

# Boxelder



# Boxelder (*Acer negundo*)

## General Description

A relatively fast-growing, short-lived, medium to tall tree of irregular form. Native to river bottoms, ravines and hillsides. Foliage is very susceptible to phenoxy herbicides. Also called Manitoba maple or ash-leaved maple. The largest tree in North Dakota is 61 feet tall with a canopy spread of 63 feet.

### Leaves and Buds

Bud Arrangement - Opposite.

Bud Color - Glaucous, gray.

Bud Size - About 1/4 inch long.

Leaf Type and Shape - 3 to 7 leaflets per leaf, 5 commonly.

Leaf Margins - Coarsely-serrated, pointed at the tip, sometimes 3-lobed, with irregular toothed margin.

Leaf Surface - Glabrous, may have a few hairs on underside.

Leaf Length - Leaves 3 to 7 inches; leaflets 2 to 3 inches.

Leaf Width - Leaves 2½ to 4 inches; leaflets 1 to 2 inches.

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

### Flowers and Fruits

Flower Type - Dioecious, corymbs (male flowers), pendulous racemes (female flowers).

Flower Color - Yellowish-green to reddish-orange.

Fruit Type - Double-winged samara.

Fruit Color - Tan to light brown.

### Form

Growth Habit - The short, crooked trunk commonly divides into several stout and wide spreading branches, forming a rounded to irregular spreading crown.

Texture - Medium, summer; coarse, winter.

Crown Height - 30 to 60 feet.

Crown Width - 30 to 60 feet.

Bark Color - Dark gray to gray-brown bark with shallow ridges.

Root System - Shallow to deep, depending on the site.

## Environmental Requirements

### Soils

Soil Texture - Adapted to a wide range of soils.

Soil pH - 5.0 to 7.5.

Windbreak Suitability Group - 1, 3, 5.

### Cold Hardiness

USDA Zone 2.

### Water

Does best on well-drained moist soils along stream banks, but moderately drought tolerant.

### Light

Full to partial sun. Shade tolerant.

## Uses

### Conservation/Windbreaks

Small to medium tree for farmstead and field windbreaks, and riparian plantings. Of little value for field windbreaks where phenoxy herbicides, e.g. 2,4-D, are used.

### Wildlife

Food and cover for birds and mammals. Older trees often provide good den sites.

### Agroforestry Products

Wood - Crates, boxes, and firewood.

Food - Sap used by Indians and others to make syrup and sugar.

Medicinal - Used in cancer research.

### Urban/Recreational

Used as a shade tree on boulevards and in yards, but not very desirable.

## Cultivated Varieties

Baron Boxelder (*Acer negundo* 'Baron') - Introduced by Morden Research Station, Morden, Manitoba, male selection, hardy.

Flamingo Boxelder (*A. negundo* 'Flamingo') - This variegated cultivar lacks hardiness in the Northern Plains.

Variegated Boxelder (*A. negundo* 'Variegatum') - Irregular white-margined leaves, not winter hardy in Northern Plains.

## Related Species

Amur Maple (*Acer ginnala*)

Silver Maple (*A. saccharinum*)

Tatarian Maple (*A. tataricum*)

## Pests

Common diseases include stem decay. Boxelder bugs, a nuisance to people, are associated with boxelder. Highly sensitive to phenoxy herbicides. Extracts of some *Acer* species are toxic to some insect pests.