

Tree factsheet

images at pages 3 and 4

***Larix kaempferi* (Lambert) Carrière**

taxonomy	
author, year	Carrière 1856
synonym	<i>Larix leptolepis</i> (Sieb. et Zucc.) Gordon; <i>Larix japonica</i> A. Murray; <i>Pinus kaempferi</i> L.
Family	Pinaceae
Eng. Name	Japanese larch
Dutch name	Japaneze lariks (Boom, 2000) Goudlorik (Heukels' Flora, 2005; Atlas van plantengemeenschappen, 2005); (Goudlorik is een foutieve naam!)
subspecies	-
varieties	-
hybrids	<i>Larix x marschlinsii</i> Coaz (<i>L. decidua</i> x <i>L. kaempferi</i>) (syn. <i>Larix x eurolepis</i> Henry) Dutch: Dunkeld lariks (Boom, 2000)
cultivars, frequently planted	-
references	
	Earle, C.J. Gymnosperm database; www.conifers.org USDA Forest Service; www.pfaf.org/database/index.php
	Westra, J.J. Het geslacht Larix. In Schmidt (ed.). 1987. Ned. Boomsoorten 1 Syllabus vakgroep Bosteelt en Bosecologie, Landbouwwuniversiteit Wageningen Plants for a Future Database; www.pfaf.org/index.html
morphology	
crown habit	tree, pyramidal
max. height (m)	Europe: 40 The Netherlands: 30
max. dbh (cm)	150
oldest tree	?
actual size Europe	?
actual size Netherlands	1860, ...Schovenhorst, Putten
leaf length (cm)	2-4 single
leaf petiole (cm)	0
leaf colour upper surface	green
leaf colour under surface	green
leaves arrangement	alternate
flowering	March – May
flowering plant	monoecious
flower	monosexual
flower diameter (cm)	?
pollination	wind
fruit; length	cone; 3-4 cm
fruit petiole (cm)	0,3
seed; length	samara (=winged nut); ... cm
seed-wing length (cm)	?
weight 1000 seeds (g)	5,0-5,9
seeds ripen	October same year
seed dispersal	wind

habitat	
natural distribution	Japan
in N.W. Europe since	1861 The Netherlands, 1861 Engeland
natural areas The Netherlands	not indigenous
geological landscape types The Netherlands (Hoek 1997)	
forested areas The Netherlands	dry and moist sandy soils; former oak coppice forests
area Netherlands	common forest tree
% of forest trees in the Netherlands	7,3
soil type	sands or loamy soils
pH-KCl	
soil fertility	nutrient medium to nutrient rich
light	light demanding
● shade tolerance (0=no tolerance to 5=max. tolerance)	1.4
● drought tolerance (0=no tolerance to 5=max. tolerance)	3.0
● waterlogging tolerance (0=no tolerance to 5=max. tolerance)	1.6
plant communities in the Netherlands	Vaccinio-Piceetea (klasse der naaldbossen)
management	
status Europe	infrequent exotics in forests
status The Netherlands	frequent exotic species in forests
application	timber tree
propagation	seed
regeneration	planting; natural regeneration
optimal gap size for regeneration	2x tree length
first plantation Netherlands	?
resprouting after cutting	no
growth rate (M.A.I. in $m^3ha^{-1}j^{-1}$)	fast ...
diseases	mainly as in <i>L. decidua</i> : <i>Armillaria mellea</i> , fungus on roots (Dutch: Honingzwam) <i>Meria laricis</i> , fungus on leaves (Dutch: Lariksschot) <i>Heterobasidion annosum</i> , fungus on roots and stem (Dutch: wortelzwam) <i>Phomopsis pseudotsugae</i> , fungus on young trees (Dutch: insnoeringsziekte) <i>Phaeolus schweinitzii</i> – Dennenvoetzwam
insects	<i>Coleophora laricella</i> (Dutch: Lariksmotje, Lariks-spinselmotje) <i>Cephalcia alpina</i> (Dutch: Spinselbladwesp) <i>Pristiphora laricis</i> (Dutch: bladwesp) <i>Ips cembrae</i> (Dutch: Lariksbastkever)
wood	
wood	Larch (Dutch: lariks)
wood structure key characteristics of pores	<i>L. decidua</i> : resin canals present, transition from earlywood to latewood abrupt
density heartwood (kg/m^3)	<i>L. decidua</i> : 470-650 (12% moisture content)
elastic modulus (N/mm^2)	?
durability heartwood	fungus 3-4
heartwood colour	yellowish brown to reddish brown
sapwood colour	yellowish white
contents	resin (Dutch: hars)
products	poles, construction timber, windows, doors, cladding, furniture
non-timber products	
resin	for turpentine

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



Japanese larch stand, Hoenderloo, Veluwe



Old solitary Japanese larch showing autumn colours, Doorwerth



seedling
photography 4x ©Leo Goudzwaard, Wageningen University



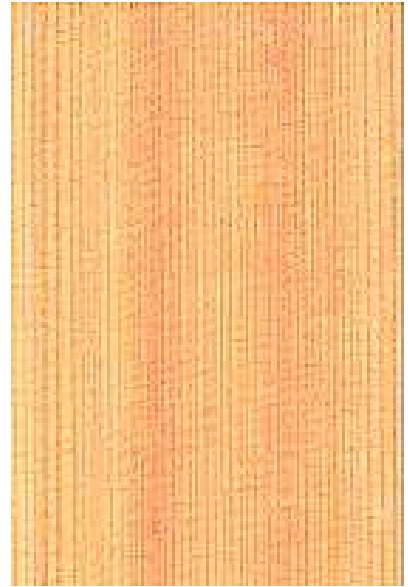
three years old sapling, Edesche Bos, Ede, Veluwe



bark
photography 2x ©Leo Goudzwaard, Wageningen University



old cones



larch wood
photo ©Chris Sonnemans



Larch branch showing short shoot and long shoot



Long shoot