# **Quercus prinus** (Chestnut Oak) Beech Family (Fagaceae)

### Introduction

Chestnut oak is a member of the white oak group with chestnut-like leaves. The chestnut oak is noted for its ability to survive on steep, rocky sites where other oaks in its range cannot. The chestnut oak has the characteristic oak form which is attractive throughout the seasons. The foliage unfurls pink-colored and becomes silvery before finally becoming dark green. The mature leaves have an attractive form and color. The chestnut oak is also known for its beautiful silvery-white bark.

### **Culture:**

The chestnut oak is used as a shade tree for large areas. It enjoys full sun and dry, well-drained soil. This oak will not tolerate shady conditions. The chestnut oak is noted for growing on steep, rocky hills where other oaks cannot survive. Its well-developed tap root makes this tree sturdy and adaptable under these unfavorable conditions. Most white oaks develop chlorosis, or the yellowing of leaves, when grown under high pH conditions. Chestnut oak's well-developed tap root makes it somewhat difficult to transplant.

Chestnut oaks may be subject to anthracnose and powdery mildew in wet years. They also tend to attract gall-producing insects. Gypsy moth infestation causes defoliation which may ultimately be fatal.

## **Additional comments:**

The chestnut oak is a stately giant. Its inner bark, like that of most other oaks, is rich in tannic acid, which is used for tanning purposes. Acorns of chestnut oak are produced singly or in pairs. They are a wildlife staple. Chestnut oak's specific epithet, prinus, is derived from the classic Greek name for a European oak, *prinos*. The chestnut oak is noted for growing on steep, rocky hills where other oaks cannot survive. Its well-developed tap root makes this tree sturdy and adaptable under these unfavorable conditions.

Unfortunately, because chestnut oak seems indestructible, it is often left on new construction sites. Without special care during house building, these trees can suffer construction damage but may not die for several years.



#### **Botanical Characteristics:**

**Native habitat:** Rocky sites in eastern United States; Kentucky native.

**Growth habit:** Broad-spreading crown.

**Tree size:** A rapidly growing tree, the chestnut oak can attain a height of 50 to 90 feet.

**Flower and fruit:** Female flowers are inconspicuous, however the pendulous male catkins look like a cloud of green smoke. The 1-1/2 inch long acorn is sweet enough to eat without roasting.

**Leaf:** Silvery-pink in early fall, the long, chestnut-shaped leaves become dark green in the summer. Fall color ranges from yellow to yellow-brown.

**Hardiness:** Winter hardy to USDA zone 4.