

Quercus bicolor

Swamp white oak



Quercus bicolor (Swamp white oak) is a type of white oak which naturally occurs in the north-eastern United States, where it grows on the banks of rivers and swamps. There, the tree grows with other species including *Nyssa sylvatica*, *Acer rubrum* and *Carya ovata* and can reach up to 38 metres in height. In cultivation, its height is limited to 20 metres with a semi-open, wide oval to round crown. The 9/11 Memorial in New York is an impressive sight where 400 *Quercus bicolor* trees were planted around the waterfall pools.

The leathery, obovate leaves of the *Quercus bicolor* bud bronze, turning dark green in summer and have a white felty hairy underside. The *bicolor* in the name comes from the fact that the top and the underside of the leaves have different colours. In autumn, the foliage has a yellow to yellow-orange and - depending on the environment - sometimes even a red-purple hue. The swamp white oak has very appealing, grey-brown bark that peels off in sheets and long strips. The swamp white oak blooms in late April, early May. The male, hanging, yellow-green catkins adds colour to the tree, but they are not a prominent feature on the tree. After blooming, the tree produces small, brown-green acorns. *Quercus bicolor* is ecologically valuable, as it is a host plant for bees, butterflies, birds and small mammals.

Quercus bicolor is perfect for avenues and squares in highly urbanised settings, as pavement, salt spray and periods of drought are not a problem for the tree. However, its natural habitat of temporarily flooded forests also makes it a great species for wadi and ecological zones. The swamp white oak can become very tall, and is therefore less suitable for use in narrow streets. For the best growth, plant *Quercus bicolor* in a sunny to lightly shaded environment in acidic soil. It cannot tolerate lime-rich soil, as that will lead to chlorosis.

SEASONAL COLOURS



TYPES OF PLANTING

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

USE

Location: avenue, square, park, central reservation, large garden, cemetery, traffic areas, industrial zones, countryside, ecological zone, bioswale | **Pavement:** none, open, sealed | **Planting concepts:** urban planting

CHARACTERISTICS

Crown shape: wide egg-shaped | **Crown structure:** semi-open | **Height:** 15 - 20 m | **Width:** 15 - 20 m | **Winter hardiness zone:** 4A - 8B

ASPECTS

Wind: tolerant to wind | **Soil:** loess, sabulous clay, peaty, heavy clay, light clay, sand, loamy soil, all soils | **Nutrient level:** moderately rich in nutrients, rich in nutrients | **Soil moisture level:** dry, moist, wet | **Light requirements:** sun | **pH range:** acidic, neutral (4.5 - 7.0) | **Host plant/forage plant:** bees, butterflies, birds, small mammals | **Extreme environments:** tolerant to salt spray, tolerant to dryness, tolerates air pollution, tolerant to short-term flooding

PLANTKENMERKEN

Flowers: catkins, pendulous | **Flower colour:** yellow-green | **Flowering period:** April - May | **Leaf colour:** buds bronze, dark green, underside white-grey | **Leaves:** deciduous, obovate, polished, underside hairy, lobate | **Autumn colour:** yellow-orange, red | **Fruits:** small, acorn | **Fruit colour:** brown-green | **Bark colour:** grey-brown | **Bark:** peeling, deeply furrowed | **Twig colour:** grey-brown | **Twigs:** hairy, bare, with lenticels, thickly branched | **Root system:** deep, shallow, extensive