

Common Hackberry



Common Hackberry (*Celtis occidentalis*)

General Description

A medium-sized tree native to North Dakota. A good replacement tree for the American Elm because of its similar form and adaptability. Gray, unique stucco-like bark. The largest tree in North Dakota is 70 feet tall with a canopy spread of 62 feet.

Leaves and Buds

Bud Arrangement - Alternate, with no terminal bud. Buds are flattened and pressed against the twig, rather inconspicuous.

Bud Color - Chestnut-brown and downy.

Bud Size - Lateral buds are 1/4 inch long, ovate, and sharp-pointed.

Leaf Type and Shape - Simple, acuminate-tipped, ovate-oblong.

Leaf Margins - Serrate except at the oblique base.

Leaf Surface - Smooth to sometimes scabrous above, glabrous or slightly hairy on veins beneath.

Leaf Length - 2 to 5 inches.

Leaf Width - 1 to 2½ inches.

Leaf Color - Bright-green above, paler below; yellow fall color.

Flowers and Fruits

Flower Type - Polygamo-monoecious, with male flowers in clusters, perfect and pistillate flowers, solitary.

Flower Color - Pale-green flowers.

Fruit Type - A rounded, 1/4 inch pitted fruit called a drupe.

Fruit Color - Dark-purple.

Form

Growth Habit - Narrow when young, broadening at the top and arching out when mature.

Texture - Medium, summer; medium, winter.

Crown Height - 40 to 60 feet.

Crown Width - 25 to 45 feet.

Bark Color - Grayish with distinct narrow, corky ridges that appear as eroded wart-like projections.

Root System - Spreading, shallow to deep, depending on soils. Occasionally will have a strong taproot.

Environmental Requirements

Soils

Soil Texture - Performs well on a variety of soils.

Soil pH - 6.0 to 8.0. Somewhat tolerant to alkaline soils.

Windbreak Suitability Group - 1, 1K, 3, 4, 4C, 5.

Cold Hardiness

USDA Zone 2.

Water

Moderately drought tolerant but does best on moist, well-drained sites. May compensate for droughty conditions by dropping a portion of the leaves when under stress.

Light

Full sun to partial shade.

Uses

Conservation/Windbreaks

Medium to tall tree for farmstead and field windbreaks, riparian plantings and highway beautification.

Wildlife

Fruit is eaten by many birds and mammals. Excellent tree for wildlife.

Agroforestry Products

Wood - Boxes, crates, and firewood.

Food - Native Americans used fruits to flavor meat in same manner as black pepper.

Urban/Recreational

Performs well in relatively dry and windy areas. Excellent for ornamental landscaping, parks, and boulevards.

Cultivated Varieties

Oahe Hackberry (*Celtis occidentalis* 'Oahe') - Released by USDA-ARS, Great Plains Research Station, Mandan, North Dakota, and USDA-NRCS Plant Materials Center, Bismarck, North Dakota. A cultivar seed strain.

Related Species

Sugar Hackberry (*Celtis laevigata*) - Deficient in hardiness and adaptation in North Dakota.

Pests

Commonly damaged by browsing rodents, rabbits, and deer. Nipple gall and witches'-broom tend to reduce its foliage/twig aesthetic quality.