

Tilia tomentosa: Silver Linden¹

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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. 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

Invasive potential: little invasive potential

Uses: hedge; urban tolerant; parking lot island > 200 sq ft; shade; specimen; street without sidewalk; parking lot island 100-200 sq ft; tree lawn > 6 ft wide; highway median



Figure 1. Young *Tilia tomentosa*: Silver Linden

Availability: somewhat available, may have to go out of the region to find the tree

Description

Height: 50 to 70 feet

Spread: 40 to 60 feet

Crown uniformity: symmetrical

Crown shape: oval, pyramidal, round

Crown density: dense

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Figure 2. Range

Growth rate: fast

Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: serrate, double serrate

Leaf shape: cordate, ovate, orbiculate

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: 2 to 4 inches, 4 to 8 inches

Leaf color: green

Fall color: yellow

Fall characteristic: not showy

Flower

Flower color: yellow

Flower characteristics: showy

Fruit

Fruit shape: oval

Fruit length: less than .5 inch

Fruit covering: dry or hard

Fruit color: tan

Fruit characteristics: does not attract wildlife; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; not showy; typically one trunk; thorns

Pruning requirement: needed for strong structure

Breakage: resistant

Current year twig color: brown, green

Current year twig thickness: medium

Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun or partial shade

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

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Other

Roots: not a problem

Winter interest: no

Outstanding tree: yes

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: susceptible

Pest resistance: resistant to pests/diseases

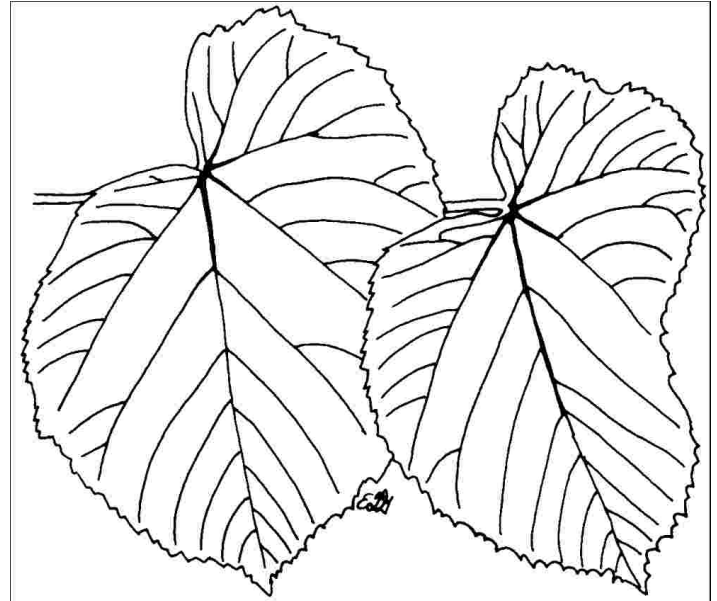


Figure 3. Foliage

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 better 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 pubescence on the under side of the leaves.

Diseases

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