# JUNIPERS by Pieter De Bruyn

Along with Pines and Japanese Maples, Junipers are one of the three most frequently used genera for bonsai. Juniperus is a genus of 50+ species of evergreen, coniferous shrubs from dry forests and hillsides throughout the world.

Junipers have foliage of two types, needle-like juvenile foliage and scale-like adult foliage, species that exhibit predominantly one or the other are used for bonsai cultivation. (see picture below) The range of colour of the foliage ranges from steely-blue-greens to light greens occasionally with silver or gold hues.

Most of the classic Juniper bonsai in Japan have been collected as yamadori from the mountains and can reach ages of 200 years or more. Many display large amounts of natural and artificially created deadwood called jins and sharis which are bleached brilliant white with lime-sulphur.



## Species and varieties suitable for bonsai

The classic Juniper for bonsai is often referred to as the Chinese Juniper. This is a naturally occuring hybrid species called Juniperus x media which is a cross between J.chinensis and J.sabina. (Confusingly Juniperus x media is also referred to in some textbooks as Juniperus pfitzeriana). The foliage can have a mixture of adult and juvenile foliage and as this combination can disrupt the design of a bonsai so varieties of J.media that display only one form of foliage tend to be used. Juniperus x media 'Blaauw' (named by a Dutch nursery 'Blaauw & co') is a strong growing conifer which carries bluish grey-green scale-like adult foliage. As with other J. x media, if needle-like juvenile foliage appears it can be pinched out until adult foliage appears.

Juniperus squamata (needle foliage), J.sargentii (scale foliage), J.chinensis, J.Sabina, J.horizontalis procumbens, J.communis hornbrookii are popularly used as can dozens of other species and varieties. What should be avoided however are the golden and variegated leaved varieties that are not best seen as bonsai.



Needle foliage of J. procumbens and Scale foliage of J. chinensis.

# Bonsai cultivation notes

#### Position

Full sun though Junipers with predominately scale-like foliage benefit from a little shade from the midday sun. During winter protect during frosts below -10°C but coniferous trees should not be over wintered in dark outbuildings unless temperatures are consistently below -10°C, at this point there is no requirement for light. Never try to grow Junipers indoors, though they may seem to tolerate indoor cultivation at first, poor humidity, lack of light and dormancy will eventually kill them. Dead Junipers can continue to display normal foliage colour for weeks or even months after they have effectively died.

# Watering

Ensure Junipers are not over watered as they suffer root rot easily, foliage should be misted frequently to help keep pores free of dust enabling them to breath. In the case of trees that have been recently repotted or have root problems, misting is essential as conifers are able to absorb enough water through their leaf surface to maintain health until the roots are able to support the tree themselves. Misting also avoids excess transpiration and water loss on hot summer days.

Spray the foliage with water daily during the growing season. Water when the soil is moderately dry (to a depth of 1/2 to 1 inch) but do not let the soil dry out completely.

# Feeding

Feed fortnightly; high nitrogen fertilizer from start of growth in Spring until mid-summer, balanced feed until late summer followed by low nitrogen throughout winter.

# Repotting

As necessary. A free-draining soil mix should be used. Repot in early to mid-spring as new growth appears though many Juniperus varieties can be repotted as early as August. Ensure that all grit or stone used in a soil mix is cleaned as alkaline deposits will adversely affect the tree. For Junipers suffering <u>root rot</u>; cut out all rotten roots and plant into pure palm peat for a year. The peat will promote vigorous root growth in Junipers whilst halting the onset of further rotting of roots.

Reduce the roots gradually, removing no more than one third of the roots at each repotting.

# Wiring:

Wiring is best done in autumn or early winter, so that the branches can become accustomed to their new position while the tree is dormant. Wiring done at other times must be watched carefully for signs of wire cutting into the bark, and must be removed immediately if this happens. If necessary, the tree can be re-wired after removing the old wire. Trees wired during winter will require frost protection at temperatures below -5°C.

#### Pruning

Junipers need continual clipping out to keep their foliage compact throughout the growing season. As with all conifers, branches should always be left with enough foliage to support them or they will die off. Try not to start cutting back until a month after visible growth first appears. Then foliage should be thinned out to reduce the volume of old inner growth that yellows and drops. Foliage pads should be pruned strongly around dominant growth areas.

## Propagation

Root ripe wood cuttings in Autumn, air-layering.

#### Pests and diseases:

Junipers are a favorite victim of red spider mites. If the tree appears weak, with yellowing foliage, it may have spider mites. To check for spider mites, hold a sheet of white paper under a branch and gently shake the foliage. If the paper comes away with many small dots that move, it has spider mites. To combat spider mites, spray with insecticidal soap or a nicotine solution (which can be made by soaking tobacco in water overnight).

#### Styling

All forms except broom in all sizes.

## General information:

#### Juniperus chinensis sargentii:

In Japan, this tree is called "shimpaku" and thus it is often referred to in western countries as "shimpaku juniper". The shimpaku is native to Japan, the Kurile Islands and the Sahalin peninsula. Its natural habit is prostrate and it prefers rocky, well-drained soils. In its natural range, it is most often found growing near the sea. The foliage is needle-like on young trees and scale-like on older trees. The fruit is a small, hard, bluish berry.

#### Juniperus procumbens nana:

This is the tree that is most often used for the ubiquitous "mall bonsai". In spite of this bad press, it does in fact make a fine bonsai if it is properly trained and cared for (unlike the average "mall bonsai").

This juniper has a low, spreading habit that makes it ideal for cascade and semi-cascade styles. Specimens grown in a nursery or specifically for bonsai can be used for many styles, but probably not for formal upright. In nature it grows as a small ground-cover shrub. The foliage is bright green