Capparis decidua (Forssk.) Edgew.

Capparidaceae

LOCAL NAMES
Arabic (tundub,sodad,murkheit,kursan); French (caprier sans feuilles,caprier); Hindi (karir,karil); Somali (meringa)

BOTANIC DESCRIPTION
Capparis decidua is a bushy shrub in dense tufts, 4-5 m high, or occasionally a small tree with many green vine-like apparently leafless branches, hanging in bundles. Bark turns whitish-grey colour with age, but most branches and twigs are a glossy dark green. Small, light brown spines occur in pairs on the twigs at each node.

Leaves very minute (2 mm long), with a very short life span on young shoots, so that the plant looks leafless most of the time.
Flowers pink, red-veined, in small groups along the leafless shoots, in the axils of the spines.

Fruit a small many-seeded ovoid or sub-globulous, slightly mucronate pink berry of the size and shape of a cherry, becoming blackish when dry.

The generic name is derived from the Arabic 'kapar', the name for Capparis spinosa.

BIOLOGY
Flowering occurs at the beginning of the dry season.

ECOLOGY
This species is common in dry tropical Africa, especially in the Sahel, where it sometimes constitutes lines of small trees in Wadi beds, as in Mauritania for instance. In West Africa, the area of distribution is identical to that of Cadaba farinosa; its southern limit corresponds to the northern loop of the Senegal river. In the Republic of Niger it reaches the Konadougou. Its area includes Tibesti (West Chad), much of the Sudan (except the extreme South) the Arabian Peninsula, Jordan, India, Pakistan, Iran, the Mascarene Islands and Natal.

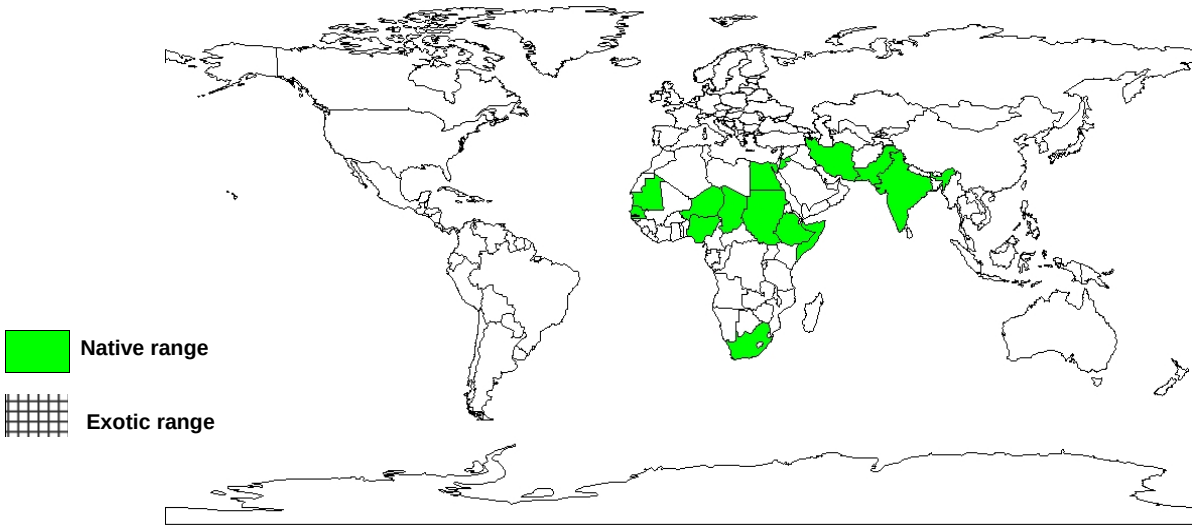
It is tolerant to prolonged drought and an interesting plant by reason of its excellent adaptation to arid conditions.

BIOPHYSICAL LIMITS
Altitude range: 300 - 1200 m
Mean annual rainfall: 100 - 750 mm
Mean annual temperature: 25 - 31ºC
Soils: It prefers alkaline, sandy and gravelly soils, thriving on shallow, hard soils and rocky outcrops.

DOCUMENTED SPECIES DISTRIBUTION

Native: Chad, Egypt, Ethiopia, India, Iran, Jordan, Mauritania, Niger, Nigeria, Pakistan, Senegal, Somalia, South Africa, Sudan

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: The fruit is relished by camels and also, wherever within their reach, by goats. The fruits are also consumed by man in the Sudan.

Fodder: Its browse value is probably its most important asset, despite being low in nutritional value. In Sudan for instance, it is a major source of camel food as it can be eaten when little else is available.

Fuel: It is used for charcoal and firewood in its native range.

Timber: The wood is very hard and used to make water pipes and water troughs.

Medicine: The very bitter roots are used in the Indian and Farsi pharmacopoeia and the root bark is used to cure swollen joints.

SERVICES
Erosion control: C. decidua has been found to be one of the best species for shelter belts to check the movement of sand in the Thar desert, India (Pandey and Rokad, 1992).

Shade or shelter: One of its preferred uses in the Sudan is as a shade and shelterbelt (Vogt, 1995).

Boundary or barrier or support: As it is drought resistant and withstands neglect, this species could be particularly useful in arid areas as a live hedge providing edible fruits.

TREE MANAGEMENT
C. decidua tolerates drought , fire, frost and termites. The trees are suited for coppicing.

GERMPLASM MANAGEMENT
Seed storage behavior is intermediate.

FURTHER READNG

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

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Pandey AN and Rokad MV. 1992. Sand dune stabilization: an investigation in the Thar desert of India. Journal of arid environments. 22(3): 287-292.

Vogt K. 1995. A field guide to the identification, propagation and uses of common trees and shrubs of dryland Sudan. SOS Sahel International (UK).

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

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/)