Boscia angustifolia

A. Rich

Capparidaceae

LOCAL NAMES
Arabic (shajeret almarfin,sereh,sehel); Hausa (ballakani,agahini); Somali (chieh)

BOTANIC DESCRIPTION
Boscia angustifolia is a shrub or small evergreen tree to 10 (14) m high, crown rounded, branches erect, bark smooth, light grey, fissured, glabrous, slash yellow; twigs covered with small, coriaceous leaves, in clusters of 3-10 on older branches, solitary on 1-year-old shoots.

Leaves lanceolate or linear, oblong, mucronate, obtuse or retuse at the tip, rounded to cuneate at base, 6.5 cm x 1.5 cm, coriaceous, spread or erect, mat-green, nerves prominent, venation reticulate, midrib prominent below, stipules absent.

Flowers small (7 mm), greenish-white, clustered in short, simple, terminal racemes about 7 cm in diameter, fragrant, sepals 4, ovate, stamina 3-8.

Fruit a berry, spherical, 6-13 mm in diameter, often in groups of 3-5, rough skinned, yellowish when mature, containing 7 cream-coloured seeds.

Two varieties are recognized: var. corymbosa's leaves are minutely pubescent and variety angustifolia leaves are completely glabrous on the underside.

The specific epithet angustifolia means narrow-leaved.

BIOLOGY
The species is hermaphroditic, flowers between May & November in Zambia and fruits appear about a year later. Growth, blossom and fructification occur during the cool part of the dry season.

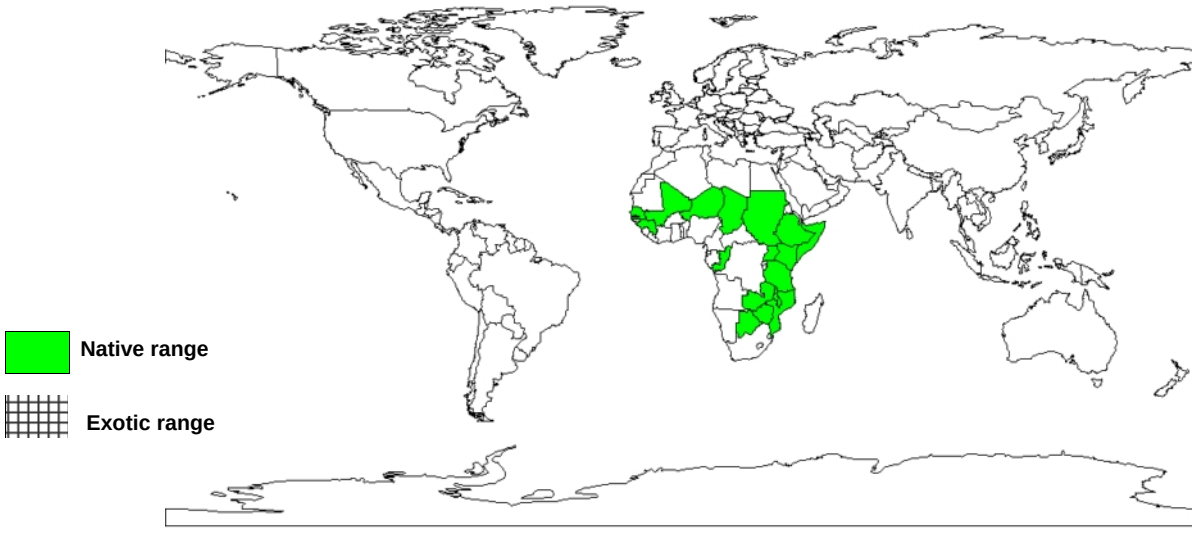
ECOLOGY
B. angustifolia is a Sahelo-Sudanian species whose area of distribution extends from the Atlantic to the Red Sea. In Sudan it is found in all Savanna types and in deciduous woodland and bush land in West Africa. It usually grows in very arid sites such as hills, laterite outcrops and cliffs, and sometimes dry riverbeds.

BIOPHYSICAL LIMITS
Altitude: up to 2 100 m
Mean annual rainfall: 200-800 mm
Soil type: The shrub tolerates a wide variety of soils and grows on free draining red soils, laterites, or on rocky screes.

DOCUMENTED SPECIES DISTRIBUTION

Native: Botswana, Central African Republic, Chad, Congo, Ethiopia, Gambia, Guinea, Kenya, Malawi, Mali, Mozambique, Niger, Senegal, Somalia, Sudan, Tanzania, Uganda, 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: Fruit and seeds are edible after cooking. Stripped bark is eaten mixed with millet or as soup in West Africa. Pieces of boiled wood are used to sweeten milk.

Fodder: The foliage is consumed by camels and small livestock, especially at the time of flowering and towards the end of the dry season.

Apiculture: In Zambia it is a good source of bee forage.

Fuel: The tree was formerly converted into charcoal for gunpowder.

Timber: Wood hard, used in carpentry and water storage vessels.

Medicine: Bark is applied on swollen feet, for kidney pains and stiff neck, roots for chest pains, fruit as a laxative. Pounded leaves are used as tonic for horses and camels.

SERVICES
Shade or shelter: The tree provides shade for livestock.

Reclamation: The shrub readily establishes itself in adverse conditions and has potential for reclaiming degraded sites.

TREE MANAGEMENT
Trees are pruned to 2 m for forage production in Niger.

FURTHER READNG

Baumer M. 1983. Notes on trees and shrubs in arid and semi-arid regions. Rome FAO. Forestry Division.

IBPGR-Kew. 1984. Forage and browse plants for arid and semi-arid Africa. Rome. IBPGR.

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Storrs AEG. 1995. Know your trees: some common trees found in Zambia. Regional Soil Conservation Unit (RSCU).

von Maydell HJ. 1986. Trees and shrubs of the Sahel - their characteristics and uses. GTZ 6MBH, Eschborn.

SUGGESTED CITATION

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