

The oaks (genus *Quercus*) are economically important species worldwide, providing timber for ships, staves for barrels, and lumber for flooring and fine furniture. Corks, tannins and dyes come from oaks, as well as valuable wildlife food in the form of acorns. Oaks have played a significant role in history and religions of the world, marking meeting places of historical figures, providing the strength to fleets of sailing ships and supporting the sacred mistletoe of the druids.

Oaks provide excellent fuelwood to heat our homes and deep shade to cool them in the summer. They are excellent landscaping trees, many exhibiting brilliant autumn foliage while others remain leafy green throughout the winter. While there is significant variation among species, their wood is generally strong and durable. On good sites, oaks grow relatively quickly, providing landscape and shade values within five to ten years. Some species, including water oak are relatively short-lived. White oaks over 300 years old are not unusual and live oaks over 500 years old have been documented.

### **Characteristics of *Quercus*:**

- Leaves are simple, alternate, and variously lobed or toothed
- No separation layer between leaf and stem developed, as do most deciduous trees
- Three to six to more terminal buds are generally clustered at the tip of the current season's growth
- Young branches tend to be five-angled raised podium-like enlargements where leaves were attached.
- Cross-section of the pith of young branches is five-angled or five pointed.

Over 300 species of oaks worldwide are divided into two groups: the white oaks and the red (or sometimes black) oaks.

### **White Oak Group**

- Leaves are rounded at tips with no sharp bristles or points. No bristle-tipped lobes or teeth.
- Light gray or brown bark usually develops and becomes scaly.
- Acorns mature in a single season and are generally sweet to the taste.
- Wood – The pores are plugged with a plastic-like material called tylose. Because of this, the wood is capable of holding liquids. The wood is moderately decay-resistant.
- Some examples of White Oak Groups are: chinkapin oak, live oak, overcup oak, post oak, swamp chestnut oak and white oak.

### **Red Oak Group**

- Many are slightly faster growers than white oaks.
- Leaves have bristle-tipped lobes, or if no lobes, the tip of the leaf terminates in a single bristle.
- Bark – Generally dark gray to gray-black and smooth when young and hard and ridged with maturity, but not flaky.
- Acorns are mature in 2 years. Bitter tasting. Remain small the first season and grow very rapidly the second season. The acorns frequently exhibit woolly or silky inner linings in a tough outer shell.
- Wood pores are open and do not hold water. The wood of red oaks is much more subject to decay than that of white oaks when used as post or other construction in contact with soil.
- Examples are: Bluejack Oak, Blackjack Oak, Laurel Oak, Shumard Oak, Pin Oak, Southern Red Oak, Turkey Oak, Water Oak and Willow Oak