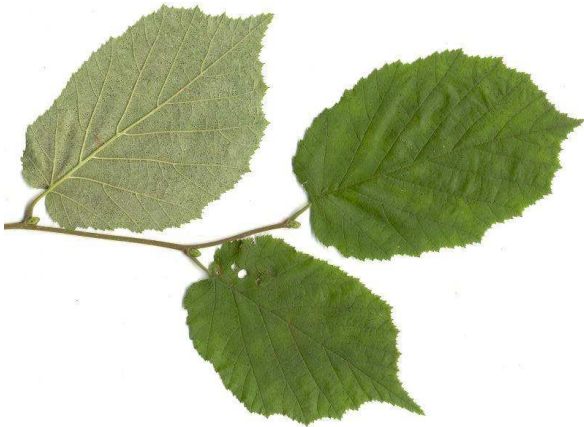


habitat	
natural distribution	Europe, West Asia
in N.W. Europe since	9800 B.C.
natural areas The Netherlands	forests, forest edges, hedges
geological landscape types The Netherlands (Hoek 1997)	river and brook valleys, loss-covered terraces
forested areas The Netherlands	not a forest tree
area Netherlands / status	
% of forest trees in the Netherlands	-
soil type	
pH-KCl	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)	1.7
plant communities in the Netherlands	Klasse der doornstruwelen: Rhamno-Prunetea: -Pruno-spinosae-Ligustretum
management	
status Europe	frequent indigenous species in hedges and scrub
status The Netherlands	frequent indigenous species in hedges and scrub
application	fruit plant; ornamental shrub
propagation	seed; cultivars by grafting
regeneration	planting; natural regeneration from seed
optimal gap size for regeneration	open forest
first plantation Netherlands	
resprouting after cutting	very good
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$)	
diseases	<i>Xanthomonas corylina</i> , bacterial disease
insects	<i>Phytoptus avellana</i> , mite living in buds (Galmijt) <i>Curculio nucum</i> , snuitkever, eating the seeds (Hazelnootboorder)
wood	
wood structures key characteristics of pores	diffuse-porous; radial pore multiples
vol. mass heartwood (kg/m ³)	630
elastic modulus (N/mm ²)	
durability heartwood	not durable
heartwood color	no visible heartwood
sapwood color	white, turning to red in air
contents	
products	osier (rijshout), basketry (vlechtwerk) charcoal
non-timber products	
fruits	raw edible and nutritious

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



Hazel leaves



Young hazel, flowering in spring, Veenendaal



Young hazel in summer



Stems of a hazel shrub



Winter twig and buds



Female flower photo ©Plantengids K.U. Leuven



Male flowers ©Plantengids K.U. Leuven

female flowers and unopened male flowers
photo ©Leo Goudzwaard, Wageningen University



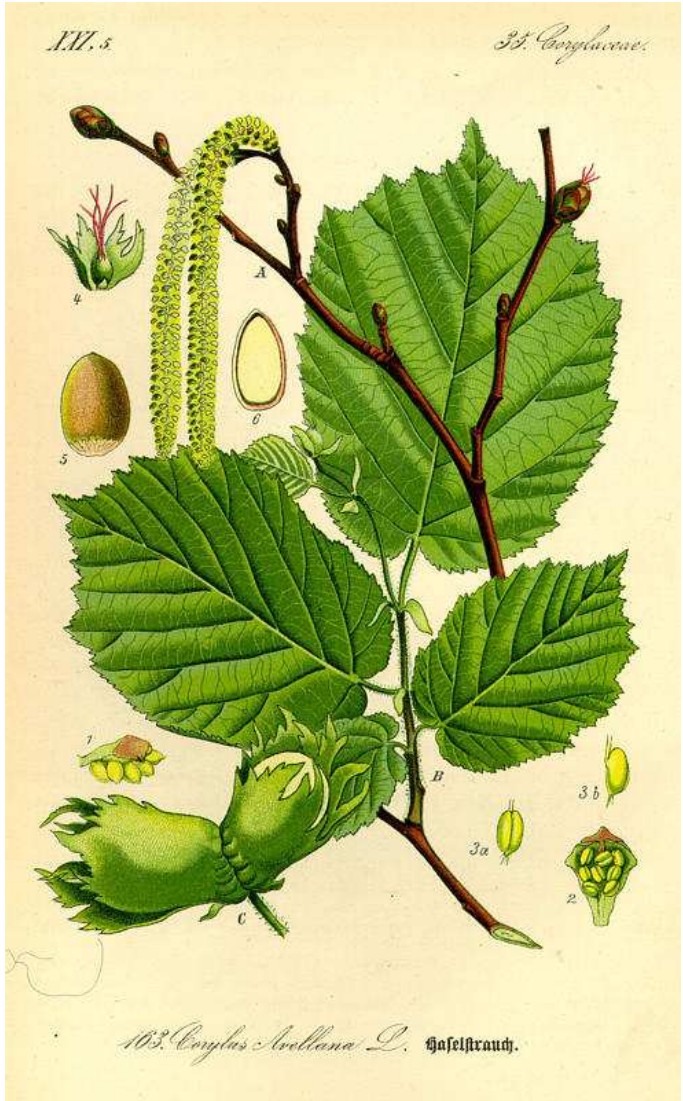
Hazel unripe fruits, photo ©Leo Goudzwaard,
Wageningen University



Hazel nuts, photo Wikipedia



fruit and fruit bracts



Thomé, 1885