

Tree factsheet

images at pages 3, 4

***Populus alba* L.**

taxonomy	
author, year	Linnaeus 1753
synonym	
Family	Salicaceae
Eng. Name	White poplar
Dutch name	Abeel, Witte abeel, Witte populier
subspecies	
varieties	
hybrids	<i>Populus x canescens</i> (<i>P. alba</i> x <i>P. tremula</i>)
cultivars, frequently used	
'Pyramidalis'	as a street tree
'Raket'	popular landscape and park tree
'Nivea'	popular landscape tree, esp. in the Dutch dune area
references	OECD, 2001. Concensus document on the biology of Populus (online document) Series on Harmonisation of Regulatory Oversight in Biotechnology, No. 16
	Schotveld, A. 1987. Populier (in Dutch). in: Schmidt, P. 1987. Nederlandse boomsoorten I, Syllabus Vakgroep Bosbouw Landbouwuniversiteit Wageningen.
	Plants for a Future Database; www.pfaf.org/index.html
morphology	
crown habit	tree, round
max. height (m)	30
max. dbh (cm)	>80
actual size Great Britain	year ..., d(120) 166, h 24, Bayfordbury, Devon, England year ..., d(120) 95, h 27, St Albans, Hertfordshire, England
actual size Netherlands	year 1860-1870, d(130) 111, h 25 year 1900-1910, d(130) 150, h 30 year 1940-1950, d(130) 159, h 20
leaf length (cm)	5-11
leaf petiole (cm)	2-9
leaf colour upper surface	green, white pubescent
leaf colour under surface	white
leaves arrangement	alternate
flowering	March
flowering plant	dioecious
flower	monosexual
flower diameter (cm)	
flower male catkins length (cm)	5-8
flower female catkins length (cm)	2-4
pollination	wind
fruit; length	capsule (doosvrucht); 0,1-0,2 cm
fruit petiole (cm)	<0,1
seed; length	seed; .. cm
seed-wing length (cm)	pappus: approx 0,5
weight 1000 seeds (g)	<i>P. tremula</i> : 0,2
seeds ripen	June
seed dispersal	wind, water

habitat	
natural distribution	C. and S. Europe, N. Africa, W. Siberia, C. Asia
in N.W. Europe since B.C.
natural areas The Netherlands	forests
geological landscape types The Netherlands (Hoek 1997)	dune area; river valleys
forested areas The Netherlands	exotic, but naturalized tree at limy, sandy soils.
area Netherlands	Populus+Salix: 16.290 (2002, Probos)
% of forest trees in the Netherlands	Populus+Salix: 6,3 (2002, Probos)
soil type	
pH-KCl	neutral to alkaline
soil fertility	nutrient rich to moderate
light	light demanding
① shade tolerance (0=no tolerance to 5=max. tolerance)	2.3
① drought tolerance (0=no tolerance to 5=max. tolerance)	2.7
① waterlogging tolerance (0=no tolerance to 5=max. tolerance)	1.8
plant communities in the Netherlands	Klasse der Eiken-beukenbossen op voedselrijke grond: -Viola odoratae-Ulmetum - Abelen-iepenbos
management	
status Europe	infrequent, locally frequent, indigenous species in forests and urban environment
status The Netherlands	infrequent, locally frequent, exotic (naturalized) species in forests and urban environment
application	street tree, ornamental
propagation	seed; named cultivars by cuttings or grafting
regeneration	planting; natural regeneration from seed and up-rootings
optimal gap size for regeneration	>3x tree length
first plantation Netherlands	
resprouting after cutting	good
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$)	fast (data unknown)
diseases	
insects	
wood	
wood	Poplar (Dutch: populieren)
wood structures key characteristics of pores	diffuse porous. Uniseriate, homogeneous rays.
vol. mass heartwood (kg/m ³)	(380-)440 (-530) (12% moisture content)
elastic modulus (N/mm ²)	9.700
durability heartwood	fungus 5
heartwood color	red brown
sapwood color	white
contents	
products	pulpwood, veneerwood
non-timber products	

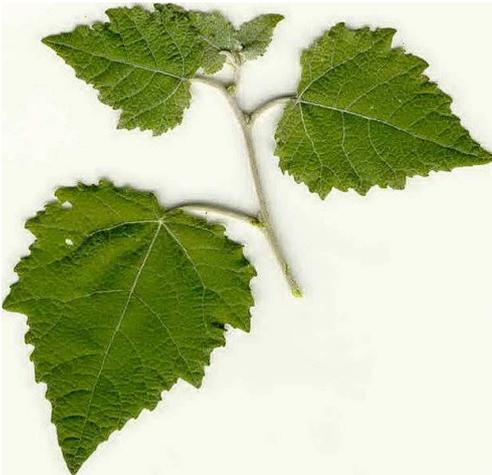
① Ülo Niinemets and Fernando Valladares. 2006. Tolerance to shade, drought, and waterlogging of temperate Northern Hemisphere trees and shrubs. Ecological Monographs 76:521–547



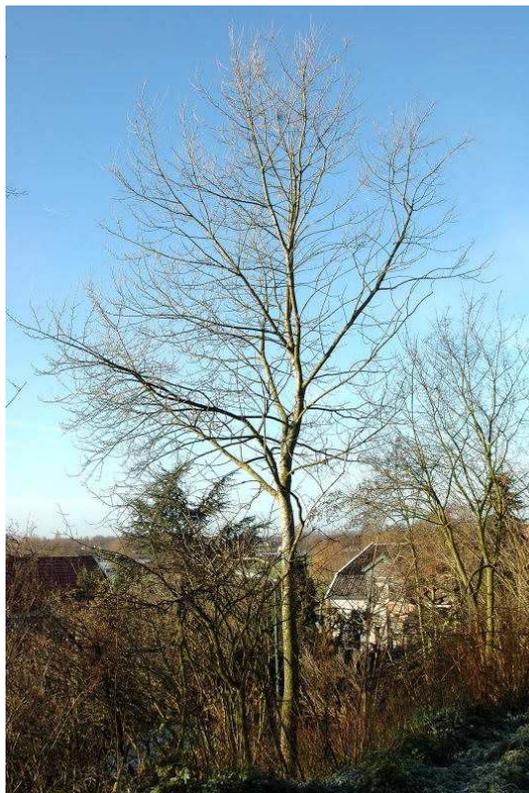
leaves of a natural specimen, Italy
(this type is not grown in the Netherlands)



lobed leaves of cv 'Raket', widely planted in The Netherlands



young shoot ('Raket')



Young tree, Rhenen ('Raket')



winter twig



bark of a young tree photo Wikipedia