

# Zelkova carpinifolia

## Caucasian elm



In nature, *Zelkova carpinifolia* (Caucasian elm) grows in the Transcaucasus where it occurs in scattered populations. It is one of the most iconic relict species, the largest of which can be found in the Hyrcanian Forests and the Cappadocian region. These are amongst the oldest, most species-rich forests in Western Eurasia, including, amongst others, *Albizia julibrissin*, *Parrotia persica* and *Quercus castaneifolia*. *Zelkova carpinifolia*, which is the most widely propagated, has a characteristic form: multi-stem or with low, heavy and protruding branching with a strong vertical habit, forming a dense vase-shaped crown with broom-like growths. The Caucasian elm can attain a height of between twenty and thirty-five metres and ten metres wide; and in nature there are even specimens aged 850 years old which are as tall as forty metres.

The bark of the Caucasian elm is grey and smooth when young, just like that of a beech. It only starts to peel off in small platelets in maturity to reveal a lighter under bark. The egg-shaped, toothed, dark green leaf is larger and less pointed than that of its Asiatic relative *Zelkova serrata*, it has a serrated leaf edge and the underside is paler green. *Zelkova carpinifolia* has brown twigs covered in lenticels and the trees have fertile twigs producing insignificant green flowers, and also infertile twigs without flowers. After it has finished flowering, unremarkable yellow brown fruits appear in the leaf axils of the tree.

*Zelkova carpinifolia* is a light-loving woodland tree which grows in moist and nutrient-rich soils and does not cope well with continuous wet conditions. This characteristic, slow-growing tree looks at its best in park-like settings where it can reach monumental proportions. *Zelkova carpinifolia* readily produces shoots and even as a juvenile it makes a real statement thanks to its capricious crown.

### SEASONAL COLOURS



### TYPES OF PLANTING

**Tree types:** standard trees, multi-stemmed trees, trees for climbing, shade trees, characteristic trees, solitary shrubs | **Topiary on stem:** multi-stem umbrella

### USE

**Location:** park, central reservation, in containers, roof garden, large garden, cemetery, traffic areas, industrial zones | **Pavement:** none, open, sealed | **Planting concepts:** Prairie planting

### CHARACTERISTICS

**Crown shape:** wide egg-shaped, vase-shaped | **Crown structure:** semi-open | **Height:** 25 - 30 m | **Width:** 10 - 15 m | **Winter hardiness zone:** 5A - 9B

### ASPECTS

**Wind:** tolerant to wind | **Soil:** loess, sabulous clay, light clay, sand, loamy soil | **Nutrient level:** moderately rich in nutrients, rich in nutrients | **Soil moisture level:** moist | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral | **Extreme environments:** tolerant to dryness, tolerates air pollution

### PLANTKENMERKEN

**Flowers:** heads, discrete, small | **Flower colour:** green | **Flowering period:** April - April | **Leaf colour:** dark green, buds bright green, underside pale green | **Leaves:** deciduous, ovate, ovoid, small, rough, hairy, serrate, dentate | **Autumn colour:** yellow-brown, dark yellow | **Fruits:** discrete, drupe | **Fruit colour:** yellow-brown | **Bark colour:** cream, grey | **Bark:** peeling, smooth | **Twig colour:** brown | **Twigs:** with lenticels, vertical branches, finely branched | **Root system:** deep, slightly branched