

Black Ash



Black Ash

(*Fraxinus nigra*)

General Description

A medium to large tree which grows best in bottomlands and other moist areas. Has a higher moisture requirement than green ash. Slightly more upright and often narrower in appearance than green ash. The largest tree in North Dakota is 66 feet tall with a canopy spread of 34½ feet.

Leaves and Buds

Bud Arrangement - Opposite, with smaller and more rounded lateral buds. The first pair is usually some distance down the twig.

Bud Color - Dark-brown to black.

Bud Size - Terminal buds are ovate, pointed, 1/4 to 1/2 inch long and covered by 4 to 6 scales.

Leaf Type and Shape - Pinnate-compound, 7 to 11 sessile leaflets.

Leaf Margins - Serrate with small incurved teeth.

Leaf Surface - Glabrous except for rusty hairs at leaflet bases and along midrib beneath.

Leaf Length - 6 to 10 inches; leaflets 3 to 5 inches.

Leaf Width - 2 to 4 inches; leaflets 1 to 2 inches.

Leaf Color - Dark-green above and lighter green beneath, yellow fall color.

Flowers and Fruits

Flower Type - Dioecious; anthers oblong, apiculate, on short filaments.

Flower Color - Greenish-yellow.

Fruit Type - Winged samaras are in loose clusters 6 to 8 inches long.

Fruit Color - Light-brown to tan.

Form

Growth Habit - Crown is variable, round, oval to oblong-ovate, densely branched.

Texture - Medium, summer; medium-coarse, winter.

Crown Height - 30 to 50 feet.

Crown Width - 15 to 30 feet.

Bark Color - Gray and smooth when young, later developing shallow fissures and large irregular plates.

Root System - Roots are shallow, fibrous and spreading.

Environmental Requirements

Soils

Soil Texture - Prefers river bottoms and other moist sites.

Soil pH - pH is 6.0 to 8.0.

Windbreak Suitability Group - 1, 1K, 2, 2K, 3, 4, 4C, 5.

Cold Hardiness

USDA Zone 3.

Water

Requires more moisture than green ash, but adapts to upland sites with reasonable moisture supply.

Light

Partial sun to full sun.

Uses

Conservation/Windbreaks

Medium height tree for farmstead windbreaks, and riparian plantings.

Wildlife

Seeds are eaten by some birds. Younger branches are browsed by deer in winter.

Agroforestry Products

Wood - Good for firewood, easy to split. Used in making baskets, barrel hoops, and chair bottoms.

Medicinal - Used for fever, ague, diuretic, purgative properties, sores, itches, treatment of gout and rheumatic complaints.

Urban/Recreational

Good landscape tree on moist sites or where additional moisture can be supplied. Some limitations for boulevard planting on droughty sites.

Cultivated Varieties

Fallgold Black Ash (*Fraxinus nigra* 'Fallgold') - Released from Morden Research Station, Morden, Manitoba.

Dense, narrow-upright male tree.

Related Species

Green Ash (*Fraxinus pennsylvanica*)

Manchurian Ash (*F. mandshurica*)

Pests

Male flower gall is more prevalent on black ash than green ash. Appears to be more resistant to anthracnose and ash plant bug than green ash.