

Quercus falcata: Southern Red Oak¹

Edward F. Gilman and Dennis G. Watson²

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. 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.



Figure 1. Middle-aged *Quercus falcata*: Southern Red Oak

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: 7A through 9B (Fig. 2)

Origin: native to North America

Invasive potential: little invasive potential

Uses: specimen; shade; reclamation; street without sidewalk

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

Description

Height: 60 to 80 feet

Spread: 60 to 70 feet

Crown uniformity: irregular

Crown shape: round, oval

Crown density: moderate

Growth rate: moderate

Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)

1. This document is ENH-704, one of a series of the Environmental Horticulture, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date November 1993. Revised December 2006. Reviewed May 2011. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

2. Edward F. Gilman, professor, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.



Figure 2. Range

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

Flower

Flower color: brown
Flower characteristics: not showy

Fruit

Fruit shape: round, oval
Fruit length: less than .5 inch, .5 to 1 inch
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts squirrels/mammals; not showy; fruit/leaves a litter problem

Trunk and Branches

Trunk/bark/branches: branches don't droop; not showy; typically one trunk; thorns
Pruning requirement: needed for strong structure
Breakage: resistant
Current year twig color: brown, reddish
Current year twig thickness: medium
Wood specific gravity: 0.59

Culture

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

Other

Roots: not a problem

Winter interest: no
Outstanding tree: yes
Ozone sensitivity: unknown
Verticillium wilt susceptibility: resistant
Pest resistance: resistant to pests/diseases

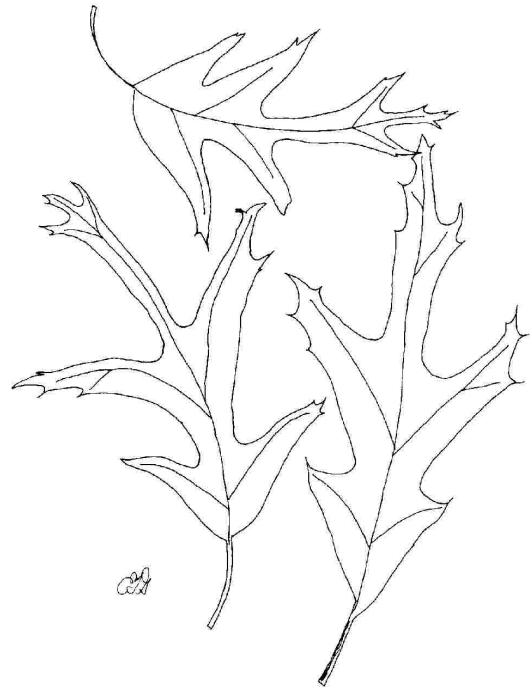


Figure 3. Foliage

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.