



## *Quercus falcata* Southern Red Oak<sup>1</sup>

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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

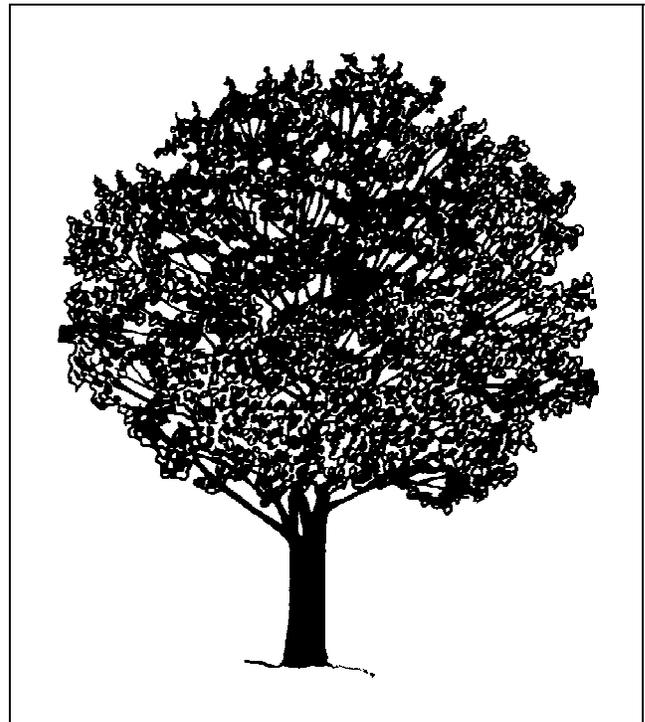


Figure 1. Middle-aged Southern Red Oak.

### 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

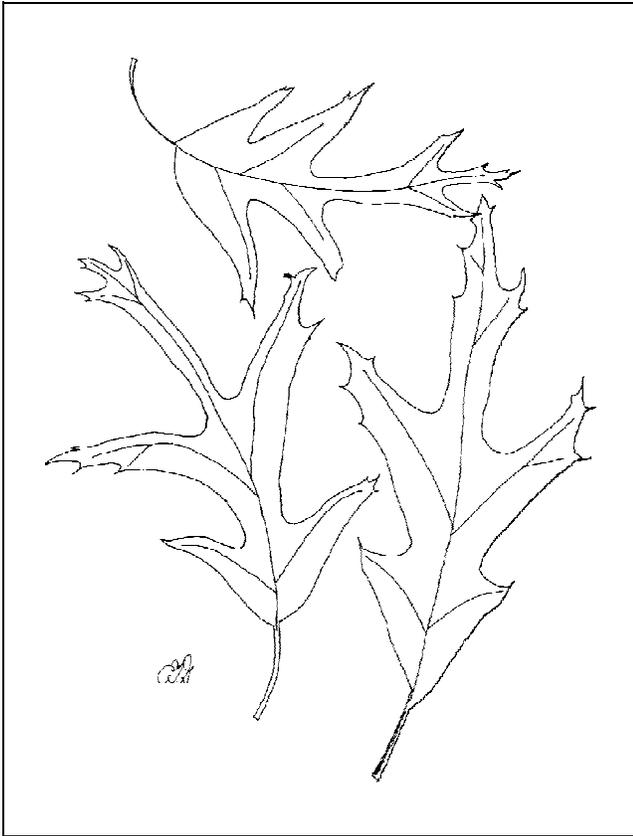


Figure 3. Foliage of Southern Red Oak.

### 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.