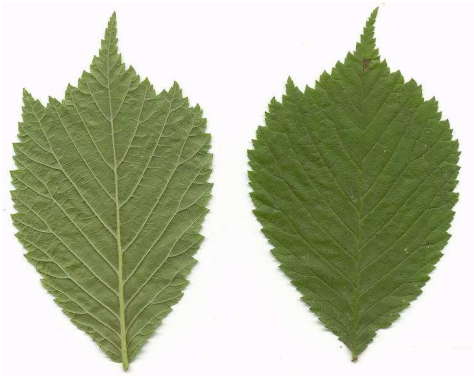


habitat	
natural distribution	Europe, Caucasus, Turkey
in N.W. Europe since	ulmus: 7000 B.C.
natural areas The Netherlands	forests
geological landscape types The Netherlands (Hoek 1997)	loess covered terraces
forested areas The Netherlands	moist and nutrient rich sandy, loamy and clayish soils; half shaded oak and ash forests
area Netherlands	not a forest canopy tree any more
% of forest trees in the Netherlands	-
soil type	
pH-KCl	neutral to alkaline
soil fertility	nutrient 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)	2.4
① waterlogging tolerance (0=no tolerance to 5=max. tolerance)	2.0
plant communities in the Netherlands	Klasse der Eiken-beukenbossen van voedselrijke grond: -Viola odoratae-Ulmetum – Abelen-Iepenbos -Fraxino-Ulmetum – Essen-Iepenbos
management	
status Europe	rare indigenous species, locally frequent but declining due to Dutch Elm Disease
status The Netherlands	endangered indigenous species in forests, cultivars frequent in urban environment
application	nature tree, street tree
propagation	cuttings, layering, seed; named cultivars by grafting
regeneration	planting; natural regeneration from seed
optimal gap size for regeneration	1-2x tree length
first plantation Netherlands	
oldest tree Europe	
oldest trees Netherlands	
resprouting after cutting	very good
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$)	moderate, (data unknown)
diseases	<i>Ophiostoma ulmi</i> , <i>Ophiostoma novo-ulmi</i> , fungi in xylem (iepenziekte)
insects	<i>Scolytus scolytus</i> , <i>Scolytus multistriatus</i> , <i>Scolytus Pygmaeus</i> (iepenspintkevers)
wood	
wood	elm (Dutch: iepen)
wood structures key characteristics of pores	Ring porous; tangential bands of pores; 4-5 seriate rays.
vol. mass heartwood (kg/m ³)	
elastic modulus (N/mm ²)	
durability heartwood	fungus 4
heartwood color	light brown to dark brown
sapwood color	grey-white to light brown
contents	
products	construction timber, cladding, furniture, tools, coach-building, bows (pre-historical)
non-timber products	
leaves and shoots	for fodder (old in Europe, still in Asia)
young leaves	edible
fruits	edible
inner bark	edible

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



Ulmus glabra, leaves of a natural population,
Hoge Venterink, Oldenzaal, Overijssel



leaves of an ornamental tree at Vledder, Drenthe



one leaf of *U. glabra* 'Exoniensis'



seedlings at Vledder, Drenthe

photography © Leo Goudzwaard



Wych elm fruits



young Wych elm, photo © L'arboretum Parc de Rouelles



mature Wych elm, Dokkum, photo © Leo Goudzwaard



young specimen of 'Exoniensis', Frederiksoord



large polyporous mushroom at the base of an old *U. glabra*, Zocherplantsoen, Utrecht

photos 2x © Leo Goudzwaard



stem and bark of an old *U. glabra*, Vledder

photos 2x © Leo Goudzwaard



bark of *U. g.* 'Exoniensis', Utrecht