

Entada abyssinica

Steudel ex A. Rich.

Fabaceae - Mimosoideae

LOCAL NAMES

Amharic (kontir,kentefa); Bemba (mulalantanga,mulalantete); English (tree entanda); Hausa (tawatsa); Igbo (angaramiri); Lozi (fumbwamusowo); Luganda (musambamazzi,mwolola); Lunda (muzenze); Nyanja (chongololo,chisekele); Shona (asena); Tigrigna (halka); Tongan (munyele,muzenze); Yoruba (gbengbe)

BOTANIC DESCRIPTION

Entada abyssinica is a small to medium-sized, deciduous tree, 3-15 m high, with a flat, spreading crown; bark grey to reddish, slightly fissured, flaking off in irregular patches; slash pink with streaks of red; branchlets pendulous, glabrous or sometimes pubescent.

Leaves alternate, bipinnate, stipules absent; pinnae 1-22 pairs; leaflets 15-55 pairs, mostly linear-oblong, 13-14 x 1-4 mm; apex round to slightly obtuse and slightly mucronate, appressed, pubescent above and below, or sometimes glabrous above, rarely entirely glabrous; petiole glandular.

Inflorescence 1-4 axillary racemes, 7-16 cm (including the 4-15 mm peduncle); flowers creamy white or fading yellowish, sweet scented.

Fruit a large, flat legume, 15-39 x 3-9 cm, subcoriaceous, straight or nearly so, with no conspicuous seed segments; seeds oval, flat, 10-13 x 8-10 mm; pod splitting between each seed, leaving the pod rim and forming a wing for the seeds.

E. abyssinica superficially resembles an acacia tree, from which it can be distinguished by its bipinnate leaves and the absence of thorns. The name 'Entada' is derived from an East Indian vernacular name. The specific name means 'from Ethiopia'.

BIOLOGY

Flowering takes place during the rainy season, and the fruit ripens towards the end of the rainy season, extending into the dry season. In Nigeria it flowers from January to March and from May to August. In Sudan it flowers in June and fruits in November.



flowers (Bart Wursten)



tree (Bart Wursten)

ECOLOGY

E. abyssinica is an understory forest species found in association with *Albizia zygia* and *A. hockii*. It extends from Guinea to Cameroon and is also widespread in central and eastern tropical Africa. It is usually found in a savannah habitat.

BIOPHYSICAL LIMITS

Altitude: 1300-2050 m, Mean annual temperature: 20-30 deg.C, Mean annual rainfall: 500-1 470 mm

Soil type: *E. abyssinica* prefers sandy loam soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Benin, Cameroon, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Kenya, Liberia, Mozambique, Nigeria, Sierra Leone, Sudan, Tanzania, Togo, Uganda, Zambia

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: The leaves are suitable for fodder.

Fuel: *E. abyssinica* is often used as firewood.

Timber: Heartwood is pale brown, occasionally tinged with pink, and is moderately light and easy to work.

Tannin or dyestuff: The root contains a saponin, entada saponin, and an alkaloid.

Poison: Juice of the bark and cambium has been used as ordeal poison under the eyelid.

Medicine: The plant is used in the treatment of miscarriage, and the leaf for fever. A decoction of the bark is taken for coughs, chronic bronchial engorgement, rheumatic pains and abdominal pain. An infusion of crushed roots is good for bronchial problems. A root or leaf decoction is used as a fever remedy; powdered or roasted pulverized seeds for sneezing; root bark as a massage for swelling; and the raw fruit induces vomiting as an antidote to snake venom. The seeds treat cataracts and diseases of the back of the eye.

Other products: Ashes from the wood are suitable for soap making.

SERVICES

Shade or shelter: Often conserved around homesteads and in coffee and tea plantations for light shade.

Nitrogen fixing: *E. abyssinica* has the ability to fix atmospheric nitrogen.

Ornamental: A good avenue tree, and it is planted for this purpose.

Intercropping: The tree grows well with crops.

TREE MANAGEMENT

Coppicing is a suitable practice. The species prefers open areas, so slashing of herbaceous vegetation in its natural habitat might boost its growth and yield.

GERMPLASM MANAGEMENT

Seed storage behaviour is orthodox. There are 3600-4200 seeds/kg.

FURTHER READING

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SUGGESTED CITATION

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