

Tree factsheet

images at pages 3, 4, 5, 6

***Acer pseudoplatanus* L.**

taxonomy	
author, year	Linnaeus 1753
synonym	-
Family	Sapindaceae
Eng. Name	Sycamore maple, Great maple
Dutch name	Gewone esdoorn
subspecies	-
varieties	-
hybrids	-
cultivars, frequently used (7e rassenlijst Bomen)	
'Atropurpureum'	street and park tree
'Bruchem'	landscape and street tree
'Leopoldii'	park tree
'Erectum'	street tree
'Negenia'	street tree
references	
	Weeda, 2003, vol.3 (Dutch)
	Boeijink, D.E. and Kervel, W. 1987. Acer (in Dutch). in: Schmidt, P. 1987. Nederlandse boomsoorten I, Syllabus Vakgroep Bosbouw Landbouwniversiteit Wageningen
	Geldereren, D.M. van. 1994. Maples of the world
morphology	
crown habit	tree, oval to round
max. height (m)	20-30(-40)
max. dbh (cm)	>200
actual size Great Britain	year 1550, d(130) 190, Newbattle Abbey, Dalkeith, Midlothian, Scotland
actual size Germany	year 1600, d(130) 270, Garmisch Partenkirchen, Germany
actual size Netherlands	year 1830-1840, d(130) 118, h 18 year 1880-1890, d(130) 148, h 20 year 1940-1950, d(130) 120, h 35
leaf length (cm)	7-12
leaf petiole (cm)	7
leaf colour upper surface	green
leaf colour under surface	blue green or reddish
leaves arrangement	opposite
flowering	April
flowering plant	monoecious
flower	hermaphrodite
flower diameter (cm)	0,5-1
pollination	insects
fruit; length	samara; 3-4 cm
fruit petiole (cm)	1-2
seed; length	nut; 0,8-1 cm
seed-wing length (cm)	3
weight 1000 seeds (g)	70-125
seeds ripen	September
seed dispersal	wind

habitat	
natural distribution	West,- Mid and South Europe
in N.W. Europe since	1000 BC
natural areas The Netherlands	forests
geological landscape types The Netherlands (Hoek 1997)	dune area, loss-covered terraces
forested areas The Netherlands	natural, loamy soils.
area Netherlands	Acer spp. 1178 (2002, Probos)
% of forest trees in the Netherlands	0,5 (2002, Probos)
pH-KCl	acid to neutral to alkaline
soil type	sand, loam, clay
soil fertility	nutrient rich
light	shade tolerant
① shade tolerance (0=no tolerance to 5=max. tolerance)	3.7
① drought tolerance (0=no tolerance to 5=max. tolerance)	2.8
① waterlogging tolerance (0=no tolerance to 5=max. tolerance)	1.1
plant communities in the Netherlands	Querc-Fagetea (klasse der Eiken-Beukenbossen op voedselrijke grond): -Carici remotae-Fraxinetum (Goudveil-Essenbos) -Viola odoratae-Ulmetum (Abelen-lepenbos) -Fraxino-ulmetum (Essen-lepenbos)
management	
status Europe	frequent, indigenous species in forests, landscape and urban environment
status The Netherlands	frequent, indigenous species in forests, landscape and urban environment
application	timber tree, street tree, ornamental tree. Coppice (old)
propagation	seed; named cultivars by grafting or cuttings
regeneration	planting; natural regeneration from seed
optimal gap size for regeneration	1-2x tree length
first plantation Netherlands	
resprouting after cutting	good; not in jan.-april because of sap flow
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$)	fast (data unknown)
diseases	<i>Rhytisma acerinum</i> , fungus on leaf, Giant tar spot (Inktvlekkenziekte) <i>Verticillium dahliae</i> , fungus (verwelkingsziekte) <i>Nectria cinnabarina</i> , fungus, (Meniezwammetje, Vuur)
insects	<i>Phylloxera geniculata</i> , leaf-mining Lepidoptera (Dutch: bladmineerder) aphids can cause "roetdauw"
wood	
wood	Maple, Sycamore (Dutch: Europees esdoorn)
wood structures key characteristics of pores	Diffuse porous; pores sparse.
vol. mass heartwood (kg/m ³)	(530-)610-680(-800) (12% moisture content)
elastic modulus (N/mm ²)	10.100
durability heartwood	fungus 5
heartwood color	white to light-yellow
sapwood color	white to light-yellow
contents	
products	furniture, cladding, flooring, musical instruments, tools, cutlery, turnery, veneerwood
non-timber products	
seed pods	roasted edible
sap	plane or as syrup

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



buds



Sycamore maple seedling
photography 3x © Leo Goudzwaard



ornamental tree in Zwolle



Mature landscape tree near Hassinkbos, Epse, Deventer, photo © Jeroen Philippona



inflorescence
photo's © Leo Goudzwaard



inflorescence and leaf



inflorescence, photo © Hans-Cees Speel



flower in detail



fruits and leaves, photo © Leo Goudzwaard



fruits, photo © Hans-Cees Speel



bark of a young tree
photo's 2x © Leo Goudzwaard



bark of a mature tree



Maple wood, photo © Chris Sonnemans