Citrus Fruit Growing in Your Rio Grande Valley Backyard

Most Texas residents would love to have a citrus tree in their home landscape so they could enjoy the evergreen foliage, fragrant flowers and colorful, delicious fruits. Fortunately for us in South Texas, production of citrus fruit in Texas is limited to the Rio Grande Valley. Because of the South Texas climate, and soils, plus disease resistant rootstocks, and numerous varieties, we can enjoy many types of citrus picked from our own trees. This article is one of four concerned with citrus this month. In this article, general information on climate, soil requirements, site selection, rootstock and varieties will be presented.

**Climate.** Citrus trees are subtropical to tropical in origin and therefore will suffer severe damage, if not death, when temperatures drop below freezing (near 25 degrees F) for more then a few hours. However, if Valley gardeners are willing to put forth some cold protection they can produce a steady supply of high quality home grown citrus fruits year after year.

**Soil Requirements.** All citrus trees require deep soils having both good surface and subsoil drainage. Surface drainage refers to runoff so that water standing around the base of the tree is prevented. Subsoil drainage is the ability of water to move downward through the soil so water does not stay in the root zone and eventually drown the roots. If you have vigorous, healthy landscape trees in your yard or neighborhood, this is a good indication that the soil is sufficiently deep and well-drained enough for citrus trees. If you have concerns about subsoil drainage, dig a hole 3 to 4 feet deep, fill it with water. All the water should drain from the hole within 36 hours. Soil that takes 48 hours or more to drain should be avoided. Most citrus trees grow well in a soil pH range from 6 to 8. Avoid soil that is high in caliche or is excessively salty, as citrus trees will not thrive in these soils.

**Site Selection.** Most home lots do not offer much choice in terms of planting sites for citrus trees. Several factors should be considered when determining if you have a good growing site for citrus trees. 1) Avoid planting near septic tanks lines. This prevents future problems with tree roots clogging the septic system. 2) Plant citrus on the south or southeast side of the house to provide some cold protection from northwesterly cold fronts. The house will provide considerable heat and wind protection. 3) Avoid planting citrus under tall or overhanging trees. Although these tall trees will provide some cold protection, citrus requires full sunlight to produce healthy, vigorous trees and good quality fruits. 4) Plant citrus trees 6 to 8 feet from buildings, fences, driveways and walkways, and 12 to 16 feet from each other. The natural form of citrus trees is for the ends of the lower branches to almost touch the ground when fruit is present. Allow for this natural growth form at planting. Otherwise you will be pruning your tree to fit the space and in turn pruning off fruit.
Rootstocks. Most citrus varieties that we grow in the Valley do not perform well on their own root system in our Valley soils. Citrus for our use is budded onto a rootstock which is adapted to growing in our soils, and which is resistant to foot rot. The rootstock regularly used is sour orange because it is well adapted to our soils. When purchasing a citrus tree you will notice a bulge in the trunk a few inches above the soil line. The tree portion below this bulge is the sour orange rootstock. Above this union is the trunk and branches of the variety you are interested in growing. If there is any green leafy growth coming from below this graft union either trim it off or avoid buying this tree, otherwise you may be producing only sour oranges.

Varieties. The common citrus grown in the Valley be it oranges, grapefruit, lemons or limes should be selected for its cold tolerance. When selecting citrus varieties it is recommended that you visit your Texas Certified Nursery Professional. You may consider cold tolerance in your selection as follows: Poor cold tolerance: Mexican lime, Tahiti lime, Ponderosa lemon and Eureka lemon. Fair cold tolerance: Grapefruits - Marsh, Ruby Red, Henderson/ Ray, Rio Red and Star Ruby. Oranges - Mars, Pineapple, Hamlin and Valencia. Good cold tolerance: Oranges - Navel. Very Good Cold tolerance: Most mandarins, tangelos and kumquats.

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