

Tilia cordata - Littleleaf Linden (*Tiliaceae*)

Tilia cordata is a common shade or specimen tree, symmetrical in shape, pyramidal to rounded, densely dark green foliated in summer. Littleleaf Linden is often incorrectly planted as a street tree and prone to heat-and drought-induced leaf scorch under those circumstances.

Form



FEATURES

- large tree
- 60' tall x 40' wide, but often half or less than that, depending upon cultivar and stress conditions
- upright pyramidal, becoming rounded oval with age
- medium rate

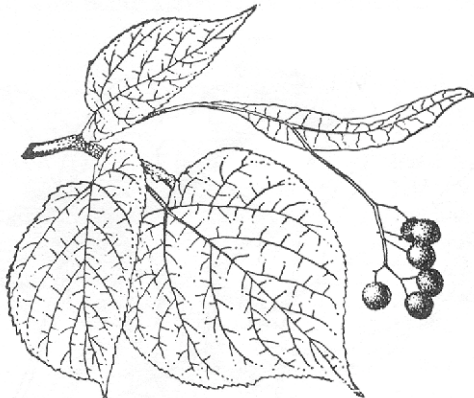
Culture

- full sun

-performs best in full sun in moist, well-drained, deep, rich soils of neutral to alkaline pH; somewhat adaptable to less optimum conditions or soils of acidic pH, but not especially urban tolerant (to heat, drought, poor soils, restricted root zones, and pollution) and often suffering significant leaf scorch, stunting, and windthrow when transplanted to sites with stressful conditions

Foliage

-alternate, dark green, dull to shiny, ovate, cordate base and short acuminate apex, serrated, dense
-autumn color yellowish green in many years but golden yellow in best years; colors best when under stress (but often indicative of stress)



Flowers

-yellow-cream
-June-July
-pendulous inflorescences from the showy lime-colored elongated bracts
-fragrant (attracts lots of bees)

Fruits

-small nutlets, round and rough, in pendulous clusters, maturing in autumn to a tan color and semi-persisting into early winter

Twigs

-red-brown, slightly zigzag, densely twiggy
-ovoid brown winter buds

Trunk

-lightly furrowed and gray-brown in youth, becoming more ridged and furrowed and dark gray with age

USAGE

Function

-shade, specimen, or focal point tree
-incorrectly used as a street tree in many cases

Texture

-medium texture in foliage and when bare
-thick density in foliage and when bare

Assets

-symmetrical shape
-shade
-pyramidal to teardrop shaped in youth
-dark green dense foliage in summer
-fragrant inflorescences in June-July

Liabilities

-not stress tolerant, although people often try to pretend it is so by its usage ('Greenspire' may be more urban tolerant)
-foliage may be severely damaged on an annual basis by Japanese beetles
-flowers attract bees in early summer

Habitat

-Zone 3
-Native to Europe

SELECTIONS

Alternates

-dense shade trees of moderate stature at maturity under average urban conditions (*Acer campestre*, *Acer rubrum* Red Sunset®, *Carpinus betulus*, *Ostrya virginiana*, *Pyrus calleryana*, etc.)
-trees noted for their symmetrical or formal shape, especially in youth (*Carpinus betulus*, *Cercidiphyllum japonicum*, *Picea abies*, *Quercus palustris*, *Zelkova serrata*, etc.)
-street trees more tolerant of urban stresses (*Acer campestre*, *Crataegus x lavalleyi*, *Koelreuteria paniculata*, *Malus*, etc.)

Cultivars - Variants - Related species

-*Tilia cordata* 'Greenspire' - by far the most common cultivar because of its higher level of urban tolerance and good conical form, to 40' x 30'
- *Tilia cordata* 'Fairview' - a rapidly growing cultivar, to 60' x 25', with foliage that is thicker and slightly larger than average

-Other *Tilia* species that share general characteristics with Littleleaf Linden include:

-*Tilia americana* - American Linden - rapid grower with large leaves and dense foliage providing excellent shade; has fragrant yellow flowers; prefers deep moist soils, but will grow in drier, heavier soils

-*Tilia tomentosa* - Silver Linden - broad pyramidal, to 60' x 30', smooth bark, silvery underside in leaves, later blooming

