Monterey Cypress (Macrocarpa) Penjing Care Guide

Congratulations on purchasing your Monterey Cypress penjing.

Please read and follow this Care Guide instructions to grasp an understanding of basic Penjing Care.

The Monterey Cypress, or commonly known in NZ as Macrocarpa (Botanical name, Cupressus Macrocarpa), are evergreen, fast growing trees. They are a Conifer which develops very quickly and have thick, hardy foliage. They must be grown outside.

Macrocarpas grow scales rather than leaves. Although your trees may still have some juvenile foliage (soft needles), generally the scales do not fully develop until around 4-5 years:

Although similar to Bonsai, Penjing are based on creating a landscaped scene.

<u>Watering (General)</u>: This is where many people make the mistake with their first bonsai or penjing; either lack of, or too much water – <u>DEATH = Over or under watering</u>.

When watering, use a shower or mist setting on the hose; you want to sprinkle rather than blast it. If using a watering can (kid's ones are good), make sure it has a rose head; this safeguards washing away soil from the pot's edge, exposing your tree's roots and damaging its foliage. For proper saturation, you need to make sure the water is getting right through to the bottom of the pot, and not just bouncing off the top. If the water starts to flood and run over the edge of the pot whilst you are watering, pause, let the water soak in, and water again until you are certain the water has gone right through (running out of the drainage hole/s).

The media contained in the soil are made of many different kinds, most of which aid in free drainage (course pumice, fine pumice, propagation sand and zeolite). The rest is potting mix and compost. So, although it is in free draining medium, you can still overwater. The roots do not like to be continuously wet and it may eventually cause them to rot/ suffocate if left to sit in water. Watering in the evening is best, or early morning and evening if watering twice a day.

Watering (summer):

During the hottest part of summer, and depending on the size of your pot, you will need to water every day, but note that Macrocarpa like to dry out <u>a bit</u> in between watering, but never more than **one** day. Macrocarpa also like to have their foliage misted.

If there has been a day or two of cloud cover, check the soil with your finger to see if it is still moist. If it is, you can skip a day of watering and just mist the foliage instead. If you are unsure, water it a little anyway.

If your Penjing is in a small pot, it will dry out quicker than if in a large pot, so you will need to water it more often. Intense heat and wind will mean possibly watering twice a day, plus some trees even of the same species will need more water than others. It will also depend on the soil quality, or if your trees needs repotting, as it may no longer have the soil content to contain the moisture required to support the excess roots that have grown. If water is running straight through the pot without soaking in, there are many visible surface roots, and the weight is considerably lighter, then this is a sure sign it will need repotting.

It's a fine line with watering. Get into the habit of checking your penjing every day to see what is required. Don't rely on the weather forecast; if it says it's meant to rain, water it anyway (if it needs it).

During the hottest part of summer, if you are **un**able to provide enough water during the day, or you are away on holiday etc. you can use a saucer under your penjing. However to avoid it swimming in water and assist with air flow, you will need to place some fine gravel/propagation sand in the saucer (humidity tray); you do not want your trees to sit in water as it will eventually suffocate. Using a saucer is not ideal, as you may come to rely on it and get out of the habit of daily checks, but it is better than your trees drying out. **Do not use a saucer during the cooler months or when you have the ability to water.**

As the weather turns cooler coming into autumn, water less.

Watering (winter):

You might find you only need to water once or twice a week, depending on how much rain, wind and sun there has been. Continuously check the moister levels in the soil to gauge how much your trees need.

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Increase watering coming into spring (beware, spring can catch you out by sneaking up on you, but if checking every day, this should not be a problem).

Best Position:

Outside in full Sun/Part shade, sheltered from strong winds. Sometimes this will mean sacrificing the best viewing spot.

Macrocarpas like full sun but can handle some shade. Ideally full morning sun and part afternoon shade. Try **not** to keep moving it around; give it a chance to settle in its new environment. Try and find one position in your garden that will suit it best.

Rotate your Penjing in its position from time to time so it receives an even distribution of sunlight on its foliage (quarter turns every week if possible or whenever you think about it).

Wind:

Protect your trees as best as you can from the wind. If you get severe gusts, temporarily place it in a protected area, even if it means keeping it in the shade, greenhouse or even inside if absolutely necessary, but <u>no more than 2</u> <u>days inside and never in the window in full sun.</u> Whether it is wired or not, its roots and foliage will not tolerate constant bashing from the wind.

Feeding your Penjing:

Fertiliser: Recommend Fish, **B**lood and **B**one- Organic if possible (Never use on very dry soil, always moisten your trees first, do not fertilise trees that looks unwell and do not use after root trimming for aprox 4-6 weeks) Shake well and apply within the average range of the suggested rate as per the individual product's instructions during the growing seasons (eg. If product suggestion states using 40-80mls of FBB use 60mls to 9 litres of water) or approx. 5mls per 750mls of water. Always apply to moist soil, **once every 2 weeks in the growing seasons from**:

Early March – late May (early to late autumn). Then take a break over the winter starting again from:

Mid August – early January (early spring/early summer). The idea is to fertilise proactively, not reactively to it growing. Gently pour on your trees. Alternatively you can feed slow release fertiliser, but you have less control.

Be sure to store this product out of the heat (either directly or indirectly as it will go off). Dogs and cats will want to drink it, so don't leave it lying around and wash away any run-off. It shouldn't be poisonous, but just to be on the safe side.

Seaweed Tonic (Organic) (This is a tonic not a fertiliser; store out of heat also)

Always use the **Organic** seaweed tonic as this promotes Mycorrhiza. This is the white, stringy growth you may have seen in soil that looks like white mould/fungus (healthy, beneficial, symbiotic fungus essential to healthy roots that act like a root extension). Do not be alarmed if you see this; this is the good stuff. If you feed **in**organic, it tells the Mycorrhizae they are not welcome. Have a look on the internet so you know what it looks like.

Shake well and apply as per the product's instructions, every other week, alternating weeks with the Fish Blood and Bone (FBB one week and Seaweed tonic the next), or every week during those periods when you are not feeding FBB.

During winter, alternate week about; one week pour Seaweed Tonic onto the roots, then, the next week spray on foliage. On the weeks you are due to do the roots, you might find this will be the only water it needs over that week, however if your trees are too wet the week you are due to do the roots, just spray the foliage again with Seaweed tonic. So always check the soil to see how moist it is and take it from there.

Wiring and Unwiring (any time of year is fine): If the trees are wired, you will need to keep an eye on the wire. Usually 2-3 months is long enough for Macrocarpa, possibly shorter during the growing seasons. If you leave the wire on too long, it will bite into the tree and cause ugly semi/permanent scarring.

The trees may also be wired into the pot around its root base for stability (anchorage wire/s). If they are, you will see the wire has been threaded through the bottom drainage holes or wire holes and secured near the trunk base. Look underneath the bottom of the pot to see if there is wire running from one drainage hole to another. If there is only one drainage hole, chances are it does not have any anchorage wire.

To avoid damage to its bark, do not wire or unwire your tree when it is wet.

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When wiring, always support the tree with your thumb and fore finger of your other hand as you work your way along the tree's trunk and its branches. Be careful not to wire over any new buds or branches.

Wiring is something you will need to visually watch and can take some time to master, so view some videos on the internet (Eastern Leaf, Bonsai Mirai, Mikbonsai or Herons Bonsai a just a few good ones).

Unless they are already in the shape you want, the necessity to wire the trees can be endless. Over time the trees may try and straighten up after you remove the wire. Give them a break for a while, then rewire if necessary, but if the trees have been 'wire bitten,' when you go to rewire the trees, wind the wire in the opposite direction so you don't re-place the wire back into the same grooves where the wire bite is. Any severe bends should be done slowly over time.

Remove the thin branch wire before removing the trunk wire. Cut the wire off as best as you can, squarely and using suitable wire cutters, however if the wire is too thin to cut and/or you feel you can unwind the wire successfully without harming the trees, do so carefully, but remember to support the tree.

NOTE: Do not play around with the branches too much after wiring; wire them, then place them into shape after you have wired all of the branches. Do not be too rough or keep changing the angle, do it slowly, possibly over a few days/weeks. Have a plan in your head before you wire. Too much bending will damage, dry and weaken the branches and possibly even kill off branches or the tree itself. Do not wire any fresh shoots – wait until they harden.

Do not wire the trees to shape it after repotting, this is too stressful for the trees and you risk killing branches or the trees themselves. **Don't be tempted**. You may watch videos of people repotting, pruning and wiring all in one day, but you never see that tree weeks later to know if it survived. The tree takes an enormous hit to its health. There is no hurry, and it is not worth the risk.

After repotting, leave it for at least 1 month before you wire the trees and visa versa. Wire the trunk first, then leave it a few weeks before you wire a few branches, etc. The trees will be much happier doing it this way. **Less is more.**

General Care: The foundation of any plant care is healthy roots. This is obtained by adequate routine watering, nutrition, pruning, sunlight and air flow. Healthy roots means a healthy tree.

As mentioned, get into the habit of looking at your penjing every day, as it may have been knocked over or it may need attention in some way, however, try and place in a position where it can't get knocked over (dogs and cats too).

Trim off any dead bits and pull out all weeds (some moss is fine).

Know in advance what the wind is doing so you can protect it before leaving for the day.

If the trees do grow cones, remove them, as this can draw too much energy from the trees.

Remove Caterpillars and aphids: Whilst the foliage is still in its juvenile state, quite often caterpillars will make their home in the foliage and kill off that part of the foliage. Black aphids will cluster around nodes and internodes which causes dieback – More than likely you will see ants running up and down your trees. Ants and aphids have a symbiotic relationship, so this is a sure sign that your tree/s is/are infested with aphids, therefore, a pesticide is required - Unless it's for your tree, do not use other sprays near your tree.

If wired, constantly check the wire to make sure it's not biting in. Do not leave the wire on longer than 2-3 months. Shorter during spring and autumn.

Keep a log book of when you last repotted and wired your trees, as well as a fertilising/seaweed tonic calendar. Take a photo of your Penjing now so you can compare in a few years time; you will be amazed how quickly the trees grow.

Repotting:

Never repot on a hot day or in direct sunlight and do not be tempted to repot out of season.

To refresh the soil and trim the roots, you will need to repot your penjing every 1-3 years. Repotting during the spring is best, although autumn is fine also.

A sure sign that your penjing needs repotting is the water will run straight through the pot like a sieve and dries out very quickly.

The instructions below may sound daunting, so watch internet videos before attempting this. Everyone is nervous on their first attempt.

Soil Preparation:

Have your new soil ready to go before you remove the trees from their pot, and if you are changing to a new pot, have this ready first, to ensure roots are not exposed for too long.

If you just have the one penjing, it might be easier to purchase some pre-mix bonsai soil from California Home & Garden, otherwise use about 30-40% Potting Mix/Compost (of which is made up of 70% Potting Mix and 30% Compost) and 60-70% **mixture** of Course Pumice, Fine Pumice, Propagation Sand and zeolite (zeolite is **natural** Kitty Litter). Do **not** use dirt from your garden unless it is good quality soil/loam. You will need to cut up some sphagnum moss into small pieces (approx. 1 cm). You should be working with 60% bonsai mix and 40% sphagnum moss. You can purchase moist or dry sphagnum moss; either is fine. Leave it to soak in water. Once soaked, mix this up with the bonsai mix to a consistency that allows you to form the 'hills' without it crumbling or being too wet (consistency of forming a snowball). However, use some of your old mix (mix a combination of new and old) to avoid root shock.

Now you are ready to re-pot:

Take a photo of your Penjing so you know how to restructure it.

Carefully peel off the moss, stones and figurines from the penjing and put them safely to one side.

The trees may be wired and secured at the base of the trunk; you will need to unwind this before you remove the trees. Either cut the wire/s at the base of the underside of the pot, or dig around in the soil until you find the wire to unwind and re-use.

After loosening the wire/s, either remove it or bend each end of the wire/s to the side of the pot and carefully dig around the edges of the pot with a knife or suitable tool and leaver the trees out of its pot. Untangle the roots by **combing from the top edge and down** with a bent, silver fork/mini rake (California Monterey Cypress Penjing Care Guide

Home & Garden stock these). Gently comb them out as best you can. If you haven't left it too long before repotting, this should be easy enough. **Do not remove all of the soil from around the root ball**

Reduce the root ball **by** about 1/3 (as long as you feel there are enough roots to spare, otherwise just give a light trim). **Try and train the roots to grow out radially rather than vertically.** If the roots have been ripped and damaged, trim them so you get a clean cut.

Always make sure you have sharp shears to cut roots, but **do not** use your pruning scissors as the gritty soil will eventually make them blunt, so have one pair for roots and one pair for the foliage.

You do not want your trees to be bare rooted for too long whilst you are reporting. This is another good way to harm the trees, so you can either place it in a bucket of water or seaweed tonic, or you can keep them misted and covered with soil or a wet cloth. Try not to remove all of the soil around the roots; you want to replace the old soil slowly over time to avoid root shock.

Once you have trimmed the roots, clean out the pot if you are re-using it and make sure there is still mesh secured over the drainage holes. Then, if applicable, place/replace the anchorage wire through the drainage holes of the pot or through the separate wire holes, as you will need to secure the trees again. Bend the wire away from you as you are working out the best angle to place the tree on. Don't forget, if you want, place approx. 1cm of the drainage aggregates in the bottom of the pot.

In the pot, form the mounds that make up the hills with your pre-mixed soil and make a hole in the hills to plant your trees into. If the root ball has a hollow, mound the soil up a bit and place the tree directly over this mound so it fills up that hollow. Gently use a chopstick to press the soil down which aids in placing the soil around the roots and remove any air pockets. **Don't overdo this and damage roots.** The action is, **gently** poke with chopstick with one hand and poke finger with other hand to fill in the gap you have made with the chopstick.

Once you have the trees semi secured, if applicable, replace the wires around the roots/base of the trees, making sure it's not too tight but enough to keep them steady. Cut off any excess wire if necessary, then pack some more soil

around the tree and neatly replace the moss into place, pressing firmly and misting the moss as you go.

If you are placing more figurines etc into the landscape, make sure they fit and match the scale.

To be pleasing to the eye, Penjing need to have a **natural feel**, **harmony**, **balance**, **depth**, **movement and delicacy from all angles with a semi tortuous/swaying look**, **but more importantly**, **you are happy with how your miniature landscape looks**.

Water thoroughly with a light shower/mist setting to get the soil to fill into any air pockets you may have missed. Then give the trees some seaweed tonic and mist with water. Keep soil moist and mist the foliage daily for 3 weeks. Do not fertilise for at least 4-6 weeks otherwise you will burn the newly cut roots (only use seaweed tonic as instructed earlier). Leave it out of direct sunlight for 2-3 weeks. You can give the trees a light trim after repotting if necessary.

<u>Pruning and Pinching:</u> Pruning and pinching, can be done as you see fit, but you also need to let them grow rather than constantly keep trimming away, even if it means they are out of shape for a while, otherwise you will weaken your trees. Do not over prune because you are bored; you will weaken your trees, but every month during the growing season is ok. Do not take off all the new growth. Use a tree sealer on any pruning wounds.

There may be some branches on the trees that you feel are superfluous. They have been left on as the trees are still young, and the more foliage they have, the more energy the tree can produce, and the healthier it will be (the more 'solar panels' the better for growth health and promotes thickening within that area it is located). These branches are known as sacrifice branches and will eventually need to be removed. If too much foliage is at the top, the energy will be pushed into the top; so keeping the foliage with equal amounts means the tree should get equal shares of energy.

During the growing season (spring- early summer & autumn), with your fingertips, in a 'pinch and roll' action, nip out some new branch tips to encourage it to thicken up, (shown below with the **blue** lines). With pruning, the idea is to trim the foliage to 2 laterals, as shown on **red** line below:

Do not prune off all of the new growth.

With pinching, you will notice they seem to 'unplug' when the foliage is at a certain age (fresher). After this, the ability to unplug is not possible and you will need to trim in an area shown on the red line; do not 'trim' in the area of the blue line as it will turn brown.

Do not trim a branch leaving no foliage, you will kill off the branch.

It is easy to get carried away. If you have left it too long from the last trim and they have got a bit out of hand, try **not** to take off any more that 30%. If there is still more to be taken off, leave it for 2-3 weeks to give the trees a chance to recover, then take a bit more. Best to keep it out of the harsh sun for a week or so after pruning/heavy pinching.

There is a lot to learn about Penjing, so take it slow. It's too easy to rush in and do too much on your trees, this is another very good way of killing them. Give them time to recover and grow. Spend more time thinking, looking and planning than doing and regretting, but at the same time be confident in your decisions. Keep reading over this document to get a better understanding.

Penjing is ideal for people of all ages.

It teaches a person that less is more, and requires a person to be patient, responsible, and think about good decisions.

It is therapeutic and allows a person to lose themselves in a creation.

Like bonsai, penjing is a form of art; living art. You will never look at trees the same again. Look after your penjing, and it will give you a

lifetime of satisfaction Happy Penjing-ing

