

Crassula Tetragona Care Guide (Miniature Pine Tree)



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

This succulent is easy care/low maintenance and fast growing. It is also easy to propagate, but its leaves can be fairly fragile, so care needs to be taken. It is a popular bonsai. It can be kept indoors or outdoors, but sunlight is required (sensitive to frosts).

Watering (General):

This is where many people make the mistake with their first bonsai; either lack of, or too much water. Crassula Tetragona will suffer from too much water rather than not enough.

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, which may eventually cause the roots to rot/suffocate if left to sit in water. The roots do not like to be continuously wet and **only needs a water about once every 2-4 weeks. Test with your finger to check the moister level in the soil.**

Watering (summer):

During the hottest part of summer, and depending on the size of your pot, you will need to water about once a fortnight, or more if you notice the leaves starting to shrivel. **The soil needs to dry out in between watering.**

If your bonsai is in a very small pot, it will dry out quicker than if in a large pot, so you will need to water it more often. If kept outside, intense heat and wind is also very drying. After time, it will also depend on the soil quality, or if your tree 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 like a sieve, then this is a sure sign it will need repotting.

It's a fine line with watering. Get into the habit of checking your bonsai every day to see what is required.

If keeping your bonsai **inside**, use a saucer, but to avoid it swimming in water and assist with air flow, you will need to place some fine gravel or stones/propagation sand in the saucer (humidity tray); you do not want your tree to sit in water as it will eventually suffocate. **Do not use a humidity tray when kept outside.**

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

Watering (winter):

Water **sparingly**, however, continuously check the moisture levels in the soil to gauge how much your tree needs.

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).

FROSTS: Crassula Tetragona does not tolerate severe frosts very well. Bring indoors during the winter, but if possible, acclimatise first.

Best Position:

Full Sun/Part shade and out of the wind, inside or outside:

Try and find one position in your garden or house that will suit your bonsai best. Do not place in a window that gets too much sun, you may burn the leaves.

Rotate your tree 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:

If kept outside, protect your tree 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 inside. The foliage and stems will not tolerate constant bashing from the wind, as they can be fragile.

Feeding your Tree:

Fertiliser: Recommend Fish, Blood and Bone- Organic if possible - (Never use on very dry soil, always moisten your tree first, do not fertilise a tree that looks unwell and do not use after root pruning for approx 4-6weeks)

Shake well and apply within the average range of the suggested rate as per the individual product's instructions during the growing seasons (e.g. If product suggestion states using 40-80mls of FBB, use 60mls to 9 litres of water, or 5ml per 750mls of water. **Always apply to moist soil, once every 4 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 bonsai tree.

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 **inorganic**, 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 month, at **alternating times with the Fish Blood and Bone** (FBB one month and Seaweed tonic the next), or every month during those periods when you are not feeding FBB.

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 bonsai 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).

Shrivelled, or flattened leaves more than likely means it needs watering, and browning, mushy leaves usually means overwatering.

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

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

Repotting:

Never repot on a hot day or in direct sunlight, you will harm the roots.

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

To refresh the soil and trim the roots, **you will need to repot your tree every 1-3 years. Repotting during the spring is best, although autumn is fine also. You may have wires holding your tree in which will be wired around the base of the roots, so you will need to loosen the wire/s first.** 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.

A sure sign that your tree needs repotting is the water will run straight through the pot like a sieve and dries out very quickly. When repotting, have your new soil ready to go before you remove the tree from its 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 tree, it might be easier to purchase some pre-mix bonsai soil from California Home & Garden. Alternatively you can use Cactus Mix with Perlite (2:1) or, 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). Do **not** use soil/clay from your garden. You can place a thin layer of the drainage mix in the base of the pot (approx. 1cm), propagation sand or zeolite will suffice. Leave the drainage mesh in place around the drainage holes of the pot.

Remember if the tree is wired in and secured at the base of the trunk; you will need to unwind this before you do anything else, and beware, it may have more than one wire).

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 lever the tree out of its pot. Untangle the roots by **combing from the top edge and down** with a bent, silver fork/mini rake (California 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 tree to be bare rooted for too long whilst you are repotting. This is another good way to harm a tree, 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, but sometimes this can't be helped. 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 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 tree 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.

When you are working out the best angle for the tree, make sure the tree will sit in the pot without being too high; you may need to flatten the roots off a bit so it sits flat. Then sprinkle about 1/3 of the amount of soil required (old and new) around the roots and gently use a chopstick to press the soil down which aids in placing the soil around the roots and remove any air pockets. 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.

Once you have the tree semi secured, replace the wire around the roots/base of the tree, making sure it's not too tight but enough to keep it steady. Cut off any excess wire if necessary.

Fill the pot with the remaining soils and keep going with the chopstick until you are happy with the firmness of the soil. **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.

Don't fill the pot right up to the brim with soil, this will make watering difficult, as water will run straight off and take the precious soil with it.

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

Pruning and Pinching: Pruning and pinching, can be done as you see fit, but you also need to let it grow rather than constantly keep trimming away, otherwise you will weaken your tree. However, do not let it get too top heavy as this may cause branches to snap off, and also the tree's energy will be forced to the top rather than evenly spread, and it will not grow branches.

To be pleasing to the eye, a bonsai in general needs to have good **flow, depth, movement, nebari, character, trunk thickness and taper.**

Do not over prune because you are bored; you will weaken your tree, but every now and then ok. Do not take off all the new growth. Prune and pinch to the style you like. Look at images on the internet for ideas.

It is easy to get carried away. If you have left it too long from the last trim and it has got a bit out of hand, try **not** to take off any more than 30%. If there is still more to be taken off, leave it for 2-3 weeks to give the tree a chance to recover, then take a bit more. There is no hurry. **Best to keep it out of the harsh sun for a week or so after pruning/heavy pinching.**


There are certain rules in Bonsai around incorrect branches, but really it's up to you what you think looks good; it's your tree. See image on page 8.

There is a lot to learn about Bonsai, so take it slow. It's too easy to rush in and do too much on a tree, this is another very good way of killing it. Give it 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.

Bonsai is ideal for people of all ages.

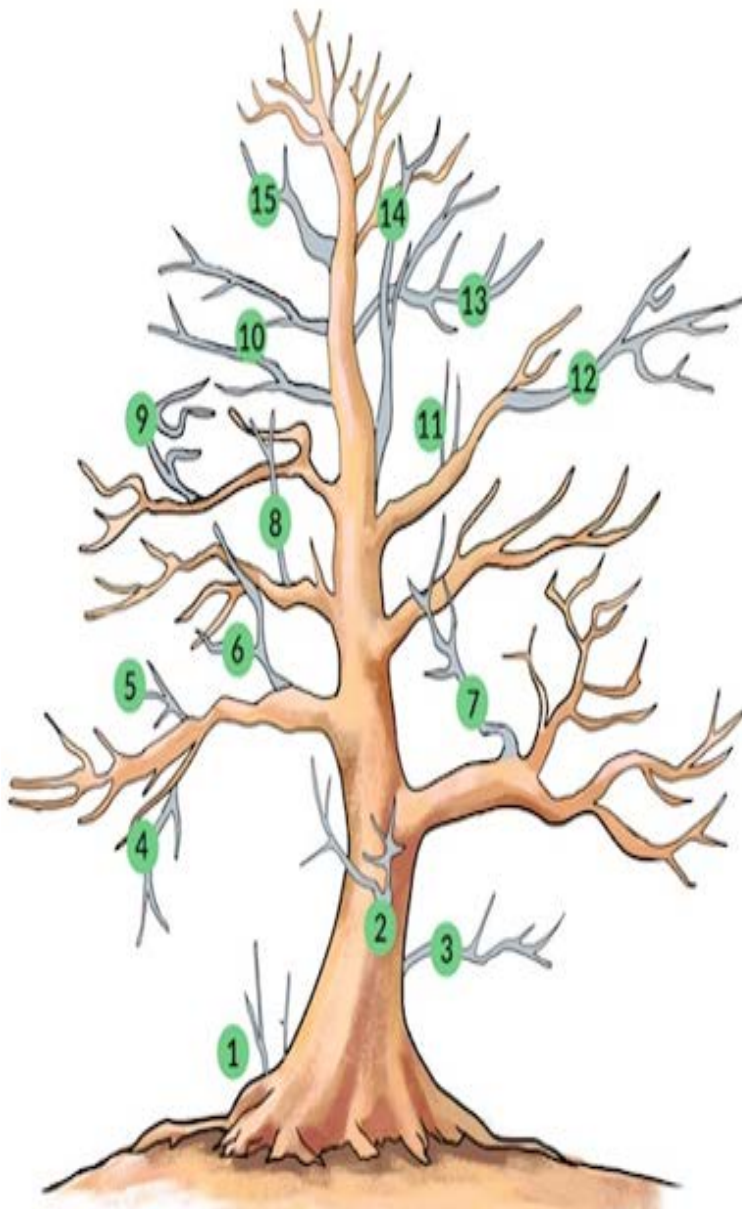
Bonsai teaches a person that less is more, and requires a person to be patient, responsible, and think about good decisions.

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

Bonsai is a form of art; living art. You will never look at trees the same again. Look after it, and it will give you a lifetime of satisfaction 

Happy Bonsai-ing 😊

Undesirable Branches



1. Suckers that grow from the base of the trunk
2. Branches blocking view on the trunk
3. Limbs that grow close to the ground
4. Hanging branches
5. Dead branches
6. Crossing branches
7. Branches returning to the center of the tree
8. Upward growing interior branches
9. Branches with unnatural twists and turns
10. Parallel growing branches
11. Suckers higher on the trunk (water sprouts)
12. Branches extending beyond the tree profile
13. Branches growing from the same height on trunk
14. Branches that compete with the trunkline
15. Disproportionately thick branches at the top