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Carapa procera DC.

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FOREST & LANDSCAPE

SEED LEAFLET

No. 136 November 2007

Carapa procera DC.

Taxonomy and nomenclature

Family: Meliaceae

Synonyms: *Carapa guineensis* Sweet ex. A Juss., *C. touloucouna* Guill. & Perr., *C. gummiflua* C.DC., *C. velutina* C.DC., *C. microcarpa* A. Chev.

Vernacular/common names: Crabwood (Eng.). Local names include: irrere, obi, ogidi, agogo and ninku (Nigeria), andiroba (French Guiana), krappa, kalappa, karaba (Surinam).

Distribution and habitat

The species is distributed from Senegal to Angola and in East Africa, as well as being found in tropical America in the Amazon basin. Its habitat range includes lake-shores, riparian and mid-altitude forest, especially where drainage is impeded, and typically at 1100-1800 m altitude. It has also frequently been recorded growing on sandy soils, generally at sea level. It is a common, but localised species.

Uses

The good quality reddish-brown timber, known as 'Uganda crabwood', resembles true mahogany and is used for furniture and interior fittings. The fruit is edible and oil can be extracted from the seeds. Although little is known about how the species behaves in agroforestry systems, its potential as a multipurpose (oilwood) crop seems great.

Botanical description

This species varies from being a sprawling tree in swamp forest, to a tall tree in lowland rain forest. It is typically an understorey tree, up to 25 m tall, but usually smaller, with branches that are widespread and arching, and no buttresses. The bark is reddish and smooth. The imparipinnate leaves are very variable in size, up to 1.5 m long, and mostly clustered at the end of branchlets, with a terminal dormant glandular leaflet. It has 6-18 pairs of opposite or subopposite leaflets, usually oblong-elliptic or oblanceolate-elliptic, up to 40 x 16 cm. The leaflets are a bright glossy green above, with sparse hairs on the midrib, and lateral nerves. The first seedling leaves are simple. The inflorescence is a pyramidal panicle, which is much branched and up to 70 cm long.

The white and pink fragrant flowers have 5, (sometimes 6) petals that are 5-6 mm in length.

Flowering and fruiting habit

It flowers early in the rainy season and fruits in the mid to late rainy season. In East Africa flowering occurs in September to November, with fruiting taking place in February to June. In tropical America flowering occurs from December to January, and fruiting from April to July.

Photo: S. Sanogo

C. procera fruits

Fruit and seed description

Fruit: There are 1-3 capsules per infructescence, which are 12-15 cm in diameter. The fruits are oblong-ellipsoid, long-beaked, or truncate and short-beaked, with ridges along each valve. There are c. 3-7 seeds per capsule. The capsules open at the apex and the base, simultaneously.

Seed: The seeds are dark brown and shiny. A typical seed measures c. 3 cm in length and they have a thousand seed weight of 12-35 kg. The kernel contains c. 55% oil.

Photo: H. Vautier

C. procera seeds

Forest & Landscape Denmark • Hørsholm Kongevej 11 • DK-2970 Hørsholm
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Harvest and Processing

Seeds should be collected from the trees when dehiscence of the first capsules occurs.

Capsules open upon drying and seeds can be manually removed from their capsules.

An open fruit of *C. procera* showing two rows of seeds. From: www.futura-sciences.com

Storage and viability

The seed is recalcitrant, it does not tolerate drying nor low temperatures. The lowest safe moisture content is c. 34%. For short term storage the seed should be stored with moist sawdust/vermiculite to maintain them at their harvest moisture content. During moist storage the seeds should be frequently ventilated to prevent anoxia.

Sowing and germination

Seed does not require any specific pre-treatment and should be germinated within the range of 26 to 31°C, and typically germinates within 4 weeks. Germination is hypogeal.

Selected readings

Sampaio P. de T.B. 1993. Andiroba. In: J.W. Clay and C.R. Clement (eds.), Selected species and strategies to enhance income generation from Amazonian forests. Working Paper - FO: Misc/93/6. FAO, Rome.

Seed Information Database (SID). 2004. http://www.rbgkew.org.uk/data/sid (release 6.0, October 2004).

Pennington, T.D. 1981. Flora Neotropica, Monograph Number 28, Meliaceae. The New York Botanical Garden, New York.

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