

Citrus

Trees



**QuickGuide To
The Selection,
Planting, and Care
Of Dwarf Citrus Trees !**



The Garden Guy respects and supports all logical efforts to . . . reduce the use of paper, and the avoidable impact on our Country's landfills.



About The Author



Through my many years, I have perfected my gardening skills and expanded my knowledge and experience as a gardening instructor, speaker, author, certified nursery consultant, and most recently blogger.

I was introduced to gardening at the very early age of 8. I lived across the street from a man who gardened his little slice of heaven on about 5 acres of semi-rural property in No. California. Mr. May had everything from honeybees to an orchard, and was very accommodating to the little boy from across the street. I spent hours shadowing Mr. May around his place, asking questions, making mental notes and scurrying across the street to try my hand in my parent's anemic yard. Eventually I got so good at applying Mr. May's know-how that I won the consent of my Mother to tend her flower beds; and my Dad gave me a vegetable garden plot in the corner of our backyard. I didn't know then that I was attracted to the science of the whole thing, but I could see the results and was very proud of the increase in blooms for my Mom, and the vegetable production that even I could appreciate as abundant. I was hooked.

High school and college left little time or opportunity to get in the dirt. But, I was rewarded and further encouraged by my zoology and botany classes and next tried my hand at tending a garden underneath the high porch and stairs of our apartment in No. New Jersey. It all came back to me and when we finally had our first home I had my first garden plot as an adult. Some early setbacks and a hankering to be more at-one with the earth, led me to the disciplines and sacrifices of French Bio-Intensive Organic Gardening. Yeah, I wore wing tips to work, but I had Berkenstocks in my heart as a young man in the late 70s.

Today, I live on a "rock" in Rocklin, CA and my active gardening is restricted to raised beds (even my lawn is a raised bed) and patio containers. But, I do keep up with the latest trends in gardening, the irreversible encroachment of the Government on our garden culture; and most importantly, those new to the pleasures of gardening. As a nursery consultant in the Garden Center of the world's leading home improvement store chain, I have even gained a faithful following of young adults with first home responsibilities and opportunities: and retired men and women who now have the time, focus, and inclination to finally develop a better understanding of gardening and hopes for its rewards.

Nearly every backyard patio has a charcoal or gas grill. My most recent experience in backyard cooking has been the introduction of the **Traeger Smoker / Grill** into the lives of myself and my wife Roberta. In the pages that follow we will share with you the wonders and rewards of cooking with wood . . .at home on our Patio !



Citrus



Tangy Sweet and Succulent

Ironically, Citrus trees are not native to the Western Hemisphere. All are in fact native to the Asian Continent and the sub-continent of India. These sweet and sour fruited trees were introduced by the Spanish in the century following Columbus landing in the "new world". As the Spaniards settled the tropical and sub tropical regions of the Western World - the citrus found a ready home in nearly every region the Spanish colonized. Much of Southern Spain had been the home of Citrus Orchards for a thousand years before exploration of the new world.

In North America, citrus have thrived for hundreds of years in the south and south west and in California along the coast and inland to the base of those hills surrounding the Sacramento and San Joaquin valleys.

Citrus trees, planted in the right location with sufficient irrigation, proved to be a good investment as many citrus trees matured into heavy fruit bearers, many living to the ripe old age of more than 50 years. This is especially valuable as nearly all citrus begins bearing fruit somewhere between its second and fifth year of growth.

Based on personal history and my association with other gardeners and cooks; you might consider these citrus for a Garden Specimen or the backbone of your home orchard.

Navel Orange (Early Season Peel n Eat)

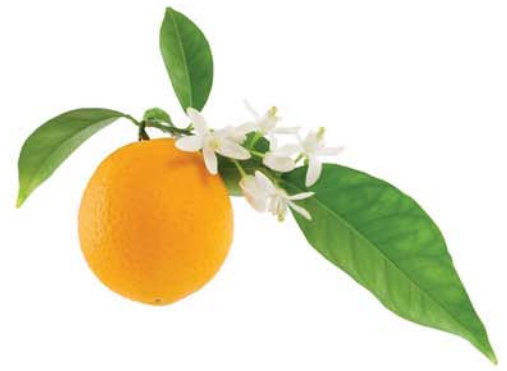
Valencia Orange (Late Season Juicers)

Grapefruit (Often The Breakfast Treat)

Lemon (A Kitchen Staple Year Round)

Lime (Tangy Compliment To Drinks and Dishes)

Citrus



Choosing The Right Citrus

Few things can anchor a suburban landscape or create the centerpiece in a garden patch like a premium Citrus Tree. Dwarf Citrus are the perfect size for the home orchard. Citrus Trees give the promise of providing a thick canopy of rich evergreen color, a period of intoxicating blossoms, and the reward of unusually attractive, and tasty fruit.

Your trip to the nursery will find a typically robust, evergreen tree with nature's own design for success and survivability. There are few fruiting trees with foliage as attractive as the Citrus. Healthy leaves and stems are cloaked in a deep, rich green. Blossoms are profuse, with a season that holds promise for a heavily laden fruit crop at harvest time.

Special care should be taken in selecting one or more citrus trees for growing at home. The first consideration is the grower. The Garden Guy favors the Dwarf varieties offered in the Garden Center of your Home Depot by **FOUR WINDS GROWERS**. These are typically well formed young trees planted in 3-5 gal plastic pots.

Be certain to pick a tree that is well proportioned with branches equally distributed around the trunk. This equal distribution is vital to citrus survivability, due to the abundant fruit load typical of many citrus varieties. Trees with a branch distribution that favors just one side will put undue stress on the trunk when the tree is laden with fruit - risking a severe break from (and possibly along) the trunk. You should have some knowledge and appreciation for the citrus variety you seek BEFORE your visit to the Garden Center. Study first the list of commonly favored citrus listed in The Garden Guy's First Choices for dwarf citrus trees.

**You can trust this label
for your Dwarf Citrus !**



Citrus



The Garden Guy's Prime Citrus Choices



Bearss Seedless Lime. This is a true lime and larger than a Mexican lime. Does well in our cool weather region. Great for kitchen and cocktails !



Washington Navel Orange. California's famous winter-ripening variety. Sweet, seedless fruit ripens in ten months. Perfect for snacking !



Owari Satsuma Mandarin. Hardest tree of all mandarins. Fruit Ripens in November, December and is usually picked before the first frost. Seedless fruit peels easily. A holiday treat !

If you have room for only one citrus, or wish to have a proven winner to anchor your home orchard, The Garden Guy heartily recommends you choose and grow the **Improved Meyer Lemon.**

This IS the gourmet's lemon of choice. Always ready to give up copious amounts of sweet/tart juice for those dishes calling for fresh lemon juice; or a base for the World's Tastiest Lemon Aide.



"Improved" refers to the California state tested, virus-free clone, a collaborative discovery of Joe Grimshaw and Four Winds founder Floyd Dillon in the early 1950's. Not as tart as the Eureka, it IS a prolific bearer nearly year-round; heaviest in winter. fully matured fruit takes on a deep golden hue.

**You can trust this label
for your Dwarf Citrus !**



Citrus



Dwarf Citrus

Standard Citrus trees grown for orchard production are large. Many grow canopies 30 feet high and 30 feet wide when mature. Unless you have a larger property, standards may not be the best choice for the home garden. Standard citrus could be planted where an evergreen shade tree was needed in a yard, or on an extensive property. The juicy (and certainly abundant) fruits would be a bonus. However, standard trees are harder to find in residential nurseries and garden centers.

The better choice in most urban yard is one or more varieties of **dwarf** citrus trees. Unlike their standard cousins, dwarf citrus, because of their size and cultivation, are well suited for yards and gardens, especially those dictating a container solution due to poor or no ground soil; and / or portability. Because they are significantly smaller in stature (narrower and shorter) every phase of cultivation is closer to you on the ground. Dwarf citrus can live for many years and offer steady yields (sometimes in great abundance) with proper care and attention.

To have selected a dwarf citrus does not mean that you will have to settle for a smaller harvest. Just the opposite might really be the case. It is not uncommon for the dwarf citrus, especially lemons to produce a near wall of harvestable fruit, ripe for the picking.



Citrus



Planting In The Ground

First, locate your planting site with a southern exposure, having at least 6 hours of direct sunlight; and behind something that will protect the tree from the cold north winds of Winter.

Dig a hole as deep, and twice as wide, as the tree's root ball. Mix the removed soil in a ratio of 50/50 with a quality amendment. With the hole dug, next perform a "perk test" (see Notes for Success) to assure that the hole you dig for the tree's root ball will effectively drain. The Garden Guy's favorite for this soil amendment is Kellogg's Organic Citrus Soil. Planting soil should be light, airy, and capable of thorough drainage at all times of the year.

Place enough lightly compacted soil mix in the hole, to position the " crown union " ABOVE the final soil line. Fill the hole HALF full, lightly compacting soil around the root ball and water in with a solution of SUPERThrive. Compact the remainder of the soil around the root ball, being careful NOT to bring soil level above the crown; and watering with the remaining SUPERThrive solution. This half filled watering in technique will help to assure that there are no air pockets around the newly planted tree. Typically, a two year old, 5 gallon citrus does not require staking.

Many citrus nurseries, still recommend that you use any remaining soil to form a " water ring" around the tree. In fact, this technique can help in administering the infrequent, deep watering preferred by Citrus Trees.

Since we are not likely to know when the tree was last fertilized, let's give it a "light" serving of SLOW RELEASE fertilizer to begin its new life of flavorful fruit production. The Garden Guy's favorite citrus fertilizer is Kellogg's ORGANIC PLUS Fruit Tree Plant Food available in your Home Depot's Garden Center. Synthetic citrus fertilizers are also available. Follow directions on the package.



**Mix At
A Ratio Of
50% Soil To
50% Amendment**



**Mix At
1 Capful To
2 Gallons Of
Water**



**Follow package
Directions For
Application
Frequency And
Amounts.**

Citrus



Understanding Your Citrus Tree

Above everything else, your citrus tree must have a **minimum 6 hours of south facing sunlight, year round.**

Evergreen Foliage.

Four seasons of Pure Beauty !

Fragrant Blossoms

First sign of fruit production.

Root Graft.

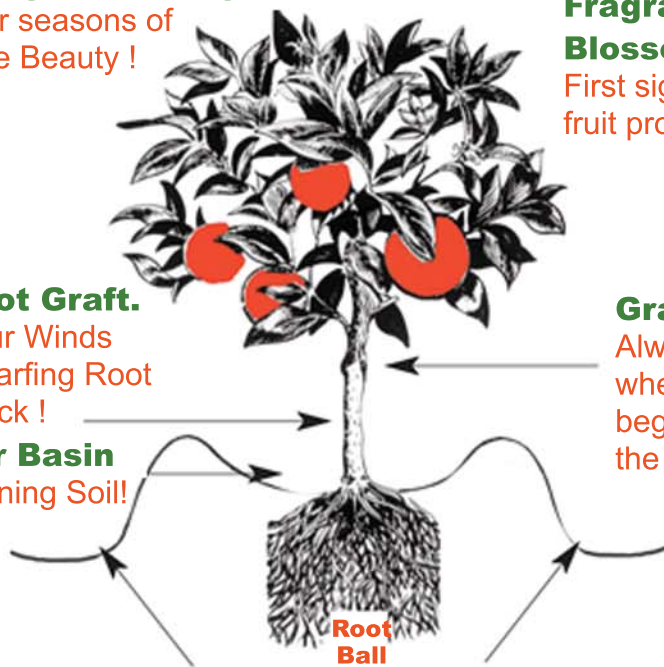
Four Winds
Dwarfing Root
Stock !

Graft Union

Always know where graft begins above the root stock.

Water Basin

Remaining Soil!



Grade In Garden's Soil

Even with soil line in pot.

You can trust this label
for your Dwarf Citrus !



Citrus



Organic Fertilizer

As previously mentioned, there are quality synthetic citrus fertilizers you can trust and rely on. Synthetic specialty fertilizers tend to be easier to apply and cost less. However, each year more home gardeners are seeking ways to be “ more natural ” in their yards, gardens and home orchard cultivations. Soils, like the Kellogg Citrus Soil outlined earlier are the first step to achieving and maintaining organic cultivation.



**Follow Package
Directions For
Application
Frequency And
Amounts.**

The Garden Guy recommends **Kellogg ORGANIC PLUS Fruit Tree Fertilizer**. Unlike synthetic fertilizers, organic fertilizer is made from natural ingredients including bone meal, dried poultry manure, feather meal, kelp and alfalfa meal to formulate the Nitrogen(N) Phosphorus (P) and Potassium (K) needed to give you a COMPLETE fertilizer formula from organic sources. However, ORGANIC PLUS is also a first choice because it adds to its formula the “ beneficial soil microbes and mycoorrhizae ” that propagate that “pooping village ” of beneficial bacteria which create the bio gases on which the tender roots will feed.

It should be noted that organic fertilizers can result in greater annual cost for two reasons: 1) because of their “ natural ” ingredients, they are lower in NPK per pound than synthetics, and 2) because the are lower, they need to be applied more frequently than slow-release synthetic formulas.

With this, the informed Gardener can decide for him/herself.

Citrus



Planting In A Container

For some, planting a newly purchased citrus in a container is the best and most practical choice - especially for a smaller yard or executive home. As with in-ground, locate your container on a site with a southern exposure, with at least 6 hours of direct sunlight and behind (or next to) something that will protect the tree from the cold north winds of Winter.

Choose a container that is at least twice as large as the pot the tree was in when purchased. The container can be clay, wood or plastic so long as it has, or can be given, holes for adequate drainage. The Garden Guy's favorite container soil for citrus is Kellogg's Organic Citrus Soil. This soil personifies the sandy, well drained soil that will best serve the development of the tree's new root system. Tip: mix in 25% of "pathway" pine bark. This will add extra porosity to your soil, allowing for maximum air circulation in the tree's root system.

As with in-ground planting, be certain that the " crown union " is ABOVE the final soil line in the container. Fill the container HALF full, lightly compacting soil around the root ball and water in with a solution of SUPERThrive. Lightly compact the remainder of the soil around the root ball, being careful NOT to bring soil level above the crown; and water in with the remaining SUPERThrive solution. This half fill watering in technique will help to assure that there are no air pockets around the newly planted tree. Typically, a two year old, 5 gallon Citrus does not require staking.

Since we are not likely to know when the tree was last fertilized, let's give it a "light" serving of SLOW RELEASE fertilizer to begin its new life of flavorful fruit production. The Garden Guy's favorite citrus fertilizer is Kellogg's ORGANIC PLUS Fruit Tree Plant Food available in your Home Depot's Garden Center. Synthetic citrus fertilizers are also available. Follow directions on the package.



Pour Citrus Soil Directly From The Bag Into The Container.



Mix At 1 Capful To 2 Gallons Of Water.



Follow package Directions For Application Frequency And Amounts.



Skip's Tips For A GREENER THUMB

The transplanting of your Citrus tree into a container, or in its prepared bed, can result in "transplant shock". This condition can result in a set back in the young tree's path to ultimate flowering and production. If, after you have done your all to establish the soil's micro village, it would be a shame to transplant a tree destined to have a slow start in root development. Watering in a newly planted Citrus tree with a solution of SUPERthrive will help to ensure the early establishment of the tree's feeder roots, providing a stronger system for supplying the nutrients and moisture vital to a robust plant eager to regularly flower and bear fruit.

SUPERthrive

Prevents Plant Shock.

Promotes Root Development.

NOT A PLANT FOOD.

A concentrated formula of ALL the necessary
Plant Vitamins and Rooting Hormones

Water In After Planting Vegetables, Flowers, Shrubs, or Trees.

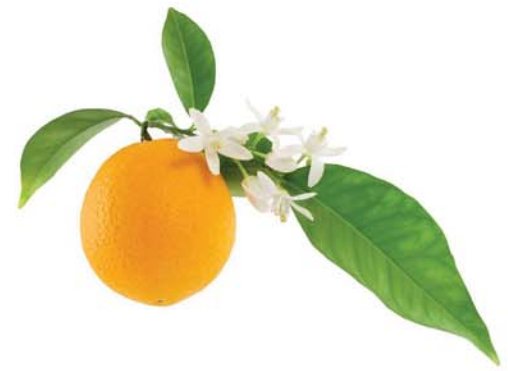
1 CAP Full to 2 Gal. Water

Makes Gallons and Gallons.

4 oz. Bottle



Citrus



Wellbeing Of Your Citrus Trees

A well tended citrus tree, with its natural hardiness, can in most cases deflect the diseases to which they are susceptible. However, citrus trees that are not cared for by proper watering, feeding and maintenance can become sickly to the point of stress and give up their ability to stay healthy producers of quality fruit. When watering citrus keep them “ on the dry side ”.

Vigilance Against Insects and Disease

Insects common to citrus are white fly, leaf and peel miners. If not checked, the damage done by insects can expose the tree to the spread of disease by open wounds and the insect secretions which foster the development and spread of disease. Ants, normally benign, can act as purveyors of disease especially sooty mold fungus - usually among the earliest disease to attack tree tissues. Their travels throughout the tree's leaves can deposit mold spores on leaves and stems. Many insects that attack Citrus DO NOT Kill trees outright. Rather, they can as in the case of leaf miners, slowly degrade the photosynthesis process and slowly starve the tree of sugars produced in the leaves and stored in the roots. One insect that can cause extensive damage, to the point of threatening the life of the tree, is the Cutworm caterpillar.

As citrus becomes more stressed due to insect damage, they are more susceptible to diseases that attack leaves, stems and fruit. Among those most perilous of these is the dreaded “ **Citrus Greening Disease** ” attributed to the **Asian Citrus Psyllid**. This disease so greatly blemishes the brightly colored rind of the citrus that it quickly renders the fruit inedible and a total loss . . . and eventually, KILLS the tree !



Always prune green (live) wood with a **BY-PASS Pruner**, either short handled or the longer lopping style pruner. The Garden Guy likes the Corona or Fiskers brand for dependable sharpness !

Citrus



CITRUS TREES

Natural Control of Insects

Because you plan to eat the produce from your citrus, and because citrus trees play host to so many beneficial insects - (those that eat the “ bad ” insects), controls, especially chemical controls, deserve a special discussion.

Vigilance Against Insects and Disease

One of the reasons we are often late coming to the conclusion that our citrus have an insect problem is because the “ good insects have been busy keeping the bad insects at bay and limiting the damage they can do to the tree. For this reason it is best to always start first with a ”natural” control, especially in the category of “insecticides”. Aphids, which attack the tender new growth on leaves and stems are controlled by the Ladybug beetle. Attack aphids that survive the Ladybugs with a spray solution made of mild dish soap. Or, a strong stream of water to dislodge the critters, taking care to not hit any blossoms or newly formed fruits.

The cottony Cushion Scale, and San Jose Scale can literally suck the life out of a healthy tree. Because leaves and stems of citrus are so sturdy, try removing Scale insects with a soft toothbrush.

Some insects like spider mites can be hosed off with a strong steam of water. Because many will survive and return to feasting on your citrus tree, this exercise might have to be performed daily until the insect disappears from the scene.

If these remedies don't do the job, you may have to increase the fire power by selecting an organic commercial insecticide. Most of these start out with some preparation of natural oils intended to smother the insect, and in many cases their eggs as well.

Avoid SYSTEMIC Insecticides

Unless the citrus tree is purely ornamental and you will never eat the fruit - avoid using any systemic Insecticides (granular or liquid). As the term implies, the insecticide poison will be drawn into the entire system of the plant including the “meat” of the fruit.



Cushion Scale being devoured by a **Ladybug Beetle.**



Give Scale The Big Brush Off With A **Soft Toothbrush.**



Spider Mites
Hang Out A Gauzy Web To Let You Know They Are Making Camp.

Citrus



Insecticides For Citrus

Purely natural control may not be enough to thwart the insects that have invaded your citrus tree. Remembering that we want to avoid systemic insecticides, there is a progression of preparations which contain one or more natural ingredients proven - in some cases - to control "bad" insects.

Vigilance Against Insects and Disease

Lets start with one The Garden Guy knows we can trust. So.Ag's **NEEM OIL CONCENTRATE** is useful in controlling insects and diseases on the blossoms, stems, and fruits of citrus and other fruit varieties. *Neem Oils can be used right up to the day of harvest.* The advantage of Neem Oil is its application to nearly everything in your yard and garden to control insects.

CAUTION: Avoid using when temps will exceed 90° !

BT (*bacillus thuringiensis*) is the natural way to control leaf chewing caterpillars. BT is especially valuable in the fight against caterpillars because it **DOES NOT KILL BEES** and other important pollinators; or earthworms. The usual washing of picked fruit makes this a safe and natural defense.

Another option is **Organocide®** spray. A blend of naturally organic Sesame Seed Oil (5.00%)in a fish oil base. Available in a spray concentrate that's safe to use right up to the day of harvest to control chewing and sucking insects, and mites.

IMPORTANT: This is a BEE-Safe product you can use with full confidence.

Avoid SYSTEMIC Insecticides

All three of these insect controls can be found in the Garden Center of your local Home Depot.



Neem Oil
Liquid
Concentrate



Thuricide BT
Kills Caterpillars
Right On The Plant.



Organocide
Apply Monthly

ORTHO DIAL N SPRAY APPLICATOR

This is The Garden Guy's favorite garden sprayer for herbicides and insecticides mixed from CONCENTRATE. Just fill the bottle with concentrate, screw cap on bottle, and dial in the mix setting. The spray is MIXED in the head. So, when application is complete, just pour the undiluted concentrate back in its original container. Or, set and put spray head directly on the original Ortho concentrate container. Pretty neat !



Citrus



Pruning Citrus

Pruning a citrus tree is not a seasonal affair. In fact, the tree itself is likely to dictate when, and how, it will be aided by light pruning. Generally, citrus trees are never pruned before April and normally not after August. This will typically avoid the pruning off of new flower buds and hence the next season's fruit.

There are however, several preventive cuts that can be made to help the average citrus to be healthier and more robust. First, once each year in late Spring, examine the main stem or "trunk" of the tree - just below the graft to the root stock, for evidence of any rogue stems that may have sprouted as "new" growth. These stems are sometimes referred to as "suckers". Suckers left to develop will cause the tree to be bottom heavy with stems that do little to increase fruit production, but do take up nutrients which might better serve fruit producing branches established above the graft line, and their flowering and fruiting. These cuts should be made with a sharp pruning knife or pruning shear with a 45% diagonal cut, or parallel to the the main stem. NEVER leave a flat cut as this can collect moisture and prevent the healing of the cut.

The second most prescribed cut is the removal of any dead or deformed stem or branch, including any stems that have begun to rub on another causing a progressive wound on either or both of the stems involved. These wounds make the tree more susceptible to disease infestations and / or the entry of damaging insects.

The third category of citrus pruning is that which will help to keep a desired canopy shape or height or keep the center of the tree open to maximize air circulation and sunshine on ripening fruit.



Always prune green (live) wood with a **BY-PASS Pruner**, either short handled or the longer lopping style pruner. The Garden Guy likes the Corona or Fiskers brand for dependable sharpness !

Alert



Citrus Greening Disease

The California citrus we all know and love is at risk. A devastating plant disease called Huanglongbing-HLB, also known as Citrus Greening Disease has been found in Southern California. It is killing trees and **there is NO cure**! Diseased trees produce bitter, hard and lopsided fruit, and eventually die. The disease is spread by a pest called the Asian citrus psyllid as it feeds from tree to tree. Psyllids are small, about the size of an aphid, and can be seen on the tender new growth of citrus trees. The best way to protect California Citrus from the disease is to stop the spread of the pest . . . especially from southern to northern California.



*It's already too late for this Citrus Tree !
The Greening of **ripe fruit** is from the
bottom, moving upward on the fruit.*

How Can You Help ?

1. Inspect your citrus trees monthly for the pest or disease.
2. Do not move citrus trees, or plant material in or out of your area, or across state lines.
3. Plant citrus trees from reputable nurseries in your area.
4. Control ants on your citrus trees. Ants interfere with beneficial insects, actually protecting the Asian Citrus Fly.

If you suspect that your citrus tree has the psyllid, or the disease, ACT FAST !

Call the California Department of Food and Agriculture at **800-491-1899**, or your county agriculture commissioner.

Citrus



Summary

So, cultivating ripe, juicy citrus fruits in your backyard or patio doesn't take rocket science or a slide rule mentality. All it takes is a little love in giving your citrus tree a good home with at least 6 hours of year round south facing direct sunlight, some simple cultivation knowledge . . . and most of all . . . a measure of patience.

Make it a point to purchase a quality dwarf from a respected grower like Four Winds. Choose a tree with evenly disbursed branches, without damage, blemishes, or limbs that rub together.

Invest in in top of the line nursery products formulated to give your citrus tree a good start and ample nutrition . . . the whole year long.

Finally, consider planting your first citrus tree in a freshly cut wine or whiskey half-barrel. Located it in a spot in your yard, or on your patio, ensured of giving your tree enough sunlight and ventilation.

The reason I recommend this approach is really quite simple.

If your property is blessed with wide expanses of full sunlight, then location is not so critical. You could safely plant your citrus tree just about anywhere it would be convenient to give it care and tending.

However, if your yard is among the multitudes of tightly spaced properties common to many newer suburban neighborhoods, every location will come with its own unique micro-climate. In fact, these more congested neighborhoods could harbor several micro-climates in a single backyard. So, don't get discouraged if you citrus tree doesn't give you the results you expect in the first season. If it is not producing as expect . . . move it. A move of just 10 or 12 feet (from one corner of your patio to another) could make all the difference.

Finally, enjoy the essence of freshly picked citrus fruits Nature can bring to your table . . . with Your Help !



Wishing You Every Success

I hope you have found this
Quick Guide To Dwarf Citrus
valuable and inspiring.

Gardening is just one of the interests enjoyed by my league of faithful followers who have shared many of my experiences through one of my personally authored publications:

- WEBSITE skipsoutdoorliving.com
- BLOG skipsoutdoorliving.com/blog
- RESOURCES skipsoutdoorliving.com/resources
- CONTACT skip@skipsoutdoorliving.com



Better Outdoor Living With Every Visit

is divided into these main areas of interest

**Yard and Garden
Outdoor Cooking
Patio Living**



Skip Batchelder

