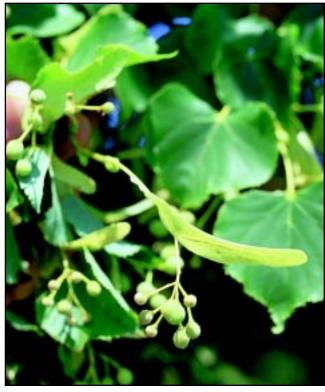


# **Littleleaf Linden**







# Littleleaf Linden (Tilia cordata)

### **General Description**

Medium-sized tree native to Europe, with a strikingly dense pyramidal to rounded crown. Desirable specimen tree in the landscape. The flowers are highly fragrant and attractive to bees. The largest tree in North Dakota is 35 feet tall with a canopy spread of 32 feet.

#### **Leaves and Buds**

 $\mbox{\sc Bud}$  Arrangement - No terminal buds. Lateral buds are alternate.

Bud Color - Reddish-brown in color.

Bud Size - Lateral buds are about 1/8 inch long.

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

Leaf Margins - Finely serrate.

Leaf Surface - Glabrous and slightly lustrous above, glabrous beneath with axillary tufts of brown hairs.

Leaf Length - 11/4 to 3 inches.

Leaf Width - 11/4 to 21/2 inches.

Leaf Color - Dark green, bluish-green beneath; yellow fall color.

#### Flowers and Fruits

Flower Type - Borne in 5 to 7 flowered pendulous cymes, bearing pale greenish-yellow, leaflike bracts.

Flower Color - Creamy-white to pale yellow perfect flowers.

Fruit Type - Fruit is a small 1/5 inch nutlet, thin shelled, and without ribs.

Fruit Color - Brown to tan when mature.

#### **Form**

Growth Habit - Pyramidal when young, becoming rounded when

Texture - Medium, summer; medium, winter.

Crown Height - 30 to 45 feet.

Crown Width - 20 to 30 feet.

Bark Color - Gray to brown, ridged and furrowed on older trees. Root System - Wide spreading.

## **Environmental Requirements**

#### Soils

Soil Texture - Grows well on deep, fertile, well-drained loam and clay soils.

Soil pH - 5.5 to 7.5.

Windbreak Suitability Group - 1, 3.

#### **Cold Hardiness**

USDA Zone 3.

#### Water

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

#### Light

Full sun, but will tolerate some shade.

#### **Uses**

#### Conservation/Windbreaks

Medium height tree for farmstead windbreaks in eastern third of North Dakota.

#### Wildlife

Of little documented value.

#### **Agroforestry Products**

Wood - Light wood for carving, inner bark used in making baskets.

Food - Honey derived from flowers highly desired.

Medicinal - Used for indigestion, hysteria and nervous stomach.

#### **Urban/Recreational**

Used for specimen, boulevards and public parks. Its medium size permits using it on sites with limited space.

#### **Cultivated Varieties**

Bicentennial Linden (*Tilia cordata* 'Bicentennial') - Dense pyramidal and conical form.

Corinthian® Linden (*T. cordata* 'Corzam') - Compact pyramidal form

Greenspire Linden (*T. cordata* 'Greenspire') - Most commonly planted cultivar, straight trunk and pyramidal form, patented.

June Bride Linden (*T. cordata* 'June Bride') - Introduced by Manbeck Nurseries, Inc., New Knoxville, Ohio. Handsome dense, pyramidal tree.

Morden Linden (*T. cordata* 'Morden') - Has performed well in NDSU trials. Released by Morden Research Station in Manitoba.

Norlin<sup>™</sup> Linden (*T. cordata* 'Ronald') - Hardy hybrid with rapid growth and larger leaves introduced at Jeffries Nursery Ltd., Portage la Prairie, Manitoba.

Rancho Linden (*T. cordata* 'Rancho') - Dense upright-oval selection

Shamrock<sup>™</sup> Linden (*T. cordata* 'Baileyi') - A stouter-branched, larger-leaved and faster growing hybrid introduced by Bailey Nurseries, Inc., St. Paul, Minnesota.

#### **Related Species**

American Linden (Tilia americana)

Harvest Gold Linden (*T.* x 'Harvest Gold') - A new Littleleaf Linden x Mongolian Linden (*T. mongolica*) hybrid with exfoliating bark introduced by Jeffries Nursery, Ltd., Portage la Prairie, Manitoba.

Hybrid lindens, e.g., 'Dropmore', 'Wascana' and 'Glenleven' are derived from American Linden (*T. americana*) x Littleleaf Linden parentage. Hardy in Northern Plains.

Mongolian linden (T. mongolica)

#### **Pests**

No major pest problems known.