

Tree Profile: Japanese Black Pine - *Pinus thunbergii*

General Information: The classic king of Japanese bonsai trees, the Japanese black pine can reach heights of 40m in nature and is native to coastal areas of Japan and South Korea. The needles come in groups of two and are naturally 70 – 120 mm long, but reduce well under bonsai culture. Bark is grey on young trees and small branches, changing to black and plated on larger branches and the trunk; becoming quite thick on older trunks.

The tree usually grows naturally in locations where there are frequent storms, often on ocean cliffs, enduring the buffeting of the elements. For that reason, it is considered a masculine tree and from that springs the challenge of expressing its character as bonsai.

Because of its resistance to pollution and salt, it is a popular horticultural tree. In Japan it is widely used as a garden tree both trained as Niwaki or sculptured trees and untrained growing as an overstory tree. The trunks and branches are trained from a young age to be elegant and interesting to view. It is one of the classic bonsai species, requiring great skill and patience over many years to train properly.

The Japanese black pine, along with the Japanese red pine *pinus densiflora*, is a dual flush pine species, meaning that if new growth is removed in late spring to early summer, a second flush of growth will occur in the same season. This growth habit is especially useful in bonsai training.

Position: Full sun, all year round for best growth and health.

Watering: Check daily – water only if the soil is drying out. Pines prefer free-draining soil. Water very sparingly in winter, and offer extra protection from heavy continual rainfall if necessary as black pines can be prone to root rot.

Feeding: For developing trees, feed heavily in spring, summer and autumn, less so in winter. For advanced trees or trees in refinement, feed heavily in spring up until decandling, then remove all fertiliser until mid autumn to keep new candle growth small, then feed heavily until winter.

Repotting: Every 2 – 5 years in late winter to early spring, as needed, in a free-draining potting mix. Can also be repotted in autumn if desired and with proper after-care to guard against root rot. Don't bare root. Preserve a sample of any white fluffy mycorrhiza fungus present in the root ball, as this is considered beneficial to the tree's health. Introduce the sample into the new potting soil.

Pruning & Wiring: For developing trees, prune in autumn to set the tree up for the following season's growth. Use long low sacrificial branches to promote trunk girth and taper. Keep other branches in proportion by pruning back outer twigs to healthy inner shoots where possible. For refining trees, decandle in early summer to promote new shoots with smaller needles, and back budding. Wire at any time, but generally following pruning. NOTE: black pine refinement is a complex skill – seeking advice from experienced growers is recommended.

Propagation: Most black pine are grown from seed, as it is very difficult to strike cuttings. Seed is sourced from two year old cones.

Pests and diseases: Generally free from pests and diseases in Australia, although the occasional caterpillar will try to make its home in the needles, and is easily removed by hand when noticed. Root aphids will also attack – look for reduced vigour and yellowing in some branches.

Styles: Most styles can be developed, including informal upright, slanting, semi-cascade, cascade, and literati. Larger size bonsai are favoured, but shohin size can be achieved if skilful.

Cultivars: Many cultivars of *pinus thunbergii* exist around the world, though fewer are available in Australia.

Pinus thunbergii "Yatsubusa" – a dwarf version of the black pine.

Pinus thunbergii "Nishiki" – a black pine with heavily "corked" bark.

Sources: Wikipedia; Bonsai Today No. 10; Tomlinson – "Bonsai Pocket Encyclopedia"; Lewis – "Bonsai – A Care Manual"

