



Tilia tomentosa Silver Linden¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

Rapidly growing 50 to 70 feet in height with a spread of 40 to 60 feet, Silver Linden could be quite popular for use as a shade, specimen, or street tree (Fig. 1). A deciduous tree, Silver Linden has a pyramidal form when young but develops into an upright silhouette with an oval canopy and often has multiple trunks. Casting dense shade below the tree, the four to five-inch-long dark green leaves are bright silver and fuzzy below, causing the trees to almost appear as if they are shimmering with each little breeze. The leaves turn yellow before dropping in autumn. In early summer, the trees are perfumed with extremely fragrant clusters of small, yellow/white blossoms but these are difficult to see due to the dense cover of the large leaves. The flowers attract large numbers of bees and a small, egg-shaped fruit follows the blooms.

GENERAL INFORMATION

Scientific name: Tilia tomentosa

Pronunciation: TILL-ee-uh toe-men-TOE-suh

Common name(s): Silver Linden

Family: *Tiliaceae*

USDA hardiness zones: 4B through 8A (Fig. 2)

Origin: not native to North America

Uses: hedge; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); recommended for buffer strips around parking lots or for median strip plantings in the highway; shade tree; specimen; residential street tree; tree has been successfully grown in urban areas where air

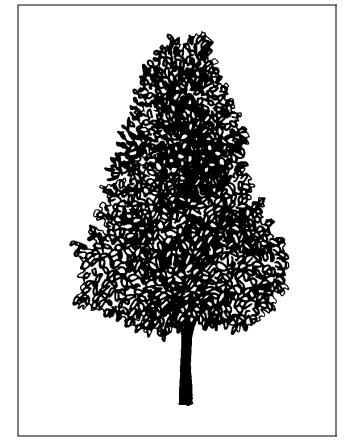


Figure 1. Young Silver Linden.

pollution, poor drainage, compacted soil, and/or drought are common

Availability -----1--

Availability: somewhat available, may have to go out

of the region to find the tree

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^{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.

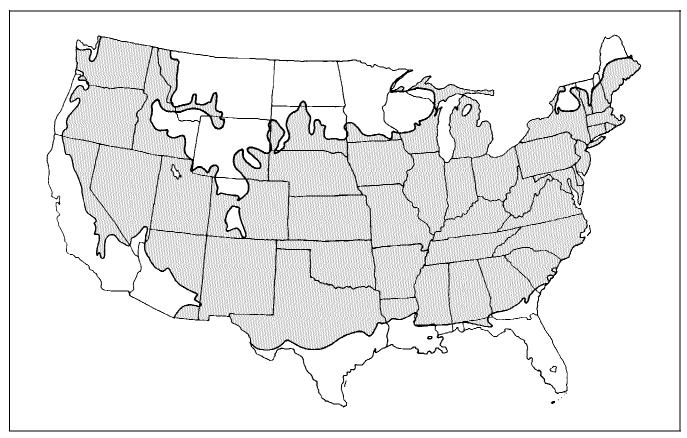


Figure 2. Shaded area represents potential planting range.

DESCRIPTION

Height: 50 to 70 feet **Spread:** 40 to 60 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

or less identical crown forms

Crown shape: oval; round; pyramidal

Crown density: dense Growth rate: fast Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: double serrate; serrate **Leaf shape:** cordate; orbiculate; ovate

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: 4 to 8 inches; 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: oval Fruit length: < .5 inch Fruit covering: dry or hard

Fruit color: tan

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; no significant litter

problem; persistent on the tree

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: medium

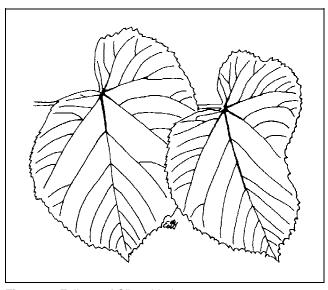


Figure 3. Foliage of Silver Linden.

Culture

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

tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline;

well-drained

Drought tolerance: moderate **Aerosol salt tolerance:** moderate

Other

Roots: surface roots are usually not a problem **Winter interest:** no special winter interest

Outstanding tree: tree has outstanding ornamental

features and could be planted more

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

This tree is large and needs plenty of room to develop. Plant it as a specimen or shade tree on a commercial property where there is plenty of soil space available for root expansion. Well-suited for large tree lawns along streets and for large parking lot islands. Be prepared to remove sprouts periodically from the base of the trunk.

Silver Linden should be grown in full sun on moist, well-drained soil, acid or slightly alkaline. This tree is moderately tolerant of pollution, soil compaction, heat, and drought making it an ideal street or shade tree. It appears to tolerate drought better than other Lindens. Some report that it is risky to transplant in the fall. Irrigate regularly following planting.

Available cultivars include: 'Green Mountain', a rapidly-growing form with a dense canopy and is reportedly resistant to Japanese beetle and gypsy moth; 'Princeton' reportedly compartmentalizes decay bettern than others; 'Sterling', reportedly resistant to gypsy moth and Japanese beetle; and 'Wandell', broadly pyramidal form, leaves reportedly resistant to Japanese beetle.

Propagation is most often done by cuttings, or by seed with difficulty (can take two years to germinate).

Pests

Mainly aphids are problems although European Linden bark borer, Linden borer, walnut lace bug, caterpillars, Basswood leaf miner, elm sawfly, scales, and Linden mites can all be serious problems. The aphids will secrete a honeydew which will result in a dark soot over objects below the tree, such as parked cars or lawn furniture.

Reportedly less susceptible to Japanese beetles than other Lindens due to the pubescense on the under side of the leaves.

Diseases

Anthracnose, leaf blight, canker, leaf spots, powdery mildew, and verticillium wilt can be occasional problems on Lindens.