

NORTHERN RED OAK



Northern Red Oak (Quercus rubra)

Identifying Characteristics

Branching: Alternate

Leaves: Simple, lobed; bristle-tipped lobes; generally larger than northern pin oak and with shallower crotches but can be quite variable; brown to dark red in the fall.

Flowers: Monoecious (male and female on same tree)

Fruit: Acorn round to oblong, pale brown; acorn sets in a shallow saucer (not a cup); ripens in fall of second year; kernel is bitter.

Twigs: Reddish-brown and fairly stout; terminal bud-pointed and with hairy to woolly scales. Bark: Smooth, greenish to reddish-brown and often shiny on young trees; dark gray to nearly black, thick (deeply fissured) on older trees (younger branches smooth); broad flat surfaced ridges are whitish, becoming more prominent in upper portions of trunk; extremely hard—difficult to cut into with a knife.

Growth Habits

Rate: Rapid Maturity Age: 200 to 300 years Height: 60 to 80 feet Crown spread: 40 to 50 feet Roots: Taproot often not well developed; deep system, fibrous

Range: Native

Shade Tolerance: Intermediate

Soils

pH preference: 4.5 to 7.0; prefers deep, rich, moist, fine to medium textured soils on north and east slopes, and in valleys and ravines
Drainage: Prefers well-drained soils
Moisture: Prefers moist soils

Susceptibility

Insects: Twig pruner; fall cankerworm; walking stick; two-lined chestnut borer *Diseases:* Oak wilt; anthracnose; oak leaf blister *Drought:* Moderately tolerant *Salt spray:* Tolerant

Uses

Shelterbelts and/or Windbreaks: not recommended unless wildlife is a prime consideration, in which case row spacing should be at least 40 feet

Wildlife: Excellent; birds—nesting (branches, cavities), perching, escape cover, food (mast, insects); mammals—food (mast, browse, buds), dens (cavity users), escape cover; mast may be slightly lower food quality than white oak species but available through winter

Products: Sawlogs; veneer; flooring; numerous other products

Horticultural: Used as a specimen tree where there is available space; easier to transplants than most of the other oak species; available from some Minnesota nurseries