

Little Leaf Linden

Tilia Cordata

Street/Curb Friendly



LITTLE LEAF LINDEN





Tilia cordata Littleleaf Linden¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

Littleleaf Linden grows 80 feet tall and can spread 40 to 50 feet, but is normally seen 40 to 50 feet tall with a 35 to 40-foot-spread in most landscapes (Fig. 1). This tree has a slower growth rate than other Lindens but has a dense pyramidal to oval crown which casts deep shade. Architects enjoy using the tree due to its predictably symmetrical shape. Littleleaf Linden is a prolific bloomer, the small, fragrant flowers appearing in late June and into July. Many bees are attracted to the flowers, and the dried flowers persist on the tree for some time. Japanese beetles often skeletonize Linden foliage, in certain areas in the northern part of its range. Defoliation can be nearly total and mature trees can be killed by severe infestations. Planting Linden in areas with severe infestations of this pest may not be wise. However, at least one reference reports that defoliation by Japanese beetles is common, but control is seldom needed.

GENERAL INFORMATION

Scientific name: *Tilia cordata*

Pronunciation: TILL-ee-uh kor-DAY-tuh

Common name(s): Littleleaf Linden

Family: *Tiliaceae*

USDA hardiness zones: 4 through 7A (Fig. 2)

Origin: not native to North America

Uses: container or above-ground planter; hedge; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the

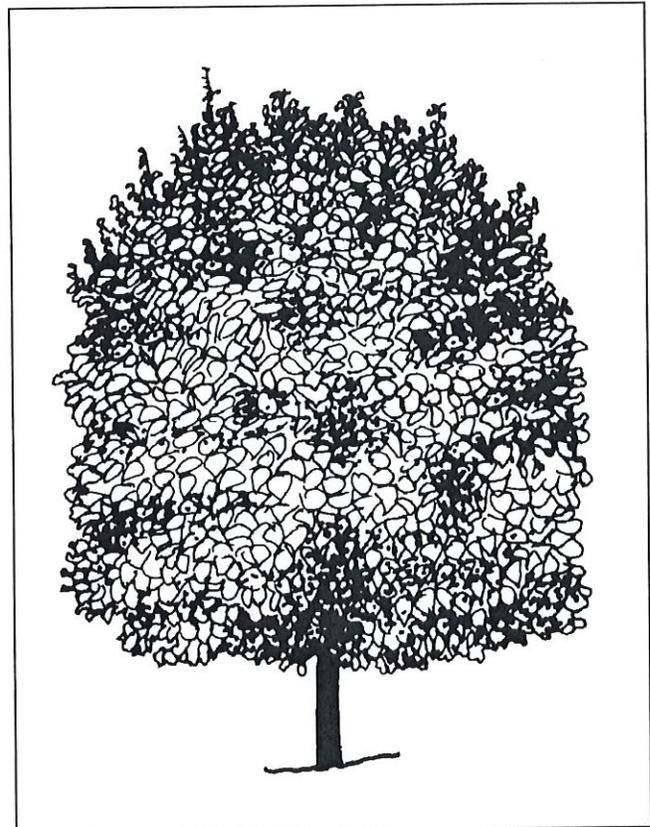


Figure 1. Middle-aged Littleleaf Linden.

highway; screen; shade tree; specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common
Availability: generally available in many areas within its hardiness range

1. This document is adapted from Fact Sheet ST-637, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

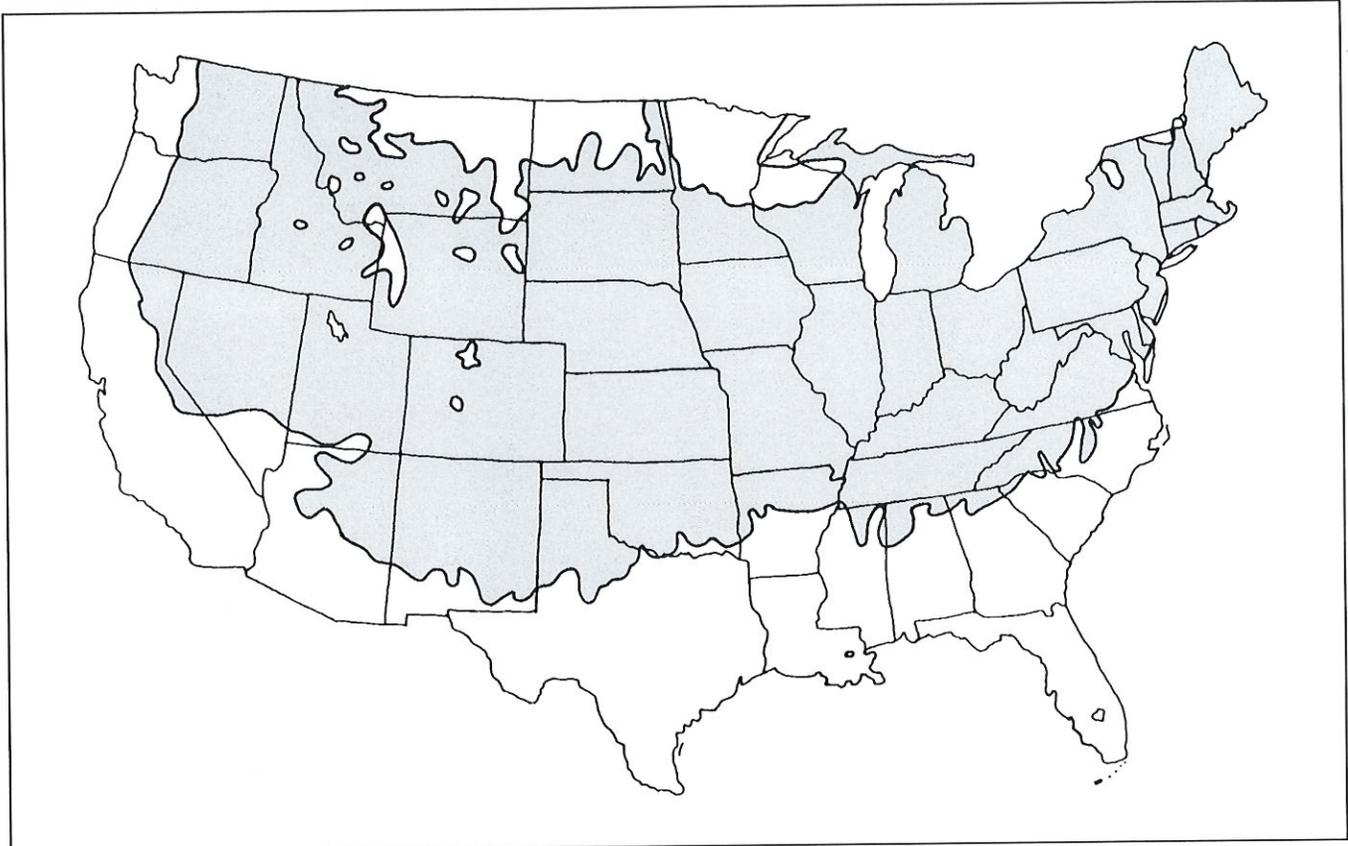


Figure 2. Shaded area represents potential planting range.

DESCRIPTION

Height: 60 to 70 feet
Spread: 35 to 50 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: oval; pyramidal
Crown density: dense
Growth rate: medium
Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: serrate
Leaf shape: cordate; orbiculate
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: yellow
Fall characteristic: not showy

Flower

Flower color: yellow
Flower characteristics: pleasant fragrance; showy; summer flowering

Fruit

Fruit shape: round
Fruit length: < .5 inch
Fruit covering: dry or hard
Fruit color: brown; tan
Fruit characteristics: does not attract wildlife; no significant litter problem; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns
Pruning requirement: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: brown; green
Current year twig thickness: thin

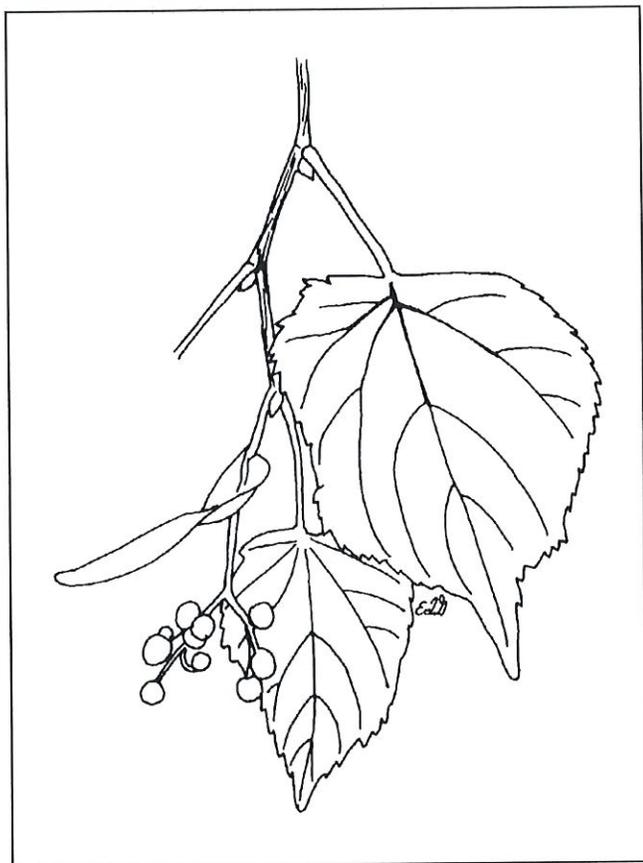


Figure 3. Foliage of Littleleaf Linden.

Culture

Light requirement: tree grows in part shade/part sun;
tree grows in full sun

Soil tolerances: clay; loam; sand; acidic;
occasionally wet; alkaline; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: none

Soil salt tolerance: poor

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: little, if any, potential at this time

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: susceptible

Pest resistance: long-term health usually not
affected by pests

USE AND MANAGEMENT

Small lateral branches arise from the trunk in an upswept curve but quickly bend gracefully toward the ground. Multiple trunks and upright, large-diameter branches develop on some trees and they may be poorly attached to the trunk. These can initiate decay or, as with other trees with the same defect, they can fall from the tree. Be sure to purchase and train Linden to one central trunk with well-spaced, small-diameter lateral branches. The cultivars 'Glenleven', 'Greenspire' and 'June Bride' have been developed for their very straight trunk. Linden may sprout from the base and these sprouts will have to be removed from time to time.

The tree grows in sun or partial shade, will tolerate alkaline soil if it is moist, and it transplants well. It is not particularly tolerant of drought, scorching at the leaf margins in summer drought. But this apparently does little long-term harm. It is more tolerant of heat and compact soil than American Basswood. Many communities plant Linden along the streets due to its rapid growth rate and dense, symmetrical crown but littleleaf Linden is sensitive to road salt. There are a number of cultivars with a variety of habits.

The wood of Linden is clear white, soft and often used for drawer sides in inexpensive furniture. Though not as soft as balsa wood, it sands poorly and is difficult to finish.

There are several cultivars: 'Chancellor' - upright when young but becoming pyramidal, fast growth, with a straight, single trunk; 'Glenleven' - conical (pyramidal), fast growth, straight trunk, more open canopy than species; 'Greenspire' - straight trunk and radially produced branches-may be the least-maintenance cultivar; 'June Bride' - pyramidal, glossy leaves, very slow growing, profuse flowering; 'Pyramidalis' - widely pyramidal; 'Rancho' - narrow, upright growth habit, very small, fine textured leaf - a beautiful tree; 'Sterling' is supposed to resist Japanese beetles.