

## ***Quercus muehlenbergii* (Chinkapin Oak)** **Beech Family (Fagaceae)**

### **Introduction:**

Chinkapin oak is a member of the white oak group with chestnut-type leaves. Unlike most white oaks, chinkapin oak is tolerant of alkaline soil. Its whitish bark and branch structure create a beautiful silhouette in winter. In summer, excellent foliage is appreciated for its shade. In fall, yellow leaves contrast with the nearly white bark.

### **Culture:**

The chinkapin oak prefers full sun and adapts to a wide range of soil conditions. It is tolerant of alkaline soils, unlike most white oaks, which develop chlorosis, or the yellowing of leaves, when grown under high pH conditions. Chinkapin oak is somewhat difficult to transplant. It has no serious disease or insect problems, but are subject to insect galls. However, as little as 1 inch of fill soil can kill an oak.

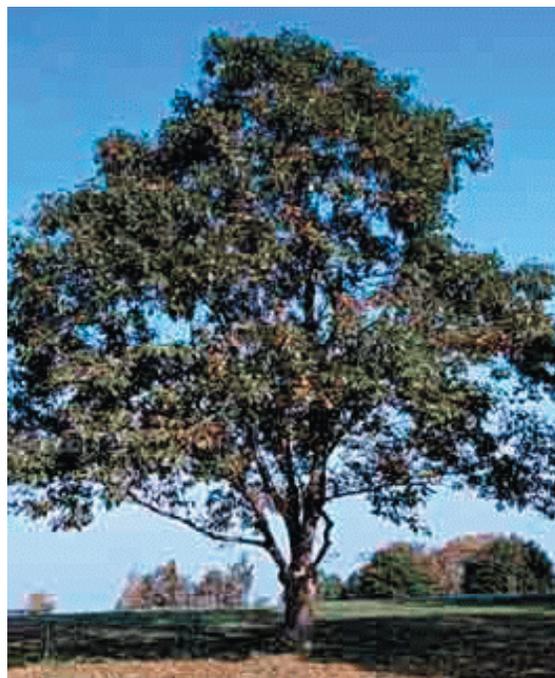
### **Additional comments:**

The wood of the chinkapin oak has been used for split-rail fences, railroad ties and construction lumber. It is noted historically for its role in fueling steamships along the Ohio River. While this durable wood made excellent fences in Kentucky, Ohio and Indiana, when farms fell by the way, the wooden fences were collected and placed on the river bank to sell to passing engineers.

The chinkapin oak's tolerance of alkaline soils, variable habit and narrow leaves make it an ideal candidate for oak breeding programs. In its native range, this species prefers rich land with a high water table. Consequently, it has been cleared to use the ideal conditions for agricultural endeavors.

Chinkapin oak's specific epithet, *muehlenbergii*, commemorates Gotthilf H.E. Mühlenberg, a Pennsylvania minister and botanist in the late 18th and early 19th centuries.

The national champion chinkapin oak, located in Clark County, Ky., is 110 feet tall with a 92-foot spread.



### **Botanical Characteristics:**

**Native habitat:** New England to northeast Mexico on limestone outcrops.

**Growth habit:** Because this tree has a diverse range, its form varies with location. It can be almost vase-like.

**Tree size:** The chinkapin oak is somewhat faster growing than other oaks, attaining a height of 35 to 80 feet.

**Flower and fruit:** Female flowers are inconspicuous, however the pendulous male catkins look like a cloud of green smoke. The small acorn is only 3/4 inch long and has a sweet-tasting kernel.

**Leaf:** Yellow-green above and pale below, the chestnut-like leaves flutter, aspen-like, in the breeze. Fall color is yellow.

**Hardiness:** Winter hardy to USDA zone 5.