

Tree Profile: Cedar - *Cedrus species*

General Information: In terms of taxonomy (classification), this is a troublesome group. There are many trees which are called cedars but aren't. It should be noted that there are only 4 trees in the cedar genus. All true cedars originated in the Old World - the Mediterranean and the Himalayas. Cedars are large evergreen trees with grey bark - smooth at first, becoming rough with age - and erect, woody cones. Cedar wood has historically been important in commerce, and remains popular today for its fine scent.

The three most common species here are *Cedrus deodara* (Himalayan cedar), *Cedrus libani* (Cedar of Lebanon) and *Cedrus atlantica* (Atlas Cedar). For the purposes of cultivation Lebanese and Atlas cedars have the same requirements.

Cedrus deodara is now the most commonly found cedar in the nursery industry which is because of the ease with which it is seed raised and the speed of its growth, but from the point of view of a bonsai grower it is inferior to the other 2 species due to the unruly way it carries its needles. It is possible to make good bonsai with *deodara* however it requires a great deal of pinching to create dense foliage pads whereas the other 2 species develop these with very little encouragement.

Deodara has longer "droopier" needles whereas the Atlas cedar has shorter and stiffer needles.

Lighting: Full sun year round.

Temperature: Handles all Melbourne temperatures without skipping a beat. Frost damage on new shoots may be an issue in colder areas.

Watering: Cedars have a reputation of being a little sensitive to over-watering and should be allowed to dry out slightly between watering. Needles will turn yellow if over-watered.

Feeding: Feeding should commence with the swelling of the buds in spring and continue throughout the growing season. Feed heavily to maximize growth when developing the trees.

Pruning and Wiring: Tip pinch new shoots to prevent elongation and promote back-budding. Clean out needles hanging below the branches. Wiring can be done at any time. Wire needs to be left on the tree as long as possible as cedar branches are very springy, but remove when the wire starts cutting in. It will probably be necessary to rewire in order to maintain the desired branch position. Cedars generally require wiring throughout their bonsai life. Cedar bonsai generally look better with branches wired below the horizontal and the sub-branches arranged in a series of steps, being the regular growth pattern of this species.

Propagation: Generally grown from seed, with a cold-stratification process of one month prior to sowing. Sow seed in spring. Blue Atlas cedars are generally propagated through grafting in late summer. Softwood cuttings may be taken in spring or hardwood cuttings in Autumn.

Repotting: Cedars have a reputation for being touchy about root pruning, however this is probably due to people repotting them at the wrong time of the year. Cedars should never be repotted with new buds swelling or when covered with soft new growth. Local experience indicates that the best time to repot cedars is in January or February, when they do not miss a beat under our Melbourne conditions. Bare rooting should be avoided.

Pests and Diseases: The odd caterpillar may brave the sharp needles, but is not generally a serious problem. Bark beetle and honey fungus have been reported overseas, but are not generally found locally.

Species Suitable for Bonsai:

Cedrus atlantica: Atlantic cedar, Atlas cedar - a short-needled (less than 25mm) variety, the Atlas cedar has pale grey bark and a conical profile. The species has green to bluish-green needles.

Cedrus atlantica glauca: blue Atlas cedar - A steel blue cultivar.

Cedrus brevifolia: Cyprus cedar, *Cyprian cedar* - A very slow growing tree, with short, dark green needles.

Cedrus deodara: Deodar cedar, Indian cedar - the largest cedar. Best used only for large size bonsai, it lacks the refinement of other cedars.

Cedrus libani: Cedar of Lebanon - in nature, Cedar of Lebanon can grow to be 30m tall. It has an unusually spreading, rounded profile for a conifer, and is often seen with multiple trunks. Needle length is about 25mm.

Cedrus libani 'Green Prince' - Grows very slowly, only 45cm in ten years. Very short dark green, almost black, needles. Highly recommended for bonsai, but rare and expensive.

Cedrus libani 'Nana': dwarf cedar of Lebanon

