

LOCAL NAMES

Luganda (musisiya,mugavu); Swahili (mugavu)

BOTANIC DESCRIPTION

Albizia coriaria is a deciduous tree 6-36 m tall. Tree crown spreading and flat, trunk often twisted. Buttresses short and blunt. Bark gray-black, rough and raggedly scaling. Young branchlets hairy.

Leaves bipinnate, pinnae 3-6 pairs, leaflets 6-11 pairs, oblong to elliptic 13-33 mm long, 5-17 mm wide, rounded at apex, subglabrous except for a few hairs on the midrib beneath.

Flowers subsessile or on pedicels 0.5-2 mm long; bracteoles minute, 1.5-2 mm long usually falling off before flowering. Calyx 3.5-6.5 mm long, not slit unilaterally, puberulous outside, with few shortly stipitate glands. Corolla 8-13.5 cm long, white and puberulous outside.

Fruit a pod 10-21 cm long, 2-5 cm wide, glabrous or nearly so, brown or purplish-brown in colour with a tapered or acute apex.

A. coriaria is closely related to *A. ferruginea* and distinguishing between the two species is difficult. The genus was named after Filippo del Albizzi, a Florentine nobleman who in 1749 introduced *A. julibrissin* into cultivation. The specific epithet 'coriaria' describes the leathery texture of its upper leaf surfaces.

BIOLOGY

A. coriaria is a hermaphroditic species.

ECOLOGY

A. coriaria is a pioneer species common in wooded grassland, woodland and thicket. Its absence in closed canopy rainforest is largely the result of its high light requirements. Its distribution range extends from West Africa through eastern, southern and parts of central Africa.

BIOPHYSICAL LIMITS

Altitude: 850-1 700 m

Soil type: Found on a variety of soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Cote d'Ivoire, Ethiopia, Kenya, Sudan, Tanzania, 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: Foliage eaten by livestock.

Apiculture: The tree is a useful source of bee fodder.

Fuel: The tree is used as firewood and for charcoal making.

Timber: The sapwood is soft but the heartwood hard and durable. Timber used for boat building, utensils and furniture manufacture.

Poison: Molluscicidal activity is shown by bark extracts of *A. coriaria*. Chemical analysis of the extracts indicates the active ingredients are tannins. However, use of *A. coriaria* is not recommended on large scale because of its low potency compared to Endod (*Phytolacca dodecandra*).

Medicine: Bark is used for the treatment of menorrhagia, threatened abortion and post-partum haemorrhage. The roots and bark in concoctions with *Carissa edulis* and *Euclea divinorum* are used in treating venereal diseases or used in steam fumigation treatments for sore eyes. The bark decoction is used in treating cattle diseases and a number of abdominal problems associated with protozoan parasites.

Other products: The bark is rich in saponins.

SERVICES

Shade or shelter: A good shade provider.

Nitrogen fixing: *A. coriaria* is nitrogen fixing.

Ornamental: *A. coriaria* is a beautiful tree with bright green splashes of new foliage growth and showy flowers, commonly found in homesteads and protected in fields.

Intercropping: *A. coriaria* is one of the species used in a permanent cultivation indigenous agroforestry system on the central plains of Uganda.

Other services: Leaves used to hasten banana ripening. This tree is highly regarded culturally among the Luo of Kenya.

TREE MANAGEMENT

A. coriaria is a slow growing tree, recommended management practices are lopping and pollarding.

GERMPLASM MANAGEMENT

Good germination rates (30-70%) are reported for A. coriaria. No pre-treatment is necessary for fresh seed, however stored seed needs soaking. Seeds can be stored up to one year. There are about 6 000 seeds/kg. Insecticide application is necessary to ward off insects.

PESTS AND DISEASES

Seeds are prone to beetle attack, often while still on the parent tree. Wood is prone to termite attack.

FURTHER READING

Brenan JPM. 1959. Leguminosae (I) subfamily Caesalpinioideae. In: Flora of Tropical East Africa. Crown Agents, London.

Katende AB et al. 1995. Useful trees and shrubs for Uganda. Identification, Propagation and Management for Agricultural and Pastoral Communities. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).

Kokwaro JO. 1976. Medicinal plants of East Africa. East African Literature Bureau.

Mengesha H, Birrie H and Gundersen G. 1997. The molluscicidal effect of the bark of "Bitza" tree: a local discovery towards the control of schistosomiasis in the Abay river valley of Western Ethiopia. Ethiopian Journal of Health Development. 11(1): 89-92.

Nielson F. 1994. Indigenous agroforestry systems in southern Luwero District Uganda - and their potential in agricultural development. CDR-Working Papers. No. 94.16; M. Sc. Thesis, University of Copenhagen, Denmark.

Owuor BO. 1999. An Ethnobotanical and Phytochemical study of the Herbal Remedies of Migori District, Kenya. Msc. Thesis, University of Nairobi, Kenya.

SUGGESTED CITATION

Orwa C, A Mutua, Kindt R, Jamnadass R, S Anthony. 2009 Agroforestry Database: a tree reference and selection guide version 4.0 (<http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp>)