LOCAL NAMES Mandinka (sana tenyo); Wolof (samba tene)

BOTANIC DESCRIPTION

Albizia ferruginea is a tree, 6-40 m high with a beautiful spreading crown. Bole nearly straight; bark rough, thick, peeling off in older trees. Young branchlets densely rusty, pubescent or sometimes subtomentose. Slash light brown with reddish patches.

Leaves bipinnate, consisting of 3-5 pinnae oppositely arranged, terminal pinnae; terminal pinnae pairs on the leaf stalk have 15-16 leaflets, which can grow up to 2cm long and 0.8 cm wide. Leaflets oblong, tip and base round; smooth on top and hairy underneath. Leaf indumentum red.

Flowers greenish-cream in tight clusters, calyx 3-6 mm long covered with rusty hairs. Stamen numerous, filaments up to 5 cm, staminal tube not or scarcely exserted beyond corolla.

Fruit a pod, 15-20 cm long and 4 cm wide, reddish-brown glossy and veined; containing 9-12 flattened seeds, seed 7-10 mm long and 4.5-8 mm wide.

The genus was named after Filippo del Albizzi, a Florentine nobleman who in 1749 introduced A. julibrissin into cultivation. The specific epithet refers to the colour of the pods.

BIOLOGY A. ferruginea is a hermaphroditic tree.

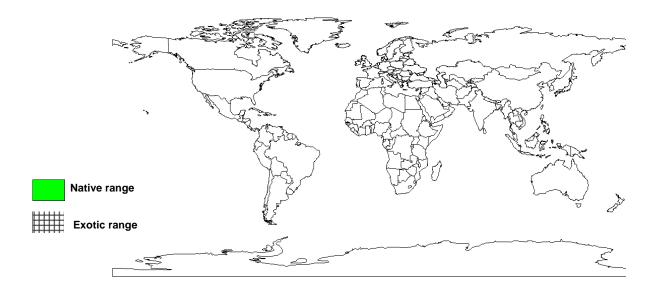
ECOLOGY

A. ferruginea is a forest emergent commonly found in woodland, lowland rainforest and scrub vegetation.

BIOPHYSICAL LIMITS Altitude: 700-1 200 m

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Nigeria, Senegal, Uganda Exotic:



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS

Fodder: Forage legume eaten by goats, reports from Nigeria lists it highest in a sample of 44 species in protein content and crude fibre.

Apiculture: The tree provides nectar for bees.

Fuel: Branches are used as firesticks.

Timber: A. ferruginea wood is medium-heavy 600-700 kg/cu. m when air seasoned; reasonably hard and durable. The heartwood is moderately resistant to termites. The wood saws easily and is used for interior construction, building of vehicle bodies, veneer production, furniture and wood carvings. It is advisable to treat surfaces with a grain filler before polishing. Wood also suitable for wooden houses.

Poison: The bark is reportedly poisonous.

Medicine: In Ghana, plant parts are used to elicit purgation and treat dysentery. The bark decoction is used as a wash for wounds and sores.

Other products: The leaves are rich in saponins and are used in washing.

SERVICES

Shade or shelter: A. ferruginea is a shade tree.

Nitrogen fixing: Forms vesicular arbuscular mycorrhiza; highest mycorrhizal inoculation effect was observed at soil P concentration of 0.02 mg/litre. Based on these data, both Albizia and Enterolobium were classified as highly mycorrhizal dependent species. Nodulation is reported in A. ferruginea, Rhizobium-type root nodules are found on the roots.

Soil improver: The tree's leaf litter improves the quality of surrounding soil.

Ornamental: A. ferruginea is a beautiful tree suitable for planting along avenues and in parks.

GERMPLASM MANAGEMENT Seed storage behaviour orthodox.

PESTS AND DISEASES Sapwood liable to attack by powder-post beetles.

FURTHER READNG

Habte M and Musoko M. 1994. Changes in the vesicular-arbuscular mycorrhizal dependency of Albizia ferruginea and Enterolobium cyclocarpum in response to soil phosphorus concentration. Journal of Plant Nutrition. 17(10): 1769-1780.

Hong TD, Linington S, Ellis RH. 1996. Seed storage behaviour: a compendium. Handbooks for Genebanks: No. 4. IPGRI.

Wester J and Hogberg P. 1989. New nodulating legume tree species from Guinea-Bissau, West Africa. Forest Ecology and Management. 29(4): 311-314.

SUGGESTED CITATION

Orwa C, Mutua A, Kindt R, Jamnadass R, Simons A. 2009. Agroforestree Database:a tree reference and selection guide version 4.0 (http://www.worldagroforestry.org/af/treedb/)