

# American Linden or Basswood (Tilia americana)

## **General Description**

A medium to large tree native east of the Missouri River in North Dakota. Desirable as a landscape tree for its large stature, shade and aromatic flowers. Fruit with attached pale-green bract, gives tree a two-tone appearance in late summer. The largest tree in North Dakota is 75 feet tall with a canopy spread of 64 feet.

#### Leaves and Buds

Bud Arrangement - No terminal buds. Lateral buds are alternate. Bud Color - Reddish-brown in color.

Bud Size - Lateral buds are 1/8 to 2/5 inch long, somewhat flattened, lopsided, and smooth or slightly downy at tip.

Leaf Type and Shape - Simple, broad-cordate or heart-shaped, oblique base.

Leaf Margins - Coarsely-serrate with long-pointed teeth.

Leaf Length - 3 to 6 inches.

Leaf Width - 3 to 6 inches.

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

#### **Flowers and Fruits**

Flower Type - Borne in 3 to 7 flowered pendulous cyme, attached to a large, pale greenish-yellow, leaflike bract. Flower Color - Creamy-white to pale-yellow perfect flowers. Fruit Type - Fruit is a pea-sized nutlet about 1/4 inch in size, thick-shelled, and without ribs.

Seed Color - Brown to tan when mature.

#### Form

Growth Habit - Pyramidal when young, becoming rounded when mature.

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

Crown Height - 50 to 70 feet.

Crown Width - 30 to 50 feet.

Bark Color - Gray to brown, broken into many long narrow, flat- topped scaly ridges.

Root System - Wide spreading.

### **Environmental Requirements**

#### Soils

Soil Texture - Grows well on deep, fertile, well-drained loam and clay soils. Flood plain tree. Soil pH - 5.5 to 7.5. Windbreak Suitability Group - 1, 3.

#### **Cold Hardiness**

USDA Zone 2.

#### Water

Intermediate tolerance to flooding. Not drought resistant. May develop leaf scorch under drought conditions.

#### Light

Full sun, but will tolerate shade.

### Uses

#### **Conservation/Windbreaks**

Medium to tall tree for farmstead windbreaks, and riparian plantings in eastern third of North Dakota.

#### Wildlife

Old hollow trees make good den trees for wildlife.

#### Agroforestry Products

Wood - Light, soft, and tough. Sold mainly for lumber, dimension stock and veneer; used in making drawing boards, furniture, tongue depressors, and for carving.

Food - Honey derived from linden flowers is regarded as the best in the world.

Medicinal - Used for indigestion, hysteria, nervous stomach or palpitations.

#### Urban/Recreational

Used as shade, boulevard, and park tree in open landscape areas due to its large size and spreading root system.

### **Cultivated Varieties**

Boulevard Linden (*Tilia americana* 'Boulevard') - Narrow pyramidal habit, introduced by Bailey Nurseries, Inc., St. Paul, Minnesota. Same cultivar as 'Fastigiata.'

Dakota Linden (*T. americana* 'Dakota') - Hardy, pyramidal selection by the late Ben Gilbertson, Kindred, North Dakota. Frontyard<sup>™</sup> Linden (*T. americana* 'Bailyard') - Broadly pyramidal, symmetrical tree introduced by Bailey Nurseries, Inc., St. Paul, Minnesota.

Pyramidal Linden (*T. americana* 'Fastigiata') - Narrow, upright growing cultivar. 'Boulevard' is new cultivar name.

Redmond Linden (*T. americana* 'Redmond') - Striking pyramidal form. Believed by some authorities to be a Bigleaf Linden (*T. platyphyllos*) x Littleleaf Linden (*T. cordata*) hybrid.

#### **Related Species**

Bigleaf Linden (T. platyphyllos)

Mongolian Linden (T. mongolica)

Hybrid Lindens, eg, 'Dropmore', 'Wascana' and 'Glenleven' are derived from American Linden x Littleleaf Linden (*T. cordata*) parentage. Hardy in Northern Plains.

#### Pests

No serious pest problems in North Dakota.