

United States Department of Agriculture

Soil Conservation Service

Program Aid Number 1407

'Gobbler' sawtooth oak



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'Cobbler' sawtooth oak is a large round-headed tree with handsome chestnutlike foliage. It produces acorns that are an excellent source of food for wild-life during the fall and winter. The acorns are eaten by squirrels, deer, grouse, bobwhite quail, and turkeys.

In March 1986, the Soil Conservation Service (SCS), the University of Kentucky Agricultural Experiment Station, the Kentucky Department of Fish and Wildlife, and the Kentucky Division of Forestry jointly released sawtooth oak for commercial production.

The material which led to the release of Cobbler was received in 1967 by the Plant Materials Center at Quicksand, Kentucky. The material had been obtained from a tree growing in the U.S. Plant Introduction Gardens at Glenn Dale, Maryland, with the number PI-168939.

Description

Cobbler sawtooth oak (*Quercus acutissima* Carruthers) grows to 70 feet tall. The leaves are similar to those of a chestnut; but they are smaller, 4 to 8 inches in length, and have pointed teeth.

Gobbler sawtooth oak acorns are smaller than those of other sawtooth oak strains. They are five-eighths to three-fourths of an inch in length by one-half to five-eighths of an inch in width. The acorns of other strains are up to 1¼ inches in length. The acorns are held in cups that have long, spreading, recurving scales which enclose about two-thirds of the nut.

A pound of gobbler acorns contains about 150 nuts, whereas other larger strains produce only 40 to 80 acorns to the pound. If plantings are well maintained and are on good sites, gobbler produces acorns when the trees are from 5 to 8 years old. Nuts mature in late August in the south and in September and October farther north. Growing on good bottom-land soil at Quicksand, Kentucky, 15-year-old trees reach a height of 50 to 60 feet and produce an average of 125 pounds of acorns per tree.

Use

Cobbler sawtooth oak is also a handsome shade or specimen tree. Other characteristics which make it an attractive selection are an apparent resistance of the trees and acorns to disease and insect damage and its potential for use as timber.

Adaptation

The exact origin of Cobbler is not known; however, the species is native to eastern Asia from the Himalaya Mountains through China, Korea, and Japan. The species was introduced to the United States in 1862.

The known range of climatic adaptation for sawtooth oak extends from northern Florida west to eastern Texas and Oklahoma, northward through Missouri to New York, and from New York into the southern New England States. It is adapted westward to about the 30-inch rainfall belt.

Sawtooth oak has proved to be winter hardy in areas where the average low temperature is between -10 and 0 °F. To ensure good acorn production in the northern half of its range, planting should be avoided in frost pockets. The species is adapted to soils from sandy loam to clay loam. It does best on well-drained and moderately well-drained upland soils. It does not perform well on poorly drained soils. Cobbler makes adequate growth on reclaimed surface-mined lands where moisture conditions are favorable and the pH is above 5.0.

Establishment

For maximum acorn production, the seedlings should be planted 20 feet apart on sites where they can get good sunlight. Plant 1- or 2-year-old seedlings in early spring.

To prepare a site for planting, scalp the vegetation from an area at least 3 feet in diameter. Then dig a hole just deep enough to allow placing the seedling at the same depth that it had been in the nursery bed. In the bottom of the hole, spread a handful of 10-10-10 fertilizer and cover with 2 to 3 inches of soil.

When placing the seedling in the hole, make sure fertilizer does not touch the roots. Water immediately. To conserve moisture and reduce weeds, mulch around the seedling with wood chips, sawdust, pine needles, layered newspaper, or straw. Watering and mulching at planting time are essential for good seedling survival.

Keep the site clear of competing vegetation for about 2 years until the plant becomes well established.

Gobbler can tolerate intermittent flooding while dormant. Young plants die if under water as little as 24 hours in the summer.



Propagation

Seedlings of Gobbler sawtooth oak are easy to propagate from nuts collected from foundation-stock plants. Average germination rate of fresh seed is more than 80 percent.

Early in the fall, plant the seed by conventional nursery procedures at a depth of three-fourths to 1 inch to ensure excellent germination. One-year-old seedlings are about **12 to 18** inches tall.

Availability

Seedlings for wildlife plantings of Gobbler are available from commercial nurseries. Foundation stock for establishing seed orchards is available through local soil and water conservation districts from the Quick-sand Plant Materials Center.

For more information on availability, propagation, and use of Gobbler sawtooth oak, contact your local SCS or conservation district office. SCS is generally listed in local telephone directories under "U.S. Government, Department of Agriculture."

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