

**Tree factsheet**

images at pages 3, 4, 5

***Robinia pseudoacacia* L.**

<b>taxonomy</b>	
author, year	Linnaeus, 1753
synonym	-
Family	Fabaceae
Eng. Name	Black locust, Robinia, False acacia
Dutch name	Robinia, Valse acacia
subspecies	-
varieties	none
hybrids	<i>R. x ambigua</i> ( <i>R. pseudoacacia</i> x <i>R. viscosa</i> )
cultivars, frequently used	
'Fastigiata'	columnar shape, planted in streets
'Frisia'	streets, parks
'Bessoniana'	streets, parks
'Apallachia'	streets, parks
'Sandraudiga'	streets, parks
'Semperflorens'	streets, parks
'Unifoliola'	streets, parks
<b>references</b>	USDA Forest Service <a href="http://www.fs.fed.us/database/feis/plants/tree/index.html">http://www.fs.fed.us/database/feis/plants/tree/index.html</a>
	Hiemstra, J.A. 2002. Rassenlijst bomen
	Robinia Foundation; <a href="http://www.robinia.nl">www.robinia.nl</a>
	Plants for a future Database; <a href="http://www.pfaf.org/index.html">www.pfaf.org/index.html</a>
<b>morphology</b>	
crown habit	tree, oval to round
max. height (m)	18-24
max. dbh (cm)	100 and more
actual size Europe	
actual size Netherlands	year 1600-1700, d(130) 223, h 17, Kasteel Doorwerth, Doorwerth, Gelderland year 1850-1860, d(130) 83, h 30
leaf length (cm)	14-25
leaf petiole (cm)	1
leaf colour upper surface	green
leaf colour under surface	green
leaves arrangement	alternate
flowering	June
flowering plant	monoecious
flower	hermaphrodite
flower diameter (cm)	2
pollination	insects (bees)
fruit; length	seedpod; 5-10 cm
fruit petiole (cm)	1
seed; length	seed; 0,5-0,7 cm
seed-wing length (cm)	not present
weight 1000 seeds (g)	18-20
seeds ripen	October
seed dispersal	

<b>habitat</b>	
natural distribution	E + M. USA
in N.W. Europe since	1601
natural areas The Netherlands	-
geological landscape types The Netherlands (Hoek 1997)	ice-pushed ridges
forested areas The Netherlands	moist, sandy, loamy and clayish soils
area Netherlands	<900 ha (2002, Probos)
% of forest trees in the Netherlands	<0,4 (2002, Probos)
soil type	
pH-KCl	acid to neutral
soil fertility	nutrient poor to nutrient rich
light	light demanding
☉ shade tolerance (0=no tolerance to 5=max. tolerance)	1.7
☉ drought tolerance (0=no tolerance to 5=max. tolerance)	4.1
☉ waterlogging tolerance (0=no tolerance to 5=max. tolerance)	1.1
plant communities in the Netherlands	planted in: Klasse der Eiken-Beukenbossen op voedselarme grond
<b>management</b>	
status USA	frequent? species in forests, urban environment
status Europe	infrequent species in forests, frequent in urban environment
status The Netherlands	frequent exotic (naturalized) species in forests, landscape and urban environment
application	timber tree, street tree, ornamental tree
propagation	seed; named cultivars by grafting; rootings
regeneration	planting; natural regeneration
optimal gap size for regeneration	?
first plantation Netherlands	
resprouting after cutting	good
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$ )	moderate; ...
diseases	<i>Verticillium dahliae</i> – Verticillium wilt – fungus on young trees – verwelkingsziekte, tast jonge bomen aan
insects	<i>Megacyllene robiniae</i> - locust borer - robinia-boorder kever in USA severe damages; bees attracted by flowers
<b>wood</b>	
wood	Locust, False acacia (Dutch: Robinia)
wood structures key characteristics of pores	Ring porous; solitary pores in early-wood; pores clusters in latewood.
vol. mass heartwood (kg/m <sup>3</sup> )	(540-)720-740-800 (-860) (12% moisture content)
elastic modulus (N/mm <sup>2</sup> )	14.200
durability heartwood	fungus 4
heartwood color	gold-brown
sapwood color	grayish yellow
contents	tanine (looizuur)
products	construction timber, flooring, furniture, garden furniture, barrels for wine, waterworks etc.
<b>non-timber products</b>	
flowers	nectar for honey production, flowers for flavouring tea

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



two leaves at a branchlet



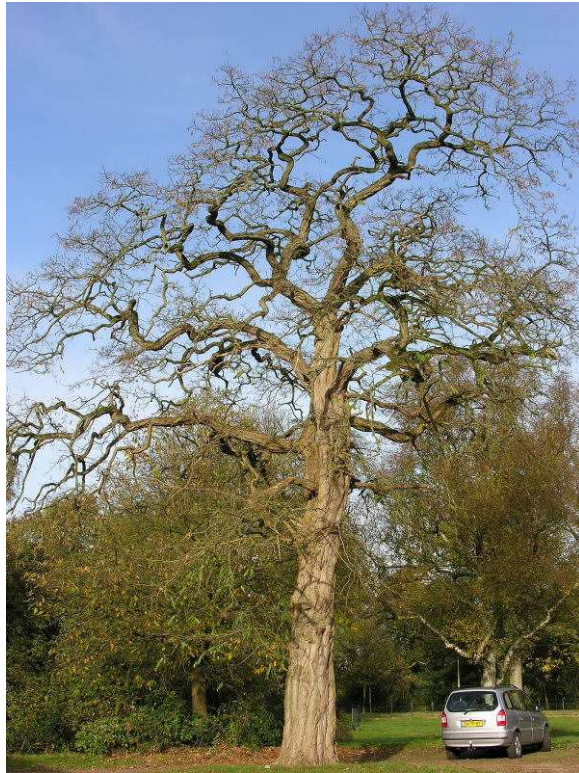
two branchlets in winter



inflorescence  
photography 3x © Leo Goudzwaard



young ornamental, Besselom



mature ornamental, Wageningen



mature ornamental Black Locust, Rhenen



bark of a young tree



bark of an old tree



wood photo © Chris Sonnemans



wood, fresh greenish brown



dry wood, brown

photos 4x © Leo Goudzwaard