



<b>habitat</b>	
natural distribution	USA: SW Oregon and NW California, near the coast
in N.W. Europe since	1855
natural areas The Netherlands	not indigenous
geological landscape types The Netherlands (Hoek 1997)	coversand area, ice-pushed ridges
forested areas The Netherlands	sandy soils
area Netherlands / status	rare as a forest tree
% of forest trees in the Netherlands	-
soil type	loamy sandy soils
pH-KCl	4-7
soil fertility	medium to nutrient rich
light	highly shade tolerant as a sapling, shade tolerant when mature
① shade tolerance (0=no tolerance to 5=max. tolerance)	3.7
① drought tolerance (0=no tolerance to 5=max. tolerance)	2.1
① waterlogging tolerance (0=no tolerance to 5=max. tolerance)	1.0
plant communities in the Netherlands	Vaccinio-Piceetea (klasse der naaldbossen)
<b>management</b>	
status USA Natural range	rare species in forests, in a small range
status Europe	rare exotic species in forests, frequent in urban environment
status The Netherlands	infrequent exotic species in forests, frequent in urban environment
application	timber tree, ornamental
propagation	seed, cuttings
regeneration	planting, natural regeneration
optimal gap size for regeneration	?
first plantation Netherlands	1856 Schovenhorst
resprouting after cutting	no
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$ )	medium to high; ...
diseases	<i>Phytophthora lateralis</i> , rootrot, fungus on roots in USA
insects	very resistant to insects
<b>wood</b>	
wood	Port Orford white cedar (the most valuable wood of North America; <a href="http://www.conifers.org">www.conifers.org</a> )
wood structures key characteristics of pores	
density heartwood ( $kg/m^3$ )	460 (12% moisture content)
elastic modulus ( $N/mm^2$ )	
durability heartwood	fungus ?
heartwood colour	white to pale yellowish brown
sapwood colour	white to pale yellowish brown
contents	volatile oil, which is poisonous
products	boats; temple construction in China and Japan
<b>non-timber products</b>	
oil	soap production

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



*Chamaecyparis* stand ONO, Renkum



Tree tops, *Thuja* (le) and *Chamaecyparis* (ri)  
Dikkenberg, Bennekom



30m high Port Orford Cedar,  
Bedgebury Pinetum, England



seedling, Speulderbos



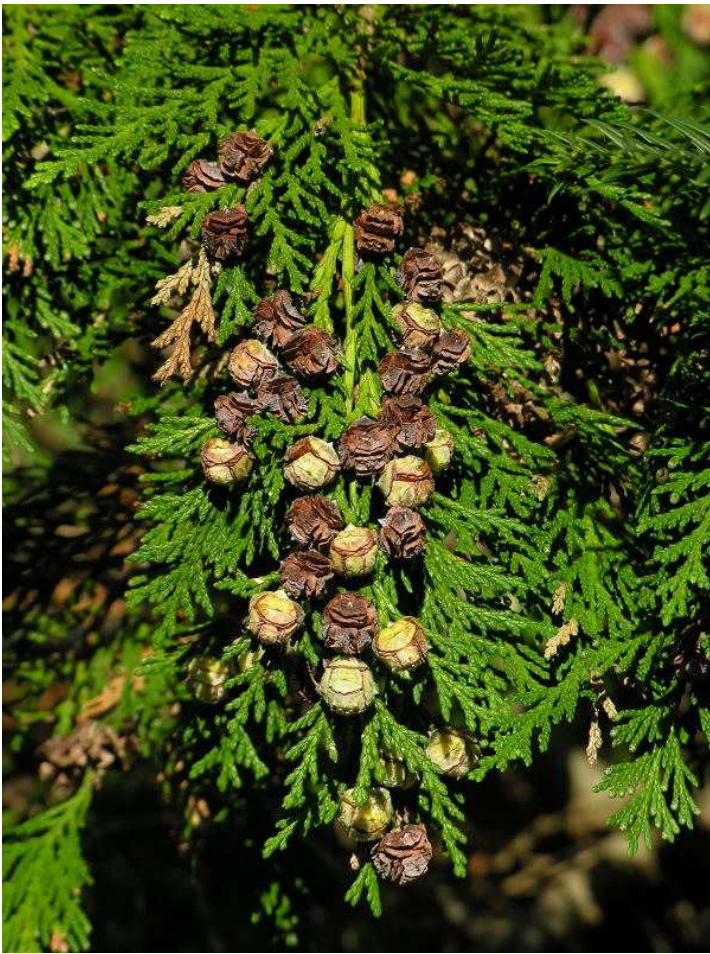
bark of a young tree



bark of an mature tree

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Cones, Hinkeloord arboretum, Wageningen

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leaves