



BUR OAK

Quercus macrocarpa

Native Range

Bur oak is native to the eastern two-thirds of Kansas. Bur oak is one of the most widely distributed deciduous hardwood trees in Kansas.

Mature Size

It is one of our largest and longest-lived hardwood trees reaching a mature height of 50 to 80 feet and a crown spread of 40 to 60 feet. It has a massive trunk, short branches and a large, round crown.

Growth Rate

It is commonly considered slow growing, however, on a fertile site with adequate moisture, after a couple of years establishing its roots, it can grow two to three feet a year.

Leaves, Stems and Fruit

The leaves are simple and alternately arranged on the twigs. They are 6 to 10 inches long and 4 to 5 inches wide with the broadest portion toward the outer end of the leaf. Usually, there are 5 to 9 lobes separated by deep indentations with the top surface being darker green than the underside. Young twigs are light brown and smooth but corky ridges often develop after the second year. Flowers appear in April or May with both male and female flowers borne on the same tree. Fruit is a large, nearly round acorn enclosed $\frac{1}{2}$ or more by a large fringed cup. The bark of older trees is dark with deep vertical furrows.

Use

Windbreaks

Because of its large size and long-lived qualities, bur oak is an excellent choice in a multi-row windbreak. It is, however, relatively slow-growing and does not tolerate shaded conditions, therefore, it should not be planted adjacent to fast-growing species which might over top it without adequate space between species.

Timber

Bur oak is the most highly sought after oak in the state for lumber products. The wood is heavy, hard, strong and durable. Some uses include: construction, furniture, barrel heading, implements, interior finish and paneling.

Wildlife

Acorns constitute a good staple food for a variety of birds and animals. Woodpeckers, jays,

flickers, squirrels, whitetail deer and such game birds as wild turkey and wood duck are important species that consume the acorns.

Adaptation

Statewide.

Soil

Bur oak grows best on deep fertile, well-drained soils but will grow on many types of upland and bottomland soils.

Spacing

It is normally spaced 10 to 18 feet within the row. Space the rows 20 to 24 feet from adjacent trees or shrubs to prevent the oak from over-growing smaller plants or to prevent fast growing plants from over-growing the oak. In a timber planting, bur oak can be planted in 10 x 10 feet to 15 x 15 feet spacing.

Culture

One-year-old, bare-root seedlings, 12 to 18 inches tall are used in plantings. Survival is generally good. Initial growth is centered around root development. Two to three years after planting, top growth should average 8 to 12 inches annually with good weed and grass control; growth may reach 40 inches annually with adequate moisture.

Pests

Bur oak is very hearty and disease resistant. Few known major insect or disease problems exist.