

# Zelkova serrata

## Japanese grey-bark elm, Saw-leaf Zelkova



*Zelkova serrata* (Japanese grey-bark elm, Saw-leaf Zelkova) originated in China, Korea and Japan and there, it grows in ravines, lowlands (stream valleys) and on shaded hill slopes. In the forests of Japan, the strong grower (reaching up to 30 metres in height) occurs along with other species including *Acer japonicum*, *Cornus controversa* and *Juglans ailantifolia*. In 1830, German botanist, doctor and scientist Philipp Franz von Siebold brought two Zelkovas to the Dutch Leiden University's Hortus Botanicus, where today they still remain. From the Hortus, the Zelkova started a spread throughout Europe. In cultivation, the *Zelkova serrata* becomes 10 - 12 metres tall, with a short stem and a wide, vase-shaped crown.

The rough, egg-shaped leaves of the *Zelkova serrata* bud red-violet and hairy, turning dark green with a light green underside in summer. The autumn colours of the saw-leaf Zelkova differ per tree and are a lovely gradient of golden yellow and orange-red. The tree blooms small green flowers in April. The few nuts that appear from September to November are brown and discrete. *Zelkova serrata* has light grey, smooth bark that peels off when it is older, revealing orange underbark. The bare, brown-violet branches and fine twigs make for an elegant winter silhouette.

The strong Japanese grey-bark elm is suitable for a wide range of uses as a standard or multi-stem solitary tree, and can be planted in various environments. From roof gardens to squares, and from industrial areas to parks: the ornate tree will thrive. With its low branches, the species is not as well-suited to planting in streets. The saw-leaf Zelkova will grow optimally in a warm, sunny to partially shaded environment, preferably in loamy and nutrient-rich soil, though the tree will also do well in poorer and dryer types of soil. With its deep, lateral roots, the species will anchor very well and is very wind-tolerant. Due to its outward similarities and good resistance to plagues and diseases, *Zelkova serrata* is often used to replace the elm.

### SEASONAL COLOURS



### TYPES OF PLANTING

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

### USE

**Location:** avenue, square, 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 vase-shaped | **Crown structure:** semi-open | **Height:** 10 - 12 m | **Width:** 10 - 12 m | **Winter hardiness zone:** 6A - 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:** dry, moist | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral | **Extreme environments:** tolerant to salt spray, tolerant to dryness, tolerates air pollution, tolerates heat

### PLANTKENMERKEN

**Flowers:** discrete, small | **Flower colour:** green | **Flowering period:** April - April | **Leaf colour:** buds violet, dark green, underside pale green | **Leaves:** deciduous, ovate, rough, dentate | **Autumn colour:** golden yellow, orange-red, bronze-red | **Fruits:** discrete, small, nut | **Fruit colour:** brown | **Bark colour:** orange, brown, grey | **Bark:** peeling, smooth, later on rough | **Twig colour:** brown, brown-violet | **Twigs:** bare, zigzagging, finely branched | **Root system:** deep, extensive, tap root