

Chinese elm is a somewhat masculine tree and so can be styled to incorporate a ragged, scarred or hollowed trunk in virtually any bonsai style. While not so feminine as a maple, they can also be made convincing as a delicately styled tree, perhaps best shown in group plantings or multi-trunk styles. Such is the versatility of the species.

Chinese elm Cultivars

Ulmus parvifolia 'Catlin': This cultivar will produce small leaves and twiggy branches. The leaves are dark green and shiny. One other quality of this cultivar is the horizontal branches it can produce.

Ulmus parvifolia 'Cortcosa': This cultivar will produce a very corky bark which makes it a very attractive cultivar producing nice specimen. On the down side, it will produce large leaves that will need leaf reduction technique applied to them in order to keep all things balanced.

Ulmus parvifolia 'Hokkaido': A very popular cultivar because its sport so many bonsai qualities. Firstly, this cultivar is a fast grower, second, it as very tiny leaves, third, it as short internodes and lastly, it as corky bark at a very young age. On the down side, it is a very fragile plant, so handle with care, especially if you wire your plant. The best method for developing this tree is clip and grow.

Ulmus parvifolia 'Seiju': This cultivar is known to be the big brother of the Hokkaido cultivar. It will presents the same bonsai qualities but on a larger plant. Being a naturally larger plant, it can be easily wired as the wood and stem are more flexible.

Ulmus parvifolia, var 'Drake', USDA Hardiness zone 7 to 9. has small, dark green leaves, sweeping, upright branches forming a rounded crown and greater leaf retention being almost evergreen in CA and FL.

Ulmus parvifolia, var 'Dynasty': has smooth dark grey bark, smaller leaves and is vase-shaped, with red fall color in the north.

Ulmus parvifolia, var 'Frosty': has a small (.75 inch long) white-margined leaf which may revert back to green.



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Chinese Elm Care Sheet



Brought to you by
S & S Bonsai of Colorado Springs, Colorado
(Most of the included information is obtained from several
online sources.)

*["Live as if you were to die tomorrow. Learn as if
you were to live forever."
— Mahatma Gandhi —](#)*

The Chinese Elm

(*Ulmus parvifolia*)

General Information: Chinese elm is one of the best choices for bonsai cultivation. It is among the most adaptable to varying climates and is often characterized as "nearly impossible to kill." Its growth characteristics are well suited to bonsai development and a good structure is quite easy to achieve with a minimum of techniques. The leaves are on the small side and will reduce readily. While it is, like most bonsai, best suited to the outdoors, it will usually tolerate extended periods of time indoors with good light. All of these factors add up to excellent material for both beginners and experienced enthusiasts.

The Chinese elm is native to China, Korea and Taiwan and usually grows in a spreading broom shape. It will in some instances keep its leaves well into Winter or may even fail to drop many of them during milder cold seasons.

The bark of this elm comes in a variety of textures depending on the variety. There are rough barked varieties and smooth barked varieties. The rough barked trees have a dark brown, corky bark that forms quickly on 3 to 5 year-old wood. The smooth barked types have a gray or silver bark that shows virtually no texture, except when, in some varieties, it exfoliates to show the orange or tan under-bark. Some varieties are more prone to exfoliation and can have a permanently mottled appearance.

Chinese elm is given to genetic anomalies and there are several sports of the species. Among them are "Hokkaido" and "Seiju", which grow almost frond-like with tightly bunched, alternating leaves on their shoots. Also "Catlin" which is a dwarf variety that has very small leaves and is quite slow growing.

Ulmus parvifolia/Chinese Elm are often sold as indoor bonsai and as such are acclimated to indoor growing conditions, however Chinese Elms are temperate trees and fully frost hardy. Chinese Elms grown indoors (or in climates with very mild winters) will remain evergreen whereas outdoor cultivation results in a deciduous tree.

Though Elms should be able to cope with the adverse growing conditions indoors, they are never as vigorous

as their outdoor counterparts. To be entirely frost hardy your Chinese Elm must spend the Autumn outside to harden up for the Winter; never place a Chinese Elm that has been grown indoors straight outside during the Winter,

Given protection from cold winds and mulching of the pot with straw, soil or bark, Chinese Elm bonsai will actually cope with temperatures of -10°F. (Zone 6 Winters). Chinese Elms planted in the ground will survive in zone 5 Winters; that's temperatures down to -20°F (-28°C).

Ulmus species and in particular *Ulmus parvifolia*/Chinese Elm are often confused with *Zelkova* species, in particular *Zelkova serrata*/Japanese Elm. *Zelkova* are classed as a separate genus to *Ulmus* as they have fruits that are unwinged as opposed to the winged fruits of *Ulmus*. *Zelkova* also differ in that they have single-toothed leaves whereas *Ulmus* have double-toothed leaves.



Ulmus parvifolia



Zelkova

(*Zelkova* are listed under their own species guide).

CARE

Temperature: Winter protection needs will vary from tree to tree, but as a general rule, they can endure temps down to 20F just fine. Take care to keep the roots from too much cold by mulching the pots into the ground or wrapping them with some insulating material. Chinese elms have fleshy roots that can easily be damaged if they are allowed to get too cold or have to endure freezing and thawing in a cycle. If the tree gets too cold for too long, loss of some of the fine ramification may result.

Lighting: Chinese elms will, in general, prefer full-sun or near full-sun. The smaller leaved varieties, like Seiju, must have full sun or they will become weak and sickly. On trees with well developed ramification, a shady sitting location may lead to interior shoot dieback. Another result of too much shade is overlarge leaves and longer internodes. Only in areas where Summer temperatures are excessively hot should Chinese elms be kept in partial shade, but because of different tolerance levels of individual trees and differing sunlight/heat levels based on geography, you will have to find your own appropriate level of exposure for your trees. High pot and soil temperatures may result from full-sun placement, but can be remedied by shading the pot, allowing the tree to get the most available sunlight.

In Winter, they may keep some or all of their leaves. If this is the case, be sure to keep them in good light as too much shade may cause them to lose more of their finer shoots.

Watering: Chinese elms will grow in nearly any soil medium and their roots should stay moist, but they do not like having wet feet on a continual basis. Too much water and the leaves will turn yellow and fall off. Chinese elms will drop a few yellow leaves when new buds are coming in, don't mistake this as a need for water and over-water your tree. Don't water in full sun, the cool water touching the warm roots can shock your plant. Take caution when moving your plant from one location to another, try to acclimate your tree to new conditions whenever possible. Water heavily laden with chemicals can cause the tree to expel the chemicals and minerals through the base of the trunk. Rain water or water which has been allowed to evaporate the chemicals out is best.

Best results can be achieved by using an open, granular medium which allows for good drainage. The more inert grit used in the soil means that much more attention to the moisture levels.

Fertilizing: Chinese elms are quite fast growing. In a bonsai pot, their trunks will not thicken very quickly, but the shoot growth can be remarkable if well-fed. Once buds open in Spring, feed weekly with high nitrogen for the first month then use a balanced fertilizer, NPK 10-10-10, monthly during the growing season, use a low nitrogen in fall and winter. The Chinese elm will at times expel minerals and chemicals such as chlorine from the trunk. You can brush away the buildup or wash it off. Using rain-water or water which has been allowed to evaporate the chemicals out is best and will usually stop this from happening.

More developed trees should be fed less often to very little to keep the fine structure in check. Keep tabs on the moisture uptake for the tree. If the soil begins to take longer to become dry, cut back on the fertilization. This often happens in mid Summer when excessive heat can cause the tree to cease growth for a time.

Pruning / Training: The branches may be formed by clip and grow or by wiring. Either method will work well as they bud profusely and, once wired, will hold their new shape in a short time and quite well thereafter. If you wire the branches, keep close tabs on the growth of the branch as these elms can put on growth very quickly, causing the wire to begin to bite in in mere days. It is best to wire shoots just as they harden off if you know what shape you want to give them at this point. Wiring after leaf drop is often effective as you can easily see what you are wiring and growth will have slowed to nothing at this point. If you wire in late fall, give the tree a bit of extra protection from the Winter cold and remove the wire just before the new buds break in the Spring. At this point, the wired branches will usually be set just fine.

Allow shoots to extend 3 or 4 nodes then prune back to 1 or 2 leaves as required.

This tree can be pruned back hard and will respond with lots of new growth. Pruning of large branches during the Spring and Summer can cause heavy calluses; if necessary, the size of the scar can be reduced by carrying out major pruning work in late Summer and Autumn.

One element of Chinese elm physical structure that is often not so good is the commonly found structure of the surface roots. Most often one will find these trees with ugly, tangled masses of ropy roots well above the soil line. This is a common trait with imported elms and one to be avoided. Always look for a spreading root structure that emerges from all sides of the trunk, just as is best with any other species of bonsai. If this spreading rootage is not present, it can be manufactured by air layering or ground layering; an operation that is quite easy with elms.

Insects / Pests: Chinese elms are resistant to Dutch Elm Disease and suffer from few maladies. The only common disorder is the periodic attack of black spot fungus. This usually occurs when the tree is kept constantly too moist or in times of a wet Spring. Any of the several common fungicides will work, but those with an oil base may burn the leaves, so use sparingly and keep the tree somewhat shaded. Borers and chewing insects seem to be the only pests bothering the plant. Cankers may develop on young trunks where soil is excessively wet.

Likewise, they are not usually found to have many pest problems but for occasional attacks by aphids or scale insects. These pests will usually attack only in times of stress for the tree. Aphids may be found dining on the new, soft growth and scale insects may be found attached to the woody branches and shoots. Either may be removed by hand or one may use a mixture of vegetable oil and dish soap mixed with water, sprayed onto the tree to remove the pests. If one wants to use a toxic insecticide, know that Chinese elms seem to dislike systemics and may drop their leaves. This is usually not too damaging and the leaves will be replaced shortly in most cases.

Propagation: Sow seed outdoors in Autumn or Spring. Greenwood cuttings in Summer. Hardwood cuttings in Winter. Air-layering after spring growth has hardened. Because the dwarf varieties are sports of another plant, they can only be propagated by cutting or layering. Cuttings may be made from new tip growth taken in early summer.

Repotting: These elms may be repotted in either Spring or Fall, but Spring is always best. If you repot in Fall, be sure to protect the tree from excessive cold during that Winter. At a Spring repot, do so just before the new buds open when one can be quite ruthless in cutting back the roots, especially the larger sections. Their roots can

thicken up quickly and it is therefore wise to repot at least every other year. Repotting every year may be necessary in some cases. It is usually advisable to wash the root pad clean so that you can see everything that is in the root structure and make your cut selections with a clear plan. Root bound Elms will grow poorly.

When cutting the roots, use scissors that are very sharp. The roots of these elms, unlike other elms, are pulpy and can be crushed if care is not used. Crushed roots can lead to root rot. When cutting away very large roots, it is usually advisable to then clean up the large cut with a sharp grafting knife so that the wound edges are smooth and clean. This best promotes healing of the wound.

Some good medium mix choices include 60% akadama (granular red clay) and 40% Haydite or pumice, or, 60% inorganic grit and 40% organic matter of your choice. Again, Chinese elms are not too particular.

Design and Styling: Chinese elms have an alternating leaf pattern and naturally short internodes making nearly any styling aim possible. The trunk form on a smooth barked Chinese elm bonsai will look convincing with both a tall, thin upright form and a stocky, powerful form. Imports are known for their 'S' shaped trunks. The rough barked varieties often look best with larger trunk diameters to account for the corky bark. Like most deciduous trees, Chinese elm is often grown for its Winter silhouette which can be stunning, but because of the small size and pleasant shape of the leaf, an elm in full leaf can be almost equally stunning.

The leaf size also makes it possible to grow these elms for either large, medium or small size bonsai and maintain a great deal of realism in the image. Done with the smaller leafed varieties like "Catlin", a group planting can be quite realistic.

A single specimen can present something of a powerful image if grown with a sizable trunk and is offset by the fine tracery of ramification that is quite easy to achieve with Chinese elm. In much the same way as Trident Maple, planted in the ground these elms grow quickly and can put on plenty of size in a short time. One can use this growth habit to produce quite stocky specimens by alternately growing and chopping over a period of years. One need only be concerned with the trunk during this time as branches may be formed later after the tree is planted in a bonsai pot.