



Tree factsheet

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***Prosopis juliflora* (Sw) DC**

Gabriel Muturi and Leo Goudzwaard

Taxonomy	
Author, year	De Candolle, ..
Synonym	<i>Algarobia juliflora</i> (Swartz) Benth. ex Heynh., <i>Mimosa juliflora</i> Swartz., <i>Mimosa salinarum</i> Vahl., <i>Netuma juliflora</i> (Swartz) Raf., <i>Prosopis cumanensis</i> Kunth., <i>Prosopis dominguensis</i> DC. and <i>Prosopis vidaliana</i> Naves.
Family	Fabaceae
English name	velvet mesquite, algarroba, honey mesquite, ironwood, mesquite, mesquite bean
Other names	mesquite
Dutch name	-
Subspecies	-
Varieties	
Hybrids	hybridizes with other species in <i>Prosopis</i> genus
References:	
	Cadoret, K. Pasiecznik, N.M. and Harris, P.J.C 2000. The Genus <i>Prosopis</i> : A reference database (Version 1.0). CD ROM. HDRA, Coventry, UK. ISBN 0-905343-28X.
	Landeras, G., Alfonso, M., Pasiecznik, N.M., Harris, P.J.C., Ramirez, L., 2006. Identification of <i>Prosopis juliflora</i> and <i>Prosopis pallida</i> accessions using molecular markers. <i>Biodiversity and Conservation</i> 15, 1829-1844.
	Pasiecznik, N.M. Felker, P., Harris, P.J.C., Harsh, L.N., Cruz, G. Tewarri, J.C. Cadoret, K. and Maldonado, L.J. 2001. The <i>Prosopis juliflora</i> - <i>Prosopis pallida</i> complex: A monograph. HDRA. ISBN 0 905343 30 1
	Shiferaw, H., Teketay, D., Nemomissa, S., Assefa, F., 2004. Some biological characteristics that foster the invasion of <i>Prosopis juliflora</i> (Sw.) DC. at Middle Awash Rift Valley Area, north-eastern Ethiopia. <i>Journal of Arid Environments</i> 58, 135-154.
	World Agroforestry Centre: www.worldagroforestry.org/es/Prosopis_juliflora.asp
	Gabriel M. Muturi: www.fem.wur.nl/UK/Research/Theme+1/muturi/ and: Ecophysiological basis of Prosopis juliflora invasion in the Acacia tortilis dominated Turkwell riverine forest, Kenya
	Purdue University: www.hort.purdue.edu/newcrop/duke_energy/Prosopis_juliflora.html
Morphology	
Crown habit	oval
Maximum height (m)	17
Maximum dbh (cm)	30-130
Actual sizes, locality, country	-
Oldest tree – location	-
Leaf length (cm)	
Leaf petiole (cm)	
Leaf colour – upper surface	dark green
Leaf colour – lower surface	dark green
Leaf arrangements	bipinnate
Flowering	dynamic
Flowering plant	pale yellow to whitish-creamy, solitary or clustered near the leaf axils
Flower	light yellowish green,
Flower diameter pollen cones	
Inflorescence description	1.5 mm wide
Pollination	
Fruit; length	Pods are 15-20 long and 1-1,5 cm wide

Fruit petiole (cm)	
Seed length (mm)	2-8
Seed-wing length (cm)	
Weight 1000 seeds (g)	80-150
Seeds ripen	
Seed dispersal	livestock and water
Habitat	
Natural distribution	Central and South America
Introduced countries	widely introduced in Africa, Asia, Australia, Middle East and North America
Area natural habitat (ha)	-
Soil type, water	grows in a wide range types of soils, drought resistant
PH – KCl	tolerates alkalinity of up to 10.5
Soil fertility	tolerates salinity and low fertility
Light	shade intolerant
Plant communities natural area	in woodlands, isolated trees and riverine forests
Climate	
Management	
Status natural range	
Status introduced range	invasive in some cases and a species of choice in other areas
First plantation outside natural range	
Application	erosion control, dune stabilization and rehabilitation of degraded lands including those affected by salinity
Propagation	seeds and seedlings
Regeneration	from soil seed bank and coppicing
Optimal gap size for regeneration	-
Resprouting after cutting (coppicing)	good
Growth rate (M.A.I.in m ³ ha ⁻¹ y ⁻¹)	0.5 t/ha/yr – 39 t/ha/yr depending on site conditions
Diseases	
Insects	
Wood	
Trade name	
Wood structures key characteristics of pores	
Density heartwood (kg/m ³)	
Elastic modulus (N/mm ²)	
Fungi class durability heartwood	not very resistant
Heartwood colour	light reddish brown
Sapwood colour	white
Contents	the gum has irritant properties, which can cause dermatitis
Products	food, fodder, honey, timber, fuelwood (can cause dermatitis), gums and tannins
Non-timber products	
Pods	flour for food, mostly by Amerindians
Leaves	fodder
Flowers	honey



P. juliflora at Hawaii © Forest & Kim Starr



Francisco Manuel Blanco, 1883, Flora de Filipinas



P. juliflora at [Hodal](#) in Faridabad District of Haryana, India ©Vilaiti Keekar