



Quercus falcata Southern Red Oak¹

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INTRODUCTION

Southern Red Oak is an excellent large, durable shade tree which reaches 60 to 80 feet in height with a large, rounded canopy when it is open-grown (Fig. 1). The deciduous, shiny green leaves are five to nine inches long by four to five inches wide, with the terminal lobe much longer and narrower than the others. Leaves fall brown over an extended period of time in fall and winter. Some defoliation is noted during the summer in droughty years, but this is probably a drought-avoidance mechanism. No permanent damage appears to come from this. The dark brown to black bark is ridged and furrowed and resembles Cherry bark, to some extent. The half-inch-diameter acorns are popular with wildlife. The trunk normally grows straight with major branches well-spaced and strongly attached to the tree.

GENERAL INFORMATION

Scientific name: *Quercus falcata*

Pronunciation: KWERK-us fal-KAY-tuh

Common name(s): Southern Red Oak, Spanish Oak

Family: *Fagaceae*

USDA hardiness zones: 7 through 9 (Fig. 2)

Origin: native to North America

Uses: reclamation plant; shade tree; specimen; residential street tree; no proven urban tolerance

Availability: somewhat available, may have to go out of the region to find the tree

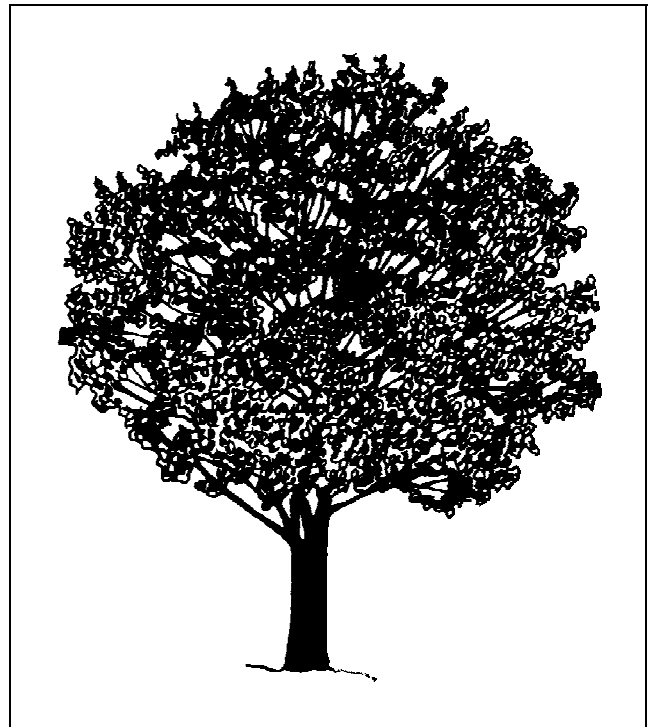


Figure 1. Middle-aged Southern Red Oak.

DESCRIPTION

Height: 60 to 80 feet

Spread: 60 to 70 feet

Crown uniformity: irregular outline or silhouette

Crown shape: oval; round

Crown density: moderate

Growth rate: medium

Texture: coarse

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Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: lobed; parted
Leaf shape: elliptic (oval); obovate; ovate
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 8 to 12 inches; 4 to 8 inches
Leaf color: green
Fall color: copper
Fall characteristic: not showy

Flower

Flower color: brown
Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: oval; round
Fruit length: .5 to 1 inch; < .5 inch
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: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: brown; reddish
Current year twig thickness: medium
Wood specific gravity: 0.59

Culture

Light requirement: tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; occasionally wet; well-drained
Drought tolerance: high
Aerosol salt tolerance: moderate

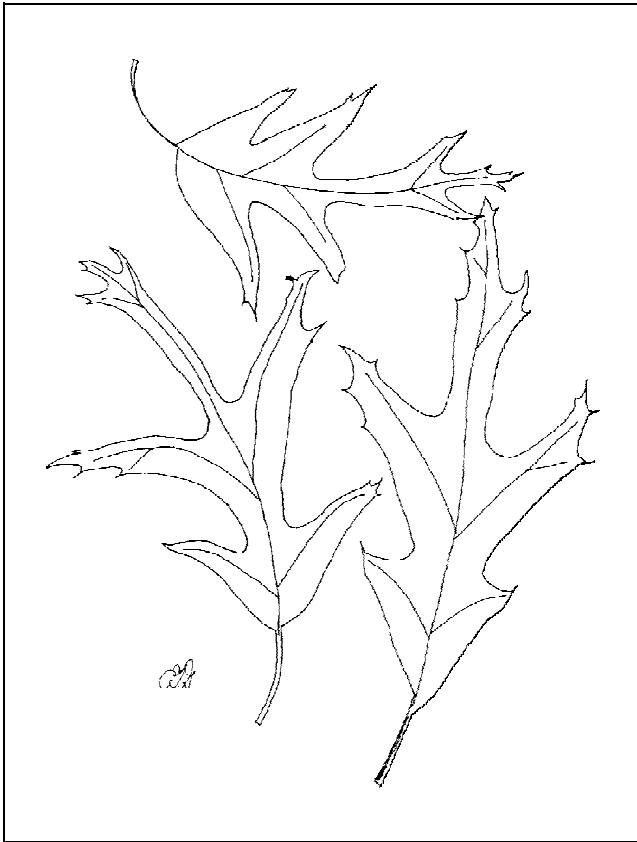


Figure 3. Foliage of Southern Red Oak.

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

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

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

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

Naturally found on poor upland soils, Southern Red Oak should be grown in full sun on well-drained soil, acid, sandy or loam (not clay). It is common on poor-quality, sandy ridges. It is well suited for planting in areas such as along roadsides where there is little maintenance after planting. The wood is used for furniture but does not have the quality of *Quercus rubra*.

Variety *pagodifolia*, Cherrybark Oak, is adaptable, growing along stream banks and ridge tops throughout its range. It may be more commonly available than the species and may be referred to as *Quercus*

pagodifolia in some nurseries. This plant may also be referred to as *Quercus pagoda*.

Propagation is by seed.

Pests and Diseases

There is a large number of potential problems. Except for oak wilt though, usually no pests or diseases of major concern. Caterpillars can defoliate trees. Fall cankerworm has been a problem in some years.