

Tree Profile: Beech - *Fagus*

General: According to *Wikipedia* the **Beech** (*Fagus*) is a genus of deciduous trees in the family Fagaceae, native to temperate Europe, Asia and North America. The European beech (*Fagus sylvatica*) is the most widely cultivated, although there are few important differences, the leaves are entire or sparsely toothed, from 5–15 cm long and 4–10 cm broad. Beeches are monoecious, bearing both male and female flowers on the same plant. The small flowers are unisexual, the female flowers borne in pairs, the male flowers wind-pollinating catkins. They are produced in spring shortly after the new leaves appear. The smooth bark is light grey. The fruit is a small, sharply three angled nut 10-15 mm long, borne singly or in pairs in soft-spined husks 1.5-2.5 cm long, known as cupules. The cigar-shaped buds are rather tender, and beech does not produce secondary buds. Nature's way of protecting these buds is for the beech to retain its dead leaves throughout winter.

Lighting & Temperature: Full sun, but semi-shade in midsummer. The European beech is the most hardy, the Japanese white beech the least. However, protect ALL from frost while young! During periods of high temperatures and low rainfall beeches may scorch, make sure the trees are adequately watered!

Watering: Frequently, especially during hot weather, to prevent the edges of the leaves from drying out. Appreciates misting! Reduce watering in winter.

Feeding: Do not feed for the first month after bud burst. Then feed every two weeks until the end of summer. Start with a high nitrogen fertiliser in spring, switching to low nitrogen fertiliser in late summer. Increasing feeding in late December to early February encourages the development of a second growth spurt.

Repotting: Repotting can be done in autumn or in spring, before bud burst, every 2-3 years for young plants and every 4-5 years for older ones in free draining soil. Carry out heavier root work during autumn repotting!

Propagation: Grafting, seeds sown in autumn, or use cold-treated seeds in spring. Air-layer in late-Spring after spring growth has hardened.

Pruning: Structural branch pruning best carried out late autumn. In winter pay attention to the bud size. Remove the large buds (**a**) from the tips of upper branches to ensure even growth over the tree. To achieve small internodes and small leaves bud pinching is very important on a Beech as it buds only once a year! As soon as the buds open you pinch out the leaves except for the first two (**b**). The weakest buds (**c**) will only produce a single leaf and no new shoot, unless the strongest buds (marked **a**) are pinched back! A beech grows slowly, and does not require much pruning. Hard pruning can be carried out in late-winter or mid-summer.

Leaf pruning every second year in late spring is important to reduce the size of the large leaves. It is safer not to defoliate the beech completely, or in the same year that it has been repotted.

Wiring: Generally not necessary. Use branch pruning to shape! If wired, protect bark as it is delicate and prone to scaring.

Pests and diseases: Beech leaf miners, scale, bark beetles, and aphids. Regular inspections of the trunk and branches are suggested for early detection of scales, Beech scale can be devastating to trees. Crown symptoms include leaves of smaller size and lighter green color than normal. In severe cases the leaves wilt and the branches die. Avoid feeding with high nitrogen fertilizers as it seems to worsen the condition of infected trees!

Styles: Formal & Informal Upright, Group Planting and Root-over-Rock.

Some species variations suitable for bonsai:

***Fagus crenata*:** Japanese white beech, more suitable for bonsai than the European beech - slightly smaller stature and leaves. The bark is sometimes bleached with lime sulphur to accentuate its white color.

***Fagus sylvatica*:** European beech, it has the darkest gray bark and darkest green leaves of all the beeches.

***Fagus sylvatica* 'Asplenifolia':** cut-leaf beech.

***Fagus sylvatica* 'Atropurpurea' ('Atropunicea'):** copper beech - it has copper red to brownish-black ovate-elliptical leaves with a smooth gray bark.

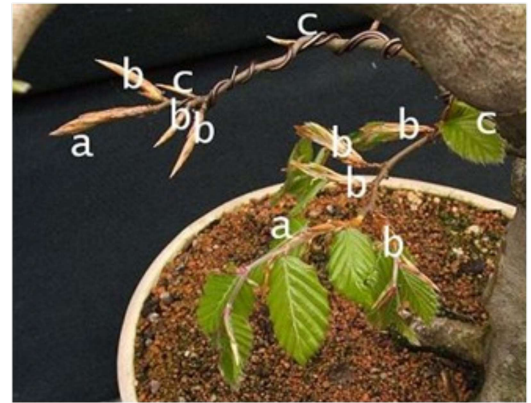
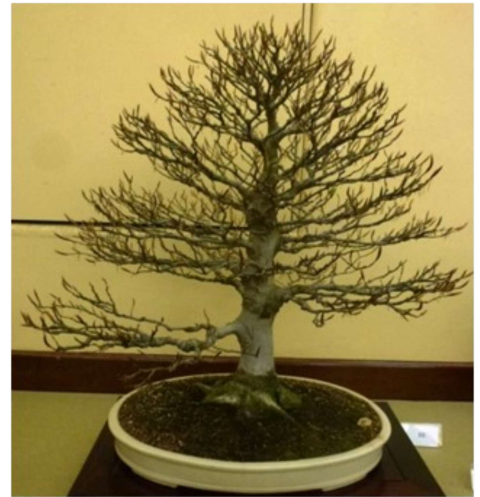


Photo courtesy of Bonsai4Me



Photo courtesy of Walter Pall

Membership Subscriptions

Membership subscriptions were due on 1st July. \$30 for singles, \$40 for families. Please pay at any club function, by cheque to PO Box 345, Mt Evelyn, 3796, or by direct deposit to BSB 633-000, Account No, 134 721257 including your name in the reference field. Please let us know if you no longer wish to retain membership.