

# Quercus alba white oak



*Quercus alba* (American white oak) is the most common tree species in the eastern regions of the United States. The white oak group shows the greatest similarities to the European *Quercus robur* and *Quercus petraea*. In America, they form extensive forests, usually together with other oaks and *Carya* species, but also with *Liriodendron tulipifera* and *Tsuga canadensis*. The American white oak grows pyramidal with a dense crown when young, later developing an oval to broad rounded crown, eventually reaching approximately thirty meters in both height and width.

The emerging leaves of *Quercus alba* are gray hairy and pinkish, turning glossy dark green in summer with a blue green underside. In autumn, the foliage shifts to shades of yellow to deep red. Young trees often hold their leaves well into winter. The leaves, with three to six rounded, narrow lobes, are elongated, inversely ovate, and deeply lobed. This oak blooms in May with yellow catkins. The acorn cups cover about one third of the chocolate brown acorn and have only a short stalk. The bark of the American white oak is ash gray to brown gray, divided into small, peeling plates.

The American white oak grows under a wide variety of climatic conditions, soil types, and moisture levels. Only extremely dry or very wet soils are unsuitable. In the United States, it is an important timber species. Although this tree is tolerant of road salt, its broad crown and abundant acorn production make it less ideal for use in streets and avenues. In Europe, *Quercus alba* is rarely planted, but it forms a magnificent large and wide park tree with outstanding autumn color.

## TYPES OF PLANTING

**Tree types:** standard trees

## USE

**Location:** park, large garden, cemetery, countryside | **Pavement:** none | **Planting concepts:** Landscape planting

## CHARACTERISTICS

**Crown shape:** rounded, flattened spherical, pyramidal | **Crown structure:** dense | **Height:** 18 - 30 m | **Width:** 18 - 30 m | **Winter hardiness zone:** 3A - 8B

## ASPECTS

**Wind:** tolerant to wind | **Soil:** loess, sabulous clay, peaty, heavy clay, light clay, sand, loamy soil, all soils | **Nutrient level:** low in nutrients, moderately rich in nutrients, rich in nutrients | **Soil moisture level:** dry, moist | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral, alkaline | **Host plant/forage plant:** birds, small mammals | **Extreme environments:** tolerant to salt spray, tolerant to dryness

## PLANTKENMERKEN

**Flowers:** catkins, pendulous | **Flower colour:** yellow | **Flowering period:** May - May | **Leaf colour:** dark green, underside blue-green | **Leaves:** deciduous, obovate, polished, dissected, lobate | **Autumn colour:** yellow-orange, orange-red, red-brown, red, scarlet | **Fruits:** discrete, rich fruit yield, acorn | **Fruit colour:** brown | **Bark colour:** grey-brown, grey | **Bark:** peeling | **Twig colour:** grey | **Twigs:** bare, horizontal branches | **Root system:** deep, shallow, slightly branched, highly branched, tap root

