

LOCAL NAMES

Afrikaans (voëlpruim,bruin-ivoor); Amharic (jejeba); English (mountain date,bird plum,brown ivory,dog plum,wild almond); Lozi (mukumba,muzinzila); Nyanja (mziyi,mtacha); Somali (deen); Swahili (mnago); Tigrigna (aba); Tongan (mwii,mwinji); Tswana (mutsintsila); Zulu (uBalatsheni likulu,umMumu)

BOTANIC DESCRIPTION

Berchemia discolor is a shrub or a tree 3-20 m high; with a straight bole; rough, dark grey bark that flakes longitudinally; dense, rounded crown; slash yellow; young branches conspicuously lenticellate; branchlets glabrous to densely pubescent with short, spreading, whitish hairs.

Leaves alternate or sub-opposite, entirely or obscurely crenate, shiny above, dull and glaucous below, broadly elliptic, ovate or obovate-elliptic-lanceolate, 2-9 x 2-5 cm, obtuse or acute at the apex, rounded or cuneate at the base; leaf stalks glabrous or pubescent, 1-1.8 cm long.

Flowers small, solitary, thick, oblong or ellipsoid, 4-5 mm in diameter, greenish when young, turning yellowish after ripening.

Fruit datelike, yellow, up to 20 x 8 mm with 1-2 flat seeds in sweet, edible flesh.

'*Berchemia*' is named after M. Berchem, a French botanist, and 'discolor' means with 2 or more colours, referring to the fact that the upper and the lower surfaces are different colours. 'Dis' is a Latin prefix meaning '2'.

BIOLOGY

It takes about 4-5 months from flower fertilization to fruit ripening; flowering starts at the onset of rains, while fruit ripening occurs towards the end of the long rains. In South Africa, for example, flowering occurs from October to January and fruiting from January to July.



Berchemia discolor (Anthony Njenga)

ECOLOGY

B. discolor grows naturally in various climates, from semi-arid areas to areas receiving rainfall in 4 years out of 5. It is found scattered in semi-desert grassland, open woodland or at lower altitudes along river valleys, especially on termite mounds. It is common in riverine forests, Acacia-Commiphora-Balanites woodland and wooded grassland, Acacia woodland and bushland, and the miombo woodlands of Tanzania. *B. discolor* tolerates drought but is not resistant to frost or cold wind.

BIOPHYSICAL LIMITS

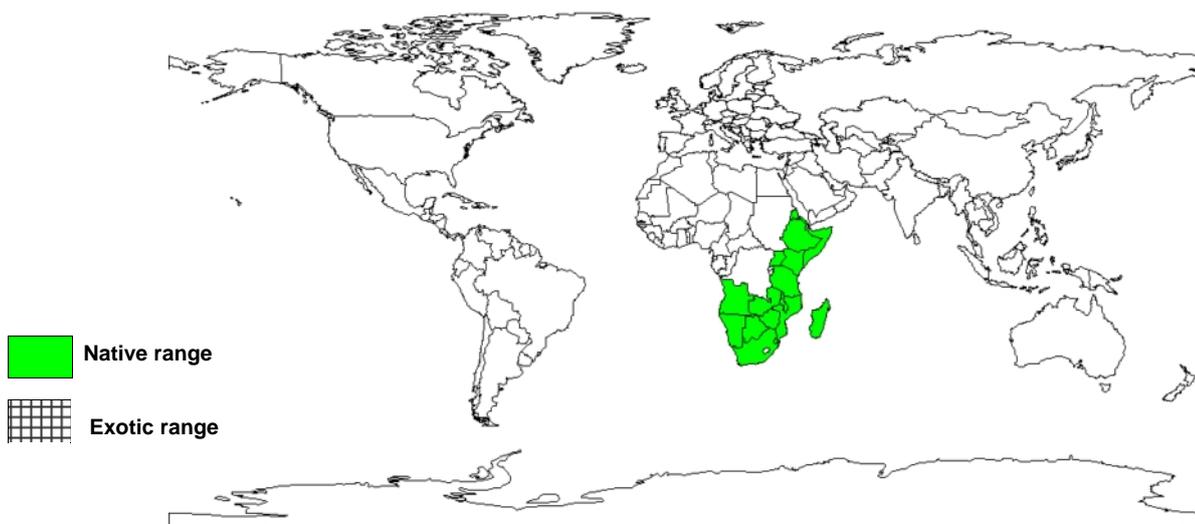
Altitude: 300-1900 m, Mean annual temperature: 14-30 deg. C, Mean annual rainfall: 250-500 to 760-1200 mm

Soil type: It grows naturally on a variety of soils of various origins. Performs best on well-drained soils in woodlands and along drainage lines.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Botswana, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Namibia, Somalia, South Africa, Swaziland, Tanzania, Uganda, Yemen, Republic of, Zambia, Zimbabwe

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

Food: Humans find the sweet, datelike taste of the fruit quite pleasant. The sugar content of the pulp is as high as 30%, and seeds taste like walnuts. The vitamin C content of the fruit is 65 mg/100 g. The fruit may be eaten boiled with sorghum. A beverage similar to tea is made from the leaves. Large quantities of the fruit are collected, dried and stored and later used by people in the low veld areas of South Africa.

Fodder: The fruit and leaves can be used as fodder.

Apiculture: Bees are attracted to the small yellow-green flowers found in loose clusters on the tree.

Timber: An important timber species of southern Africa. The sapwood is pale brown; heartwood hard, heavy (air-dry 992 kg/m³) and fine grained, yellow-brown with a reddish tinge. The wood is excellent for making furniture such as tables, chairs and benches and is also used in making poles, pestles and hair combs.

Gum or resin: The heartwood produces a resin.

Tannin or dyestuff: Black dye, popular with basket makers, is produced from powdered heartwood and roots.

Alcohol: A strong alcoholic drink is distilled from the fruit.

Medicine: The roots have various medicinal uses.

Other products: The whitewash produced from the ash is used for painting houses.

SERVICES

Shade or shelter: The spreading branches and heavy, rounded crown make *B. discolor* an effective shade tree; it can also act as a windbreak.

Ornamental: *B. discolor* is planted as an ornamental. The tree presents a challenge to anyone trying to make a bonsai from it, but if the effort is successful, it is one of the best indigenous trees for this form of art.

TREE MANAGEMENT

Plant groups of trees in protected areas in well-drained soil. *B. discolor* is a good tree to plant at or near watering points, as its roots are not aggressive. The growth rate is relatively fast, 600-800 mm/year. The tree is often found growing naturally near fertile termite mounds, so applying fertilizer at the time of planting may be useful. Tending the crop should include regular watering, slashing and spot weeding until the plants are well established. Coppicing, pollarding and lopping are all practised.

GERMPLASM MANAGEMENT

Seed storage behaviour is orthodox. Viability can be maintained for several years in hermetic storage at 3 deg. C with 7-13% mc. There are about 3000-3500 seeds/kg.

FURTHER READING

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SUGGESTED CITATION

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