Pandanus leram

Scientific Name

Pandanus leram Voigt.

Synonyms

Pandanus indicus (Gaudich.) Warb, Pandanus leram var. macrocarpus Kurz, Pandanus mellori Boden-Kloss, Roussinia indica Gaudich.

Family

Pandanaceae

Common/English Names

Nicobar-Breadfruit (Plate 3), Pandan Wong

Vernacular Names

Nicobar Islands: mukung (<u>Shompen</u>), Larohm; *Portuguese*: Melori;

Origin/Distribution

The species is indigenous to the Nicobar and Andaman Islands and the south coasts of Sumatra and western Java.

Agroecology

A strictly tropical species found in low swampy areas away from the seashore in lowlands and along water courses where the soil is moist and heavy. *P. leram* is the dominant species in this low swampy vegetation flora. In its native habitat the mean annual maximum and minimum temperature is 25 and 30°C and with high annual rainfall up to 3,900 mm and high relative humidity of 77–88%.

Edible Plant Parts and Uses

Ripe fruit forms the staple food or daily bread of Shompen folks in Nicobar (Hedrick 1972; Sharief and Rao 2007; Sharief 2008). The ripe globose fruit is harvested and the wedge-shaped fruitlets are inedible when raw and are consumed after



Plate 1 Strap-shaped leaves clustered at the end of the shoots



Plate 3 Tree label



Plate 2 Aerial prop roots

cooking in water, the mealy mass is scooped off and prepared into various dishes. This is the *melori* of the Portuguese and the *larohm* of the natives. The flavor of the mass thus prepared strongly resembles that of apple marmalade. The wedge-shaped sections are also cooked by covering with thick layers of leaves of *Macaranga nicobarica* and cooked for 1–2 hours, the mealy pulp is scooped off and mixed with other food ingredients like pig fat and sugar to prepare different types of dishes.

Botany

An erect, evergreen tree, 12–16 m high, with robust, aerial basal prop roots (Plates 1 and 2). Leaves bright green, clustered towards the shoot apex, linear or strap-shaped, 2 m long, 6–8 cm at the proximal end and tapering to a sharp point at the distal apex, mid-rib and margin with short, fine prickles (Plates 1 and 2). Staminate inflorescence large, pendent, spicate-racemose. Flower bracts cream, stigma erect or oblique. Pistillate head, globose to subglobose, ripening orange or yellow-orange, made up of 90–110 carpellate phalange.

Nutritive/Medicinal Properties

The aggregate fruit pulp and seeds of *Pandanus leram* were found to contain 75.8% and 57.1% moisture, 0.6% and 0.9% total mineral content, 0.4% and 7.1% protein, 8.1% and 3.3% fibre, 0.5% and 23.7% total lipid, and 14.6% and 7.9% non-fibre carbohydrates, respectively (Katiyar et al. 1989). The seeds were found to be nutritionally rich in comparison with the fruit pulp,

but constituted only a small fraction (3%) of the total fruit. Palmitic (56.4%), oleic (26.5%) and linoleic acids (16.4%) were the major fatty acids in the seed oil.

The tender young leaves are pounded with coconut oil and rubbed on the body to remove fatigue (Verma et al. 2010).

Other Uses

Dried fruit with fibres are used as tooth brush. The leaves are used for thatching. The dissected split leaves are made into brooms and weave into mats (Sharief 2008; Sharief and Rao 2007).

Comments

P. leram propagates readily from seed, but it is also widely propagated from branch cuttings by local people in the Nicobar Islands.

Selected References

- Govaerts R, Radcliffe-Smith (2010) World checklist of Pandanaceae. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet. http://www.kew.org/wcsp/. Retrieved 1 Feb 2010
- Hedrick UP (1972) Sturtevant's edible plants of the world. Dover Publications, New York, 686 pp
- Katiyar SK, Kumar N, Bhatia AK (1989) A chemical study of *Pandanus lerum* fruit grown in the Andaman and Nicobar Islands. Trop Sci 29(2):137–140
- Negi SS (1996) Biosphere reserves in India, landuse, biodiversity and conservation. Indus Publishing Company, New Delhi, 221 pp
- Sharief MU (2008) Tribal artifacts of Nicobari folk of Nicobar Archipelago. Indian J Tradit Knowl 7(1):42–49
- Sharief MU, Rao RR (2007) Ethnobotanical studies of Shompens – a critically endangered and degenerating ethnic community in Great Nicobar Island. Curr Sci 93(10):1623–1628
- Stone BC (1975) Pandanus leram var. andamanensium (Kurz) B.C.Stone. Ceylon J Sci Biol Sci 11(2):118
- Verma C, Bhatia S, Srivastava S (2010) Traditional medicine of the Nicobarese. Indian J Tradit Knowl 9(4):779–785