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.