

DWARF CITRUS CARE

Congrats on your new little tree!

From our family farm to yours we hope you enjoy many memories of sweet fruit.

*To ensure this tree provides a life of fruits for your family, we recommend following this **Care Guide** to ensure your tree is as healthy & robust as possible.*

What is Flying Dragon?

Flying Dragon is the Rootstock used in the grafting process to create your dwarf citrus tree. It is said to originate from ancient China or Japan around 3000BC. It is said to be immune to many of the viruses & diseases killing citrus worldwide. It's survived this long for a good reason!

For all these excellent qualities and more, we selected it to grow our citrus.

We love it so much we named the farm after it.

~ Flying Dragon Farm Family ~

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Healthy Roots = Healthy Trees

We believe that healthy roots grow healthy trees.

So a lot of the energy we put into your tree was focused around **healthy root system** development. The **Root-Training Pots & Microbial Rich Soil** are the foundations of a healthy tree. There's a lot of high end Organic Stuff we put into each of our potting blends

The **Root-Training Pot** your tree came in is an essential growing tool for developing healthy roots, because **healthy roots = healthy trees**. This narrow root-training pot allows for plenty of root depth, and trains the roots to grow uniformly down, rather than spiraling in the pot. Since overwatering is a common killer of citrus, these narrow pots also protect your young citrus tree from being overwatered and becoming waterlogged in a giant pot before the roots are ready!

Tip: Do Not Transplant Immediately: Keep your new tree in its pot for as long as possible, minimum 6 months, to ensure your young citrus tree has developed a robust root system that will give you the best growing results in a new larger container or in the ground.

Microbial Rich Custom Blended Potting Soil - You can't find anything like it on the market! We blend it ourselves using Regenerative Agriculture Principles to create the perfect growing medium for Dwarf Citrus! Packed with High Grade Organic Amendments to keep your plant healthy, happy, and give it the boost it needs to develop into a member of the family.

A **Decorative Sleeve** can add color, style, and stability to your root-training pot until it's time to transplant or plant. Just make sure there's plenty of holes for drainage in the bottom of your decorative sleeve! Alternatively a few cinder blocks will add stability if it's windy where you live.

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TRANSPLANTING

*If you want to keep your Dwarf Tree in a container, that's totally cool!
You just need a **bigger** container!*

YOU DO NOT NEED TO TRANSPLANT RIGHT AWAY

In fact, we recommend you keep the Dwarf Citrus tree in the container it came in for 6 months to promote healthy robust root development & learn to care for it!

Healthy Roots = Healthy Trees

A good indicator your roots are **Ready for Transplant** is the tree will drink water more quickly, dry out faster, the pot will get very light in less days, the trunk will be much thicker, and you'll start to see roots bursting from the bottom holes.

Transplant **13" Starters** when the trunk is the diameter of a **dime**.

Transplant **18" Tall Pots** when the trunk is the diameter of a **quarter** or more.

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TRANSPLANTING

STEP 1

To check readiness, wait until the pot is very dry, and remove the pot gently without disturbing the soil. If you see plenty of roots throughout, especially at the bottom - **it's ready to Transplant**

Recommended Transplant Progression

13" Stater Pot >>> 18" Tall Pot >>> 25 Gallon Pot or, In-Ground

13" Rootball



18" Rootball



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TRANSPLANTING

STEP 2

Select a new container!

Our **13" Starter Pot** is the building block to robust roots - DO NOT TRANSPLANT Too Soon ! This is our most critical root trainer ensuring your plant has the most success! The 13" Starter pot is deeper than a 5 Gallon Tall pot - so don't rush it - Dwarf Citrus can grow quite large in this container.

CITRUS DOES NOT LIKE A BIG POT TOO SOON

Our **18" Tall Pot** is designed to allow for deep root growth & development; preparing it to be planted in the ground or transplanted into its forever home. In the **18" Tall Pot** Dwarf Citrus can grow enormous, all the way to its final mature height. It'll get more bushed-out in the next pot.

At the farm, we move 18" Tall Pot trees into a **Big 25 Gallon** container which has plenty of room for them to develop into a mature tree. For the BIG pot we recommend picking out a large decorative pot that can showcase the trees' beauty over time.

Ceramic, plastic, metal... your choice, as long as the new pot has good drainage!!

Too much water or bad drainage is the #1 killer of citrus!

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TRANSPLANTING

STEP 3

Prep your Potting Soil.

We recommend starting with an Organic Citrus-specific potting soil.

****Pro Tip - double your soil & your drainage by adding extra Organic Perlite to your potting mix!**** Add plant food & additional amendments - we recommend Organic microbial rich inoculants & mycorrhizae. Mix thoroughly.

Pre-moisten your potting mix until it lightly holds together like a snowball.

STEP 4

Add soil to the bottom of the pot until your plant can rest level with the top of the container.

VERY IMPORTANT TO TRANSPLANT AT THE SAME DEPTH

Backfill with your loose potting mix until covered. Gently remove air pockets being mindful not to press on the root ball zone. Add soil until level with original tree depth. Water Deeply. Check to see if more soil is needed to be perfectly level. Water lightly & done.

ONLY water again when the weight has significantly decreased.

Water on a Schedule.

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IN GROUND PLANTING

If you decide to plant your tree in the ground, your location and soil conditions are a big factor. Consider keeping it in the pot for a while, possibly moving it around to find the perfect location. Remember the sun changes throughout the year.

Dwarf Citrus needs a minimum of 6 hours of direct sunlight to be happy, protection from wind, infrequent deep watering on a schedule, good drainage, and plant food every 2-3 months to thrive! It will also need your continued support for protection against pests.

Once you find a location, you want to dig a hole at least 3X the size of your pot.

(If you auger a hole and drop the sleeve in the hole, the tree will suffer)

The idea is to loosen up the surrounding soil so the roots grow freely into the new soil.

Mix in cinder, some healthy Organic compost, plant food and any other amendments you wish to add to your soil. ****Backfill your hole so your tree is the EXACT SAME DEPTH as it was in the potted container.** Add mulch around your tree, be careful to keep a small ring of mulch free border between the mulch and your tree trunk.

Keep the area around the tree weed free for best growth!

Companion plants such as perennial peanut, comfry, & vetiver are highly recommended.

Water on a schedule - Water deeply - Infrequently

Tip: While you may want to plant your **13" Starter** in the ground it is recommended that it be transplanted to an 18" Tall Pot first before going in the ground. By using the 18" Tall Pot you will notice faster growing, earlier fruiting, & overall better results for establishing a healthy young citrus tree for years to come.

Farm tested. Family approved.

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WATER on a SCHEDULE

Dwarf Citrus Trees can survive down to nearly freezing temperatures and up to temperatures above 99° F. They are a really durable plant that have been grown well in all parts of Hawaii.

Growers in the wettest climates will be the most challenged because citrus loves to dry out between watering. That said, Dwarf Citrus is the most tolerant of too much water. When it does receive water, it likes infrequent long deep watering, NOT a regular short shallow watering.

#1 tip, DO NOT OVERWATER YOUR CITRUS!

At our farm in Kula, we water our trees on Sundays and Thursdays to give it a nice break between watering. The elevation is about 2500 feet, the days are hot and the evenings are cool. In the heat of summer we water on Sundays, Mondays and Thursdays; choosing to give it 2 days of deep watering and maintaining a 2 day break to dry out in between.

SUGGESTED DEEP SOAK WATERING SCHEDULE

13" Starter Pot - Twice Weekly - 2-4x 3-5 seconds - extra gentle shower do not overflow

18" Tall Pot - Twice Weekly - 15-30 seconds - steady gentle shower stream

25 Gallon Mature Pot - Once Weekly - 30-60 seconds - steady shower outside perimeter

In the beginning, try to get familiar with the weight of your tree to know when it needs water.

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WATER on a SCHEDULE

WATERING EXPLAINED

How to know when your **Potted Dwarf Citrus** needs water in simple steps:

STEP 1:

Water your tree very deeply until water runs out the bottom and it's gotten very heavy.

STEP 2:

Pick it up, feel the weight, and do this every time after watering until it's familiar.

STEP 3:

Water again when it has lost approx $\frac{2}{3}$ weight or feels light.

(If it gets too light it will take longer time to water slowly & feel heavy again)

#2 BEST watering tip:

Get a hose bib timer and slow drip !!

A simple hose bib timer can save time, promote consistent growth, easy to adjust watering schedule, & some are bluetooth operated (we use bluetooth, it's so cool and easy to use). Slow drip irrigation is a fantastic way to deeply water without the root disturbance & erosion caused by garden hoses, it uses very little water, and can be connected to multiple plants at the same time.

A **Dwarf Citrus Tree** is an investment in your family and future food source, it's worth time & energy!

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PLANT FOOD BASICS

Just like any living thing, your tree needs food on a regular basis.

The quality of the food is important.

We recommend a citrus specific Organic plant food every 2-3 months.

There are products such as Organic fertilizers, compost, ground stakes, slow-release granular, chicken manure, kelp, and the list goes on...

Whatever you do, feed your tree on a regular basis!

The importance of using a citrus specific fertilizer is in the **micronutrients** needed for citrus to develop fully! Trace amounts of basic elements contribute greatly to the healthy development of your new Dwarf Citrus Tree.

There are many regenerative farming methods out there; but for natural Organic farming we prefer Korean Natural Farming as it's a safe, effective, and versatile way to feed & maintain healthy Dwarf Citrus.

1 Feeding Tip

Over Feeding can lead to pest problems!

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Integrated Pest Management

Pests can be an incredible thing to deal with, especially here in Hawaii. Our recommendation is to approach it from the most basic natural organic way possible, and then slowly work yourself into more aggressive methods if needed.

A) High Pressure Water Wash Weekly

Yes, just as it sounds. Use the high-pressure and spray nozzle on your hose to wash away those insects. Use your own discretion and be careful not to break any branches with your water pressure. Often, frequently spraying off the insects does not allow them to get a colony started, and is the most natural effective way possible.

B) Soap spray

You heard it right, soap mixed with water and sprayed on your plants is one of the most effective plant washes you can make at home. Insects breathe through their bodies; when you coat the leaves in soap they will fall off and stop feeding.

We have used all types of soap, we do recommend organic whenever possible, and DO NOT use detergents. It is important to realize that contact is needed, so think about spraying on the bottom half of the leaf where the insects tend to hide or in the creases where new growth happens. After 30 mins, rinse off with water.

DO NOT spray in the middle of the day when beneficial insects like ladybugs and bees are present because it will harm them too. We recommend spraying before sunrise, and after sunset to protect the beneficial insects. If it applies, Follow the label.

C) Organic Neem based oils

When things get really bad or you're having a difficult time controlling your pests, things like organic Neem based oils can be very effective. Just because it says organic doesn't mean it's 100% safe, make sure to read & follow your labels to make sure you know what you're using. It is especially important to use these sprays before sunrise and after sunset to protect beneficial insects and prevent leaf burn. Follow the label.

D) Organic BT

Use this for organic control of caterpillars. Follow the label.

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To Fruit or Not to Fruit - That is the question

Ready for fruit?

Since your tree is grafted it will start making fruit right away...

But, is your tree ready to support fruit growth???

13" Starters

Wait 1-2 years

Remove all new fruit during this time!

If your tree is growing fruit at this age it's not focusing on more important things like root development, new branches, & green growth. Don't stress-out your tree at such a young age.

Pick off the tiny fruit that develops after flowering.

18" Tall Pot

Ready to fruit this year, in moderation.

Only allow as much fruit as branches can support.

In the beginning that's only a couple fruit.

Pick off additional tiny fruit as needed after flowering.

Gradually your Dwarf Citrus can support more & more fruit growth.

25 Gallon Mature Trees

These trees are much older and have already started fruiting!

But just because they're ready to fruit doesn't mean they should grow loads of fruit.

If you notice a branch drooping because of excessive fruit weight >>> Remove some fruit!!!

Or, support the branch with a stake, trellis, etc

Allow your tree to grow a sparse few fruit on strong branches when it's very young, and keep in mind that your tree only has but so much energy, so if it's using all its energy to make fruit, it's not growing or developing roots as quickly as it would if you remove the fruit.

Don't let the branches get overloaded with fruit until they cannot support the weight!!!

If one branch is loaded with 2-10 fruits; that branch is likely to break - remove & eat asap.

Be prepared for your tree to look stressed after fruiting.

Your tree needs to recover. Feed it. Talk nice to it. Maybe prune it gently.

Use your best judgement.

If it looks like too much fruit, pluck off the excess!

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WHAT's a WATERSUCKER?

You have purchased a **Grafted Dwarf Citrus Tree**.

Since it has been grafted, it is an exact clone of the variety you have selected and fruit will taste exactly the same. If you grew this tree from seed it is a 1 in a million chance of getting the same good tasting fruit. So it's a really good thing your tree is grafted!!

Since it has been grafted, the roots selected are much more durable and resistant to diseases and viruses that can kill normal citrus.

It is important to familiarize yourself with the graft point. It's a pretty easy to identify the point, where the bark changes color & texture. Also, look for a small nub or cut-off point about 6" up the trunk - this is where it was grafted. (see photo)

In order to redirect energy back up to the grafted (top half) of your tree, you need to remove all the water suckers or new growth below the graft point. These will look like little green triple leaf growth coming out of the trunk of your tree. If maintained weekly, they can be plucked off with your fingers. But if you let these water suckers get much bigger, your tree will slow down growing, and the water suckers will need to be pruned off for a clean removal.

By doing this on a weekly basis, you will be encouraging your tree to grow quick and strong!

Identify the Graft Point



Remove Water Suckers



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Summary

Growing your own food is among the most rewarding experiences!

We started our family farm to solve a problem.

Being renters on Maui for almost 20 years, we planted fruit trees at each of our rental properties, only to donate them to the landlord when we moved to our next home. If we got lucky, we might get 1 or 2 of the fruits of our labor before we moved.

We wanted a **Dwarf Tree** that we could take with us, that could live in a container, and produce full size, perfect tasting, abundant fruit in a small space.

After a lot of research, time & development.....

This is it!

We wanted to grow Dwarf Fruit Trees so that everyone, regardless of your property size or ownership / rental status could have their own fruit trees, have space to grow them and have the ability to provide a variety of food to your family and island community!

From our Ohana to yours,

Mahalos Nui Loa

Flying Dragon Farm Family