



Quercus imbricaria Shingle Oak¹

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INTRODUCTION

This stately, deciduous, native tree grows 40 to 60 feet tall (occasionally 80 to 100 feet) with an equal or greater spread, its broad, strong branches casting medium to deep shade below the rounded canopy (Fig. 1). The smooth, four to six-inch-long by one to two-inch-wide leaves start out life with a red to yellow cast, deepen to a rich green through the summer, then turn shades of yellow and rust again in the fall before dropping. Some leaves will persist on the tree throughout the winter. In May or early June the flowers appear as drooping yellowish-green catkins and are followed by the production of one-half to one-inch-long, dark brown acorns.

GENERAL INFORMATION

Scientific name: *Quercus imbricaria*

Pronunciation: KWERK-us im-brih-KAIR-ee-uh

Common name(s): Shingle Oak, Northern Laurel Oak

Family: *Fagaceae*

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

Origin: native to North America

Uses: large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); 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

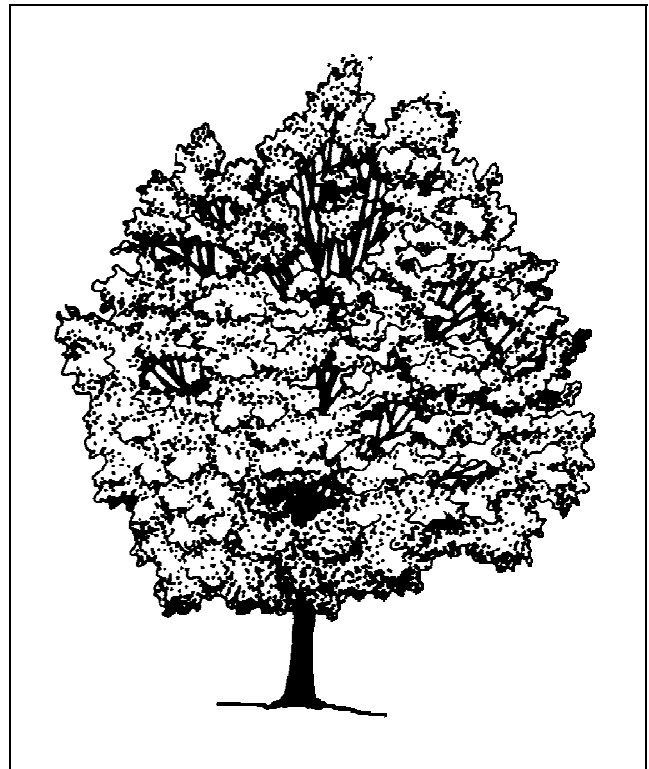


Figure 1. Middle-aged Shingle Oak.

DESCRIPTION

Height: 40 to 60 feet

Spread: 40 to 60 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: oval; round; pyramidal

Crown density: dense

Growth rate: slow

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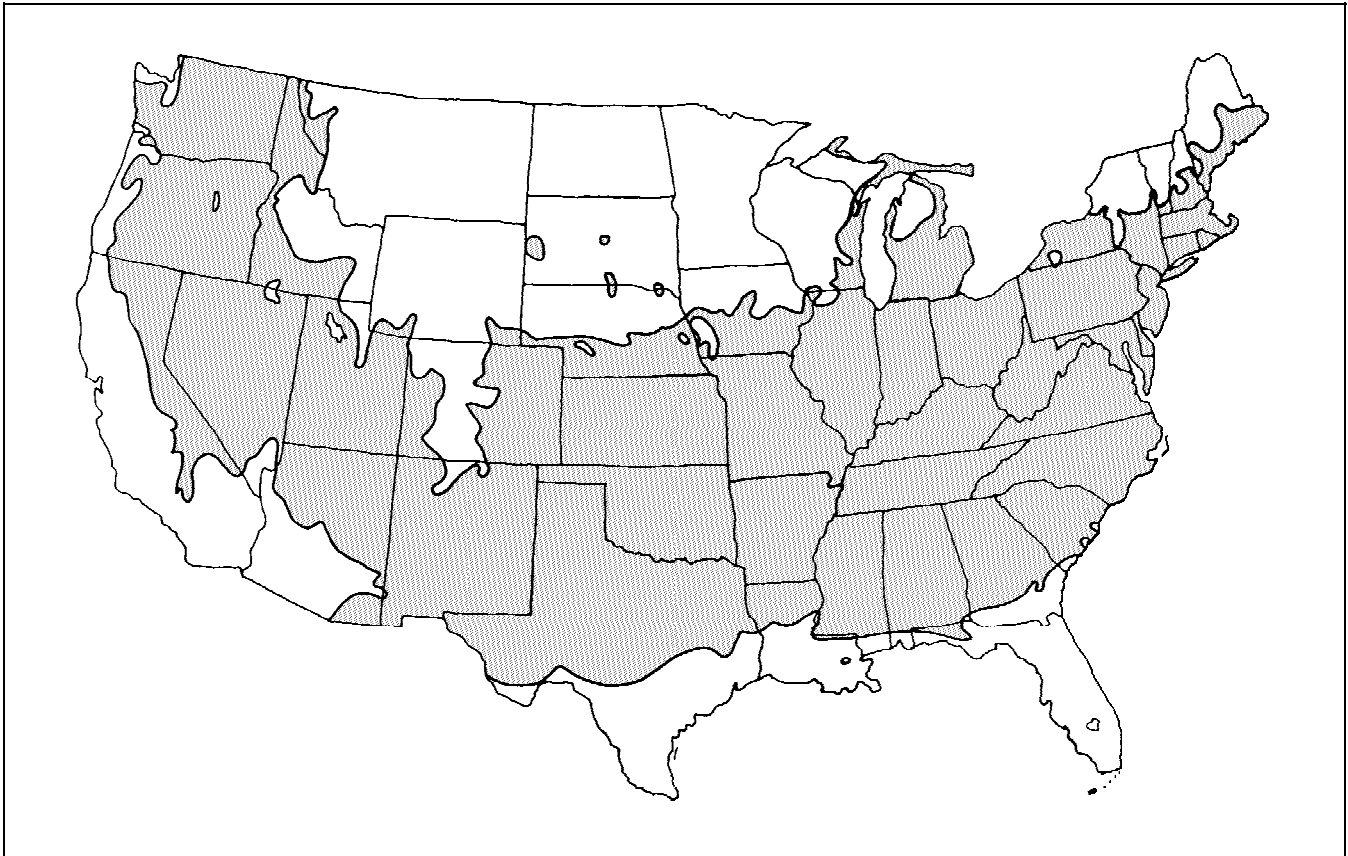


Figure 2. Shaded area represents potential planting range.

Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: sinuate; undulate

Leaf shape: elliptic (oval); lanceolate; oblong

Leaf venation: pinnate; reticulate

Leaf type and persistence: deciduous

Leaf blade length: 4 to 8 inches; 2 to 4 inches

Leaf color: green

Fall color: red; yellow

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

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: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; 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; green

Current year twig thickness: thin

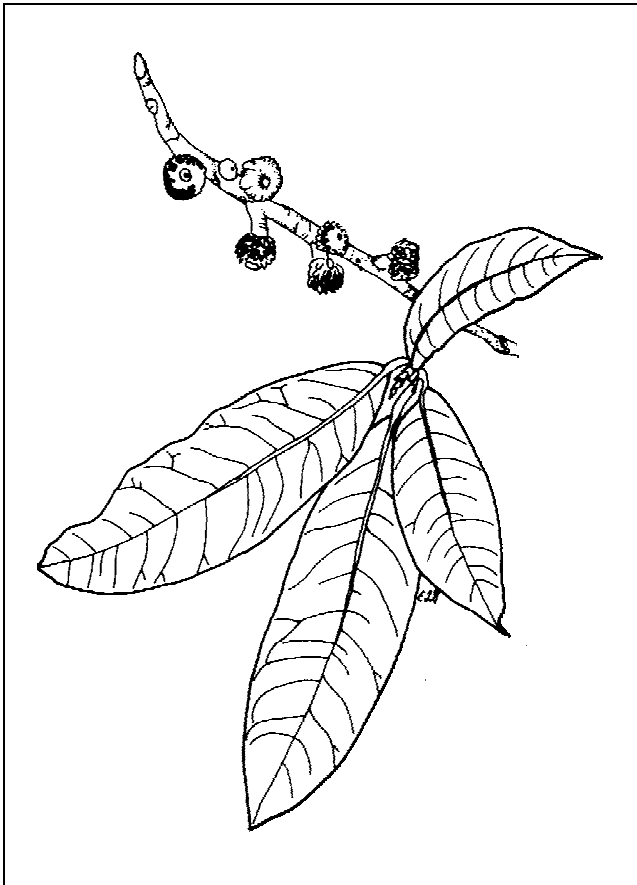


Figure 3. Foliage of Shingle Oak.

Culture

Light requirement: tree grows in full sun
Soil tolerances: clay; loam; sand; slightly alkaline; acidic; extended flooding; well-drained
Drought tolerance: high
Aerosol salt tolerance: high

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: tolerant
Verticillium wilt susceptibility: not known to be susceptible
Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

The wood of Shingle Oak is extremely durable and was used in pioneer days for split shingles. This strong, resilient nature of Shingle Oak and its pyramidal shape when young help to make it suited to use as a screen, or a durable street or specimen tree which is unlikely to be damaged by harsh winds or snow-loads. It can be planted along residential streets, but there are more adaptable trees for downtown areas.

Naturally found along streams or river banks, Shingle Oak should be grown in full sun and prefers moist but well-drained, acid soils though it will adapt to moderately drier conditions and slightly alkaline soil. It is tolerant of wet sites once established. Field-grown trees should be transplanted in springtime for best survival.

Propagation is by seed.

Pests

Some pests of this oak are borer, variable Oak and Oak slug caterpillar although natural enemies usually provide control.

Diseases

Twig gall leaf miner and powdery mildew are common diseases for this tree. Shingle Oak is also susceptible to oak wilt.