

## JUNIPER – JUNIPERUS by Jonathan Cain

This article is written for the climate on the South African Highveld, which is summer rainfall, dry climate and temperatures between -5 and 30 deg C.

### Species and varieties suitable for bonsai.

Juniper is one of the most popular species in the world, used in bonsai. This is due to their adaptability, toughness, elegance and beauty. There are about 60 species that range throughout the northern hemisphere. Tree growth ranges from 30 meters to ground cover and can grow to many thousands of years old.



Junipers are evergreen. Juniper for bonsai is often referred to as the Chinese Juniper. The foliage can have a mixture of adult and juvenile foliage and as this combination can disrupt the design of a bonsai. If needle-like juvenile foliage appears it can be pinched out until a mature adult scale-like foliage appears.



Popular species, *J. communis*, *J. sargentii*, *J. sabina*, *J. horizontalis*, *J. procumbens*, *J. sinensis*. There are dozens of other species and varieties.

*Juniperus procumbens nana* by Denise Cain

### Bonsai cultivation

#### Position

Semi shade though Junipers with predominately scale-like foliage benefit from full shade from the midday sun. All plants should be protected from frost if possible. *Juniperus* is frost tolerant. Keep Junipers indoors for no longer than 2 weeks. Though they may seem to tolerate indoor cultivation at first, poor humidity and lack of UV light can damage them and kill them. Dead Junipers can continue to display normal foliage colour for weeks or even months after they have effectively died.

#### Watering

As with all bonsai, the soil composition and atmospheric conditions will determine the required amount of water. Junipers like to be watered. Foliage should be sprayed frequently to help keep pores free of dust enabling them to breath. In the case of trees that have been recently been 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 all the time and do not let the soil dry out completely.

#### Feeding

Feed continuously a balanced feed throughout the year. We find organic pellets work well,

## Repotting

As necessary. A free-draining soil mix should be used. Repot as necessary, but early to mid-spring as new growth appears is best, especially if the tree has been pruned and wired at the same time. Pruning, wiring and repotting, all at the same time, usually leads to death.

Reduce the roots gradually, removing no more than one third of the roots at each repotting. Keep the roots moist while repotting. Replace some of the original soil to keep the Mycorrhizae.

## Wiring:

Wiring is best done in spring, so that the branches can quickly grow to their new position. Watch 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. Wiring through winter can cause the branch to die. Trees wired during winter will require frost protection at temperatures below 0°C.



Juniper by Amy Liang

## Pruning

Junipers need continual clipping out and nipping 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. Severe pruning(40%) will result in the tree stressing and juvenile foliage appearing. Removing all foliage may result in the branch dying. 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. Creating good adult foliage pads takes a few years. As a rule of thumb, select 3 foliage tips and remove the centre one, to give a compact growth. Cutting and pruning may result in brown tips. This can be slowed by misting the trees with cool water (16deg) after pruning.

## Propagation

Root ripe wood cuttings in Autumn and mid winter works best. Use a rooting hormone. The best success is by taking heel cuttings. Rooting takes from 4-8 months.

## Pests and diseases:

Junipers are a favourite victim of Cypress Aphids. If the tree appears weak, with yellowing foliage, which later turns brown, it may have aphids or spider mites. They inject a toxin into the plant while sucking the sap for food. Despite its brown appearance, the plant remains pliable. The aphids are 2-4mm long and are difficult to see. To check for aphids and 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 mites or aphids. To combat mites and aphids, spray with an insecticide. Spray again in two weeks to rid the plant of eggs that may have hatched.

### **Styling**

All forms except broom in all sizes. Dead wood is very hardy and the species lends itself to jins and sharis, which should be preserved and can be bleached white with lime sulphur.

No good for broom style.

### **Juniperus procumbens nana:**

This is the tree that is most often used for the ubiquitous "mall bonsai". It does make a fine bonsai if it is properly trained and cared for.



Juniperus procumbens nana has a low, spreading habit that makes it ideal for cascade and semi-cascade styles. Specimens grown for bonsai can be used for many styles, except for formal upright. In nature it grows as a small ground-cover shrub. The foliage is bright green, compact and dense.



Juniper by Amy Liang