



Quercus robur 'Fastigiata' 'Fastigiata' English Oak¹

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INTRODUCTION

'Fastigiata' or upright English Oak is an upright, columnar, deciduous tree which eventually matures into a dense elongated oval shape with a short trunk and makes a striking landscape specimen (Fig. 1). Growing moderately-fast to 50 to 60 feet high and only 10 to 18 feet wide, upright English Oak was first discovered growing wild in a forest in Germany and was propagated by grafting in 1783. The 2.5 to 5-inch-long by 1 to 2.5-inch-wide leaves maintain their dark green color throughout the year until they turn brown in autumn. They often remain on the tree for some time before dropping. The attractive, dark brown bark is deeply ridged and furrowed, and the one-inch acorns persist on the tree throughout the winter.

GENERAL INFORMATION

Scientific name: *Quercus robur* 'Fastigiata'

Pronunciation: KWERK-us ROE-ber

Common name(s): 'Fastigiata' English Oak

Family: *Fagaceae*

USDA hardiness zones: 5 through 8 (Fig. 2)

Origin: not native to North America

Uses: wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

Availability: generally available in many areas within its hardiness range

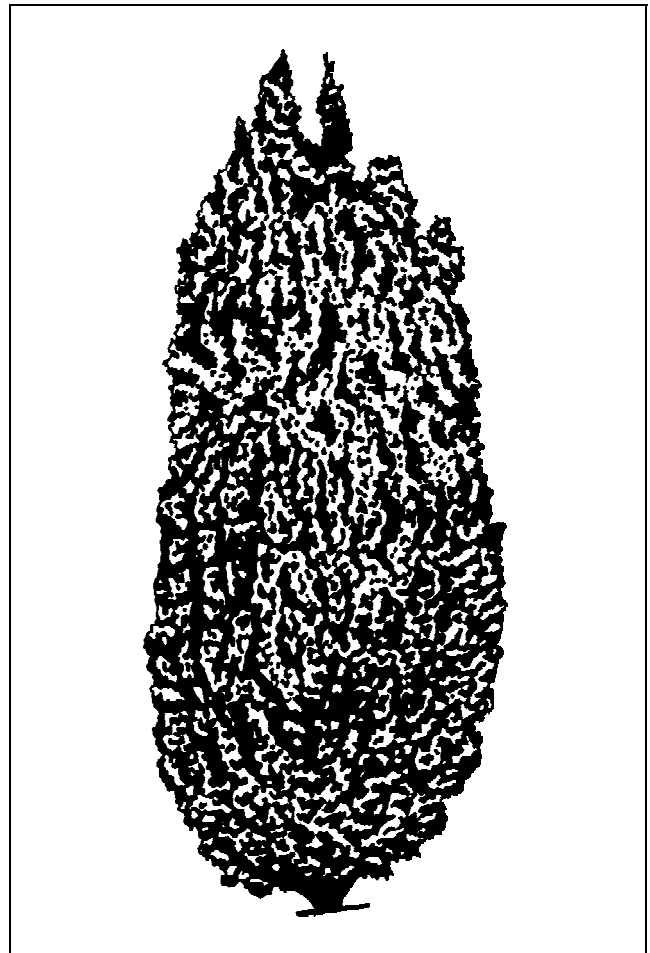


Figure 1. Mature 'Fastigiata' English Oak.

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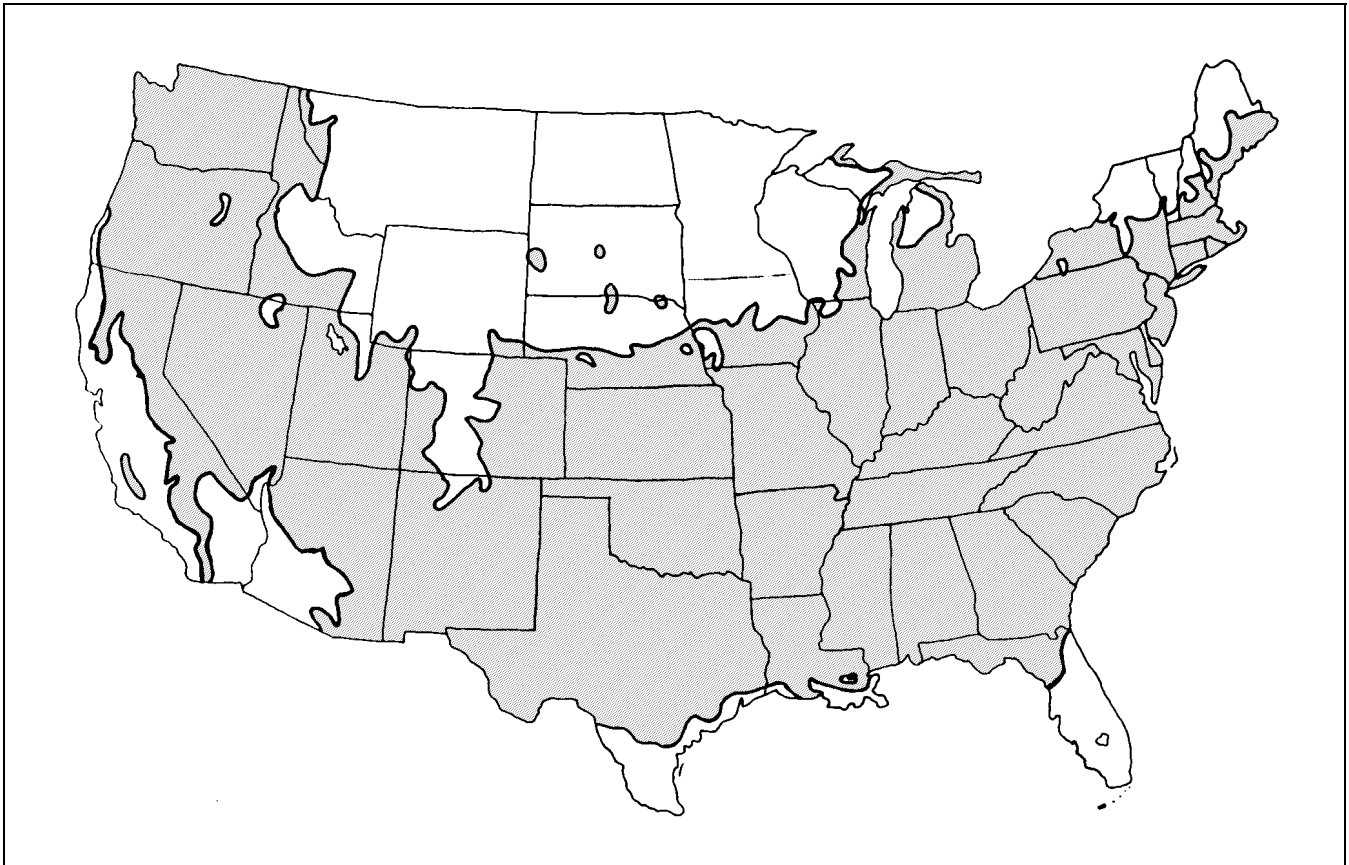


Figure 2. Shaded area represents potential planting range.

DESCRIPTION

Height: 50 to 60 feet
Spread: 10 to 18 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: columnar; upright
Crown density: dense
Growth rate: medium
Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: lobed; cleft
Leaf shape: oblong; obovate
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 4 to 8 inches; 2 to 4 inches
Leaf color: green
Fall color: copper
Fall characteristic: showy

Flower

Flower color: brown
Flower characteristics: inconspicuous and not showy

Fruit

Fruit shape: elongated; oval
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts squirrels and other mammals; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will not droop; not particularly showy; should be grown with a single leader; no thorns
Pruning requirement: needs little pruning to develop a strong structure
Breakage: resistant
Current year twig color: brown; reddish
Current year twig thickness: medium

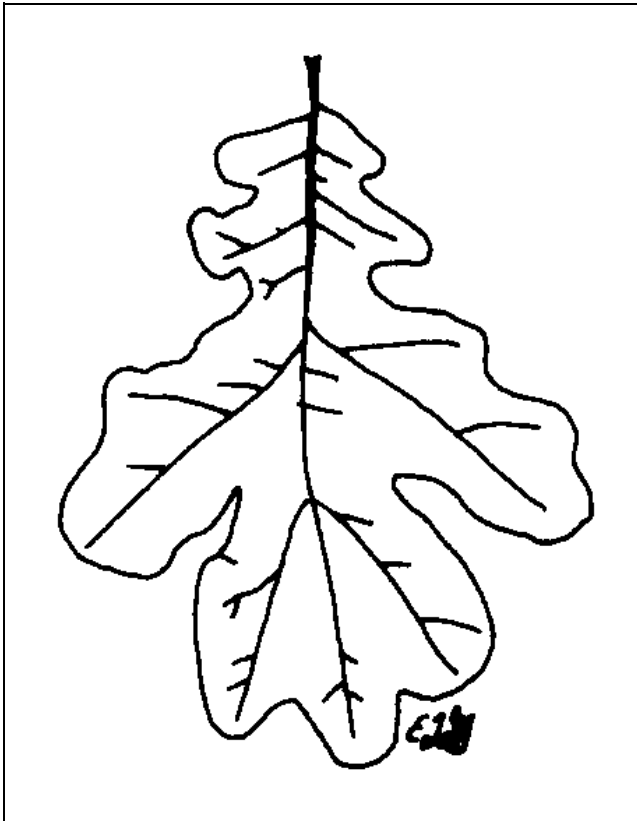


Figure 3. Foliage of 'Fastigiata' English Oak.

Culture

Light requirement: tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline; well-drained

Drought tolerance: high

Aerosol salt tolerance: high

Soil salt tolerance: moderate

Other

Roots: surface roots are usually not a problem

Winter interest: tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

Outstanding tree: tree has outstanding ornamental features and could be planted more

Invasive potential: little, if any, potential at this time

Ozone sensitivity: sensitive or moderately tolerant

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

Upright English Oak is useful in areas where there is not much room for lateral branch growth. The crown remains tight with no branches wandering away from the trunk. Some people object to the persistent brown leaves in the fall, but others like the tree for this trait. They have been used successfully for planting on 15 to 25-foot-centers along an entrance road to a commercial landscape and for downtown tree planting projects where soil space is extremely limited.

The tree should be grown in full sun on well-drained, acid or slightly alkaline soil. The tree is very tolerant of urban conditions, is adaptable and should be grown and used more. Few trees in the east are seen without powdery mildew. Locate in full-day sun to help reduce this problem. Trees in the drier climates in the mid-west probably are less affected by powdery mildew.

'Attention' also has an upright, columnar form and is reportedly mildew-resistant.

Propagation is by seed, although there is some seedling variation.

Pests

No pests are of major concern but occasionally bothered by gypsy moth and borers. There are many other potential problems.

Diseases

Some possible diseases are powdery mildew, Oak wilt, anthracnose, cankers. There are many other potential problems.