

## ***Quercus velutina* (Black Oak)** **Beech Family (Fagaceae)**

### **Introduction:**

Black oak is a member of the red oak group with lobed leaves. This is a Kentucky native, common in all areas except the bluegrass region. The black oak's foliage is its major ornamental feature. In early spring, velvety red leaves emerge from the velvety winter bud. The bicolored, mature leaves are then nicely contrasted with this oak's uniquely black, furrowed bark. Deep orange or red leaf color is ornamental in autumn.

### **Culture:**

The black oak requires full sun and thrives in well-drained, slightly acidic soil. It tolerates poor, dry soil, but will not tolerate shade. Like many of the oak species, black oak can develop yellow leaves, or chlorosis, when grown in high pH soil. Black oak tends to suffer from decay and may become structurally compromised.

Potential problems for oaks in general include obscure scale, two-lined chestnut borer, bacterial leaf scorch, oak horn gall and gypsy moth. In addition, as little as 1 inch of fill soil can kill an oak.

Black oak has a long, prominent tap root that makes it difficult to transplant.

### **Additional comments:**

The black oak is a stately oak that was introduced to commerce as early as 1800. It can reach a height of more than 100 feet. Co-national champion trees are in Michigan (131 feet) and Connecticut (84 feet).

The very prominent tap root of black oak ensures this species' survival under poor growing conditions. However, the black oak is not as common in the nursery trade because it can be difficult to transplant.

Like other tree species, oaks can suffer where construction means a change in the grade around the root system of the tree.

The black oak's common name refers to its nearly black bark. This oak's inner bark, however, is yellow or deep orange and is used to make a yellow dye called quercitron.

Although the native black oak is most frequently found in dry, poor areas, it prefers rich soil. Its seedlings, however, will not survive in shade so the black oak is often relegated to poor soils in native areas.

The specific epithet, *velutina*, is derived from the Latin word "vellus" for fleece, wool or down, which refers to this species' velvety winter buds and young foliage.



### **Botanical Characteristics:**

**Native habitat:** Central and eastern North America in poor, dry soils.

**Growth habit:** Black oak has a variable, irregular form and may look unruly.

**Tree size:** This is an long-lived tree, living to 200 years, which can reach a height of 90 feet.

**Flower and fruit:** Female flowers are inconspicuous; however the pendulous male catkins look like a cloud of green smoke. The 1-inch acorn is coated with soft rust-colored down and the top half is capped by loose scales.

**Leaf:** Bright red when unfurling, the foliage becomes glossy above and pale with hairs below when mature. Leaf shape resembles the deeply-lobed red oak's. Fall color ranges from deep orange to red.

**Hardiness:** Winter hardy to USDA zone 3.



Leaf