

Tree factsheet

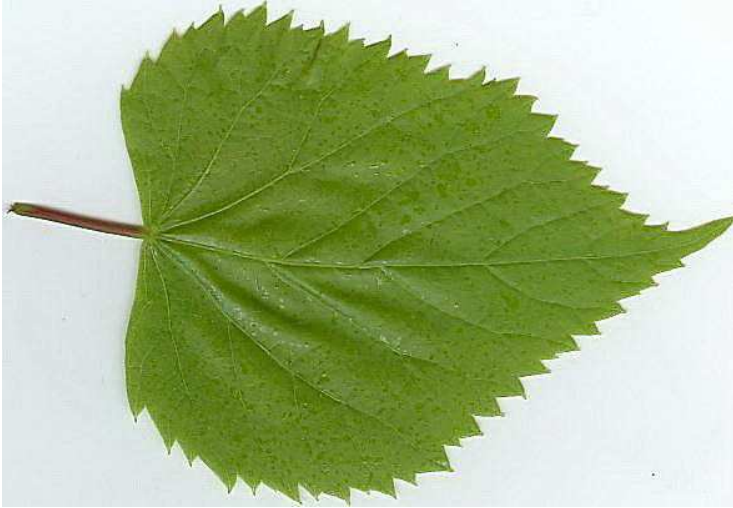
images at pages 3, 4, 5

Tilia x vulgaris Hayne

taxonomy	
author, year	Hayne ...
synonym	<i>T. x europaea</i> L.
Family	Malvaceae
Eng. Name	Common European Linden, -Lime, European Basswood (USA)
Dutch name	Hollandse linde, Gewone linde
subspecies	
varieties	
hybrids	<i>Tilia x vulgaris</i> Hayne (syn. <i>T. x europaea</i>) (<i>T. cordata</i> x <i>T. platyphyllos</i>)
cultivars, frequently used (7e rassenlijst Bomen)	
'Euchlora'	parks, avenues
'Koningslinde'	streets, avenues, parks, landscape
'Zwarte linde'	streets, avenues, parks, landscape
references	Weeda, 2003, vol.2 (Dutch)
	Maes, N. 1989. De Linde in Nederland. Stichting Kritisch Bosbeheer.
	Hiemstra, J.A. 2002. Rassenlijst Bomen.
	Plants for a Future Database; www.pfaf.org/index.html
morphology	
crown habit	tree, pyramidal to round
max. height (m)	35 (>40)
max. dbh (cm)	>200
actual size Europe	year ..., d(050) 262, Dallam Park, Cumbria, England h 46, England
actual size Netherlands	year 1600, d(130) 201, h 15, Oosterhuizen, Gelderland year 1850-1860, d(130) 134, h 35 year 1850-1860, d(130) 296, h 21
leaf length (cm)	5-10
leaf petiole (cm)	2-5
leaf colour upper surface	green
leaf colour under surface	green
leaves arrangement	alternate
flowering	June-July
flowering plant	monoecious
flower	hermaphrodite
flower diameter (cm)	approx 1
flower male catkins length (cm)	-
pollination	insects: bees and moths
fruit; length	nut containing 2-4 seeds; 0,6 cm
fruit petiole (cm)	1-3
seed; length	seed; approx 0,5 cm
seed-wing length (cm)	approx 5 (Boeijink 9-10)
weight 1000 seeds (g)	70-100
seeds ripen	October
seed dispersal	wind, water (mice?)

habitat	
natural distribution	-
in N.W. Europe since	...
natural areas The Netherlands	-
geological landscape types The Netherlands (Hoek 1997)	-
forested areas The Netherlands	not a forest tree
area Netherlands	-
% of forest trees in the Netherlands	-
soil type	
pH-KCl	slightly acid to neutral to alkaline
soil fertility	nutrient medium to rich
light	shade tolerant
① shade tolerance (0=no tolerance to 5=max. tolerance)	3.5
① drought tolerance (0=no tolerance to 5=max. tolerance)	3.0
① waterlogging tolerance (0=no tolerance to 5=max. tolerance)	1.8
plant communities in the Netherlands	Querco-Fagetea: Klasse der Eiken-beukenbossen op voedselarme grond
management	
status Europe	infrequent indigenous species in forests
status The Netherlands	rare indigenous species in forests and urban environment
application	timber tree, street tree
propagation	seed; named cultivars by cuttings, grafting or layering (old)
regeneration	planting; natural regeneration from seed (rarely in the Netherlands) and uprooting
optimal gap size for regeneration	1-2x tree length?
first plantation Netherlands	
resprouting after cutting	good
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$)	moderate:...
diseases	<i>Nectria cinnabarina</i> – fungus – a weak parasite - Meniezwammetje <i>Verticillium dahliae</i> – Verticillium wilt – fungus on leaves - verwelkingsziekte
insects	<i>Eucallipterus tiliae</i> , aphid on leaves – lindebladluis <i>Caliroa annulipes</i> , wasp on leaves - lindebladwesp <i>Eotetranychus tiliarum</i> , mite on leaves – lindespintmijt <i>Phalera bucephala</i> , Buff tip - caterpillar on leaves - Wapendrager
wood	
wood	European linden, lime (Dutch: Europees linden) (basswood = American linden)
wood structures key characteristics of pores	diffuse porous to semi-ring porous; radially oriented pore groups; triseriate and tetraseriate rays.
vol. mass heartwood (kg/m ³)	(520-) 540 (-560) (12% moisture content)
elastic modulus (N/mm ²)	12.000
durability heartwood	fungus 5
heartwood color	white to yellowish brown
sapwood color	white to yellowish brown
contents	
products	kitchen-tools, toys, cutlery, turnery, musical instruments
non-timber products	
flowers	lime flower tea
leaves	young raw edible
inner bark	fibres

① Ülo Niinemets and Fernando Valladares. 2006. Tolerance to shade, drought, and waterlogging of temperate Northern Hemisphere trees and shrubs. Ecological Monographs 76:521–547



Common European Linden leaf



leaves at a branch



Common linden inflorescence

photos 4x © Leo Goudzwaard



fruits



Common lime tree, Wageningen



winter silhouette, Oosterbeek



bark of a young tree



bark of a mature tree

photos 4x © Leo Goudzwaard



lime wood photo © Chris Sonnemans