

Quercus rubra (Red Oak)
Beech Family (Fagaceae)

Introduction:

Quercus rubra, the “red oak,” is a member of the red oak group with lobed leaves and is one of the most widely distributed oaks in North America. Red oak is a hardy tree with beautiful red or brown fall color. It has an attractive branching pattern and beautiful furrowed bark during winter months.

Culture:

Red oak prefers full sun and acidic, well-drained sandy loam. This species will survive when exposed to air pollution but develops chlorosis in high pH soils. It may be subject to attack by obscure scale under conditions of high stress.

Potential problems for oaks in general include bacterial leaf scorch, two-lined chestnut borer, oak horn gall and gypsy moth. In addition, as little as 1 inch of fill soil can kill an oak.

Additional information:

Red oak has a relatively fibrous root system and is therefore easier to transplant than other oaks. It is, consequently, readily available in nurseries.

The national champion red oak (134 feet) is in North Carolina in Great Smoky Mountains National Park. Northern red oak may be the most widely planted oak. Nursery production in containers produces trees with a more fibrous root system for transplanting.

Red oak’s specific epithet, *rubra*, Latin for “red,” refers to this tree’s beautiful fall color. Even the leaf petioles on red oak can be a bright red.

Because it is a fast-growing oak with good wood, red oak is managed for timber production. Commonly used as an ornamental tree in North America, it is one of the most popular exotic oaks grown in Europe.

Red oak has hanging male catkins that shed pollen as the leaves emerge.

The acorns are large with a shallow cap that covers only one-fourth of the acorn. Like other red oaks, acorns mature in the second year.



Botanical Characteristics:

Native habitat: Central and eastern North America; throughout Kentucky.

Growth habit: Red oak has a straight trunk and a dense, round crown.

Tree size: Fast-growing oak that can attain a height of 60 to 75 feet with a similar spread.

Flower and fruit: Female flowers are inconspicuous; male catkins are pendulous. The 3/4- to 1-inch-long acorn is covered by a shallow cap.

Leaf: The leaf has sharply pointed, coarsely toothed lobes. The upper surface is dark green and the lower surface is pale. Fall color is red or brown.

Hardiness: Winter hardy to USDA Zone 3b.