

## Damping Off

If your seedlings suddenly collapse and die, one of the fungal diseases called “damping off” or “seed and seedling rot” may be to blame. In one type of damping off, the seedling’s stem collapses at or near the soil surface; in another type, the seedling rots before it emerges from the soil, or the seed decays before it even sprouts.

To prevent these problems, use pasteurized potting mix and new or thoroughly washed and disinfected containers. A fungicide may be helpful but best practice is to:-

Take care not to overwater seedlings.

Be sure to provide good air circulation and ventilation, so tops of seedlings stay dry and standing moisture is kept to a minimum.

# GROWING STARTER TREES INTO GREAT BONSAI

A guide to developing your young tree.

By

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## INTRODUCTION

This booklet is designed to give you some tips to help in growing your new starter bonsai into a great bonsai tree.

The suggested methods I have put together here have been used for many years to develop bonsai without wasting many years by doing things in the wrong order and making some basic mistakes that will cost years of growing time.

They are intended to help you reach good results in a shorter period of time than it might otherwise take.

I have tried many techniques over the years and have found that some are better than others.

These are only my suggestions, and you may want to do things differently according to your own experience.

I will cover a few topics that will start at the early stages of growing seeds. From there we will go on to look at taking cuttings.

More advanced propagating techniques such as air-layering will be covered in a different booklet.

The main thrust of this publication is to guide you through what to do with your newly acquired starter tree.

Once again, just allow the tree to grow freely without pruning anything in order to thicken the trunk and set the bends.

If it is needed you can pot on the tree to the next pot size up but don't pot it into a pot that is too large. Don't prune any roots. Instead just tickle around the outside with a chopstick to encourage the new roots to grow outwards into the new soil.

Repeat this process until the desired girth and height is reached. Along the way, keep an eye on the side branches and remove any that are growing from the inside of the bends. Side branches that are getting too thick can be reduced by half in order to slow them down but try keeping pruning to a minimum while the tree is trying to gain thickness.

### **The future.**

As the tree develops you can start to make the branches and wire them into place giving them bends to add character that will match the trunk line.

Don't be tempted to plant the tree into a bonsai pot because that will slow everything down a lot and it will take you many years to make very little progress.

Keep the tree in a good sized training pot and feed regularly until the tree is pretty much finished.

Be on the look out for pests and diseases and treat them promptly with a suitable insecticide or fungicide.

Use fungicide proactively instead of waiting for a fungus to appear. Prevention is much better than cure.

### **Sowing seeds.**

This can be a daunting topic for many, especially if you have never tried it before.

In this booklet I will just give some basic pointers that should help achieve better results. More detailed information can be found in my booklet about 'Growing from seed'.

- Prepare your seeds according to their needs. Clean them, soak and stratify.
- When they are ready for sowing, sow the seeds with the pointed end downwards about 6-8mm deep, and 15-20mm apart. Sowing on this type of grid pattern helps to keep track of which seeds have germinated.
- Don't be tempted to overcrowd them as this will cause them to grow thin and weak and may also result in bad damping off.
- Sow in trays or pots filled with a 50/50 mix of suitable seed compost & sharp grit.
- Sowing with the point down results in a relatively straight seedling without the awkward wiggly root at the base that will be difficult to deal with later on. If a pointed end is difficult to work out then plant with the part that was connected to the seed pod facing upward. This is often visible as a darker spot or slight dimple on one end.
- Water the trays gently so as not to wash seeds out.
- Place trays in a bright sheltered location outdoors or even better, in a greenhouse.
- Protect from frosts, hot sunshine, strong winds and wildlife such as mice and A mouse or bird will make short work of eating an entire tray of seeds.
- When the seedlings have developed their second set of true leaves, it is time to transplant them into individual pots.

## To Transplant Seedlings

- Fill each new container with a moist planting mix of your choice.
- Loosen the soil around the seedlings (tweezers or a chopstick is handy for this); then carefully lift them out, one at a time. Handle seedlings carefully by their leaves to avoid damaging the tender stems.
- Poke a hole in the new planting mix, place the seedling in the hole, and gently firm soil around it.
- Water the transplant right away.
- Keep the containers out of direct sunlight for a few days to let the transplants recover from the move.
- Before the seedlings go outside full time, harden them off so they can withstand bright sun and cooler temperatures. Put them outdoors for several hours each day in a wind-sheltered spot that receives filtered sunlight. A cold frame is useful for hardening off seedlings.
- Over the next week or so, gradually increase exposure until the plants are in full sun all day.
- At this point you can start using weak organic fertilizer to help them grow.

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## Growing on your young trees

When the young plants are around 15-20cm tall and just becoming slightly woody it will be time to apply the first wiring. *Some of the plants you will receive will already have been wired at least once.* Obviously as a young and tender plant they will be susceptible to bruising so you have to be careful when winding the wire on.

Once the wire is on you can gently put bends into the young plant. Avoid bending it to and fro as this will probably kill the young plant.

At this stage I always make exaggerated bends because as the tree gets older the bends will tend to straighten out. Once you are happy with the shape its time to wait until the bend has set.

During this waiting period you can gradually increase the amount of fertiliser and get the plant growing strongly. Don’t prune anything at this stage. The plant will need as many leaves as possible as these are the food production areas so if you prune them the whole process will slow down dramatically.

Keep an eye on the young plants and allow them to grow freely. By the time they have doubled in height the wire will be starting to bite in. Don’t worry, leave the wire in place so that it bites in a little.

This is especially important on coniferous species such as pines and junipers. Taking it off too soon will probably result in the tree straightening out almost all the way and the effort so far will be wasted.

With pines it is a good idea to leave the wire on until it bites in quite a lot. This causes swelling in the bark and helps to thicken the trunk and set the bends in place.

Don’t worry, any wire marks will grow out as the tree progresses and increases in girth.

If you want to have a taller tree it will be necessary to apply another wire along the full length of the trunk and put some extra bends into the parts that have not been previously wired and shaped. Avoid placing the wire in any previous wire marks but wire in the same direction as before.