# Ironwood or American Hop-hornbeam



## Ironwood or American Hop-hornbeam (Ostrya virginiana)

## **General Description**

Also known as American Hop-hornbeam. A small, slowgrowing tree, found in pockets along rivers in eastern North Dakota. Leaves resemble elm but this tree is a member of the Birch family. The largest tree in North Dakota is 33 feet tall with a canopy spread of 34 feet.

#### Leaves and Buds

Bud Arrangement - No terminal buds. Lateral buds are alternate.

Bud Color - Glabrous, or finely downy, slightly gummy, with scales longitudinally striate.

Bud Size - Small, 1/8 to 1/4 inch long, narrowly-ovate and pointed.

Leaf Type and Shape - Simple, oval-lanceolate, acuminate-tipped.

Leaf Margins - Sharply and doubly-serrate, veins forked at ends.

Leaf Surface - Leaves are thin, but tough in texture. Hairy along midrib and veins, pubescent below.

Leaf Length - 2 to 4 inches.

Leaf Width - 1 to 2 inches.

Leaf Color - Green above, and light yellow-green beneath; yellow to orange fall color.

#### **Flowers and Fruits**

Flower Type - Monoecious, male catkins usually grouped in threes.

Flower Color - Greenish.

Fruit Type - Nutlet, enclosed in a hop-like sack.

Fruit Color - Brownish-tan.

#### Form

Growth Habit - Pyramidal when young. Broader crown with horizontal to drooping smaller branches when mature.

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

Crown Height - 15 to 30 feet.

Crown Width - 12 to 25 feet.

Bark Color - Grayish-brown, with narrow rectangular strips which are free on each end. Bark has a shreddy appearance reminiscent of shagbark hickory.

Root System - Root spread is less than height, good for planting on boulevards with narrow berms.

## **Environmental Requirements**

#### Soils

Soil Texture - Prefers moist, fertile, well-drained rocky or sandy soils along ridges and edges of forested areas.

Soil pH - 5.0 to 7.5. Intolerant of salt. Windbreak Suitability Group - 1, 3, 4, 4C.

#### Cold Hardiness

USDA Zone 3.

Water

Prefers moist area.

#### Light

Full sun to partial shade.

#### Uses

#### **Conservation/Windbreaks**

Small to medium tree used for farmstead windbreaks and riparian plantings.

#### Wildlife

Winter food for pheasants, grouse, rabbits, deer and squirrels.

Agroforestry Products

Wood - Used for posts, tool handles, and mallets.

#### Urban/Recreational

Landscaping and along boulevards. Shapely tree which often retains coppery-tan leaves well into or through winter.

## **Cultivated Varieties**

None.

## **Related Species**

None, but in same family as Birch (*Betula spp.*) and American Hazelnut (*Corylus americana*).

## Pests

Occasionally leafspots, mildew or scorch may be of minor importance.