought. If you keep the tree, be sure to provide sufficient irrigation to promote steady growth. Finally, trees stressed for a prolonged period are slow to recover and often not worth the wait.

Stephen Brown is a horticulture agent with the Lee County Extension Service. Submit questions by calling the horticulture desk at 533-7504 between 9 a.m. and 4:00 p.m. or by e-mailing brownsh@leegov.com. Visit his web page at <http://lee.ifas.ufl.edu/hort/GardenHome.shtml> "Garden Doctor" video clips <http://lee.ifas.ufl.edu/Hort/Video.shtml> and flowering trees information at http://lee.ifas.ufl.edu/Hort/GardenPubsA_Z.shtml