

Podocarpus macrophyllus

Family: *Podocarpaceae*

Translation: [from Greek [*podos* (foot) and *carpos* (fruit), referring to the aril-like stalk of the seed] [large-leaved].

Form: Dioecious (having male and female flowers on different plants), evergreen, coniferous shrub or tree (depending on cultivar), upright, densely foliated, branching, narrow columnar canopy.

Size: To 45 feet.

Native Habitat: China.

Leaves: Simple, spirally arranged, to 4.5" long, glossy dark green above, lighter beneath, new leaves light green.

Stem/Bark: New growth green, woody, bark peeling, very flexible branches.

Flowers: Male catkin – like cones, yellow, to 1.5" long, female scale-like, inconspicuous.

Fruit: None. Seed drupe – like, green, ovoid to 0.5" long, on a fleshy purple edible receptacle (aril) – (*fig 1*).

Culture: Full sun is preferable (4 to 5 hours of direct sun is usually sufficient).

Podocarpus will grow well in partial shade, but will have softer leaves, lighter in color, with longer internodes and will have more pest problems as shade gets deeper. It's not very picky about soil as long as it drains well. I use a mix of 40% haydite, 40% turface, and 20% pine bark. This mix

requires daily watering. As the trees gets denser moss might grow under the canopy, which is beneficial in keeping the soil evenly moist. *Podocarpus* does not mind wet soils. Keep the moss away from the trunk. Especially if it has dead wood.



Propagation: Seeds, cuttings. Cutting generally root well in a greenhouse.

Other species: Dwarf cultivars with much smaller leaves are available, but they are extremely slow growers. Another popular relative is *Podocarpus gracilior* – which has a weeping growth habit, leaves are stiffer and sharp tipped.

Problems: Scale, sooty mold, mites, root rot; none too serious. Blue aphid infestation might be vector viral disease. Use horticultural soap or oil to eliminate. I recommend systemic insecticides in granular form. Spread around the tree and it will protect the bonsai for a month.

Bonsai Styles: Any, if cascade – top growth needs to be suppressed as it grows stronger and weakens lower branches.

Fertilization: Any slowrelease synthetic organic fertilizer, natural organic is acceptable, but will require repotting as it has a tendency to block pot drainage.

Repotting: As with any conifer repotting is usually done during winter months preferably from late December to early March (depending on weather). I prefer to repot *Podocarpus* around the last week of February at the beginning of the growth season just as new buds begin to swell (*fig 2*). Avoid removing more than 50% of the small feeder roots at the time of the initial repotting from the nursery container to bonsai pot. If you



need to remove more than fifty percent of the root mass, do it in two or more stages. Repot into a temporary, larger-than needed bonsai pot. Wait a year or two and repot into a smaller one until desired pot size is achieved. In the meanwhile you can work on the top. I prefer not to do any major pruning of the crown for few months prior to repotting or at

the time of repotting. Maintenance repotting depends on the age of the tree, type of the soil, growing conditions, and amount of work done on the canopy (more pruning – less often repotting needed). *Podocarpus* doesn't mind being root bound. For collected material – let the specimen establish a new root system for 1–3 years before styling, depending on the age of tree.

Pruning and shaping: In South Florida *Podocarpus* have 3 to 4 growth spurts during the year. Trees respond best if any work done is timed to the beginning of these growth spurts. I usually avoid any major pruning when the last growing season comes late in the year (end of November, early December) – as new tender growth can be damaged by an unexpected cold snap. Branches of *Podocarpus* are very flexible and easy to wire and bend. I usually let wire cut slightly into the branches to ensure that they set. It also adds character.

Branch development: If a branch is long and has no secondary branching the best way to encourage side branching is to remove all old leaves and cut new leaves in half
(fig 3)



(fig 4)

This opens the interior to the sun and slows down the apical growth. The result will be development of many secondary branches (fig 5)



If the branch is short and you want to start developing ramification as the branch grows – the best way is to cut the branch back to the older leaves and reduce those in half (*fig 6*).



This will encourage many new branches to sprout at or near the cut (*fig 7*)



All I need to do then is to pick two best suitable for the design, let them grow, and repeat the process. This way very good branch structure can be developed in relatively short time. When branches are long and leggy and start turning woody it is possible to reduce branches in just two growing seasons. The first step is to wait until current growth spurt leaves are a couple of inches long, then cut off all old leaves, leave only 4 to 6 new leaves at the tips of branches and cut them in half. This will cause new buds will swell all over the branches. When they get about 1/4" in length cut the branch all the way back to desired length. As long as there is at least one strong bud left behind, the cut tree will have enough momentum to grow new leaves. This technique requires precise timing and some experience. Be sure to practice on less important trees or branches you won't mind sacrificing.

Leaf reduction: After the tree is styled you can begin leaf reduction. This is done by removing old leaves and cutting new growth in half for 2–3 consecutive growth spurts. The result will be smaller leaves with tighter internodes. After first year just keep new growth in check and tree tight and the new leaves become smaller. Using this technique will produce leaves about quarter of normal size. Do not fertilize before or after leaf pruning. Wait until new leaves are fully opened.

Remember for optimum success, always work on strong, healthy trees!

Nourish trees back to health first if not actively growing. Let collected material establish for a couple years, before starting to style.

After a few years of maintaining a tightly styled tree, you might see a decline in health, which is shown by a reduction in new growth (when all other *Podocarpus* will have new branches all over, this one will have only a couple of branches active).

Let the tree grow freely for some time to regain strength. This decline can also be a sign

of the tree being root bound. Check your records for when the tree was last repotted. Don't let this condition continue, repot as soon as possible. The longer the tree is in decline – the longer it will take to recover.

Jin and Shari are always good design elements for *Podocarpus* bonsai. The wood is easy to carve and fiber pull. As the tree ages the trunk will twist, the bark will flake, adding to a more aged appearance.

I prefer to remove the scales and brush the trunk with a steel brush (which can be done easily when the trunk is wet). This exposes new bark with a great burgundy color that makes a nice contrast to dead bleached wood (*fig 8*)



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