



Cycas sphaerica Roxb. – A living fossil

Botanical Name

Cycas sphaerica Roxb.

Synonyms

Cycas circinalis Linn. var. *orixensis* Haines.

Family

Cycadaceae

Local Name

English : Living fossil plant

Hindi : Tangli madanmasikaphul

Oriya : Arguna, Oruguna, Oruna,
Rengua, Bhoru, Odasamari .

Tamil : Per-ita , Kamkshi

Habitat

Generally found in moist deciduous forests, largely on the upper reaches of the hills.

Distribution

Endemic to Eastern Ghats region of India (Odisha, Andhra Pradesh, Tamilnadu & Karnataka)

Flowering time: April– July

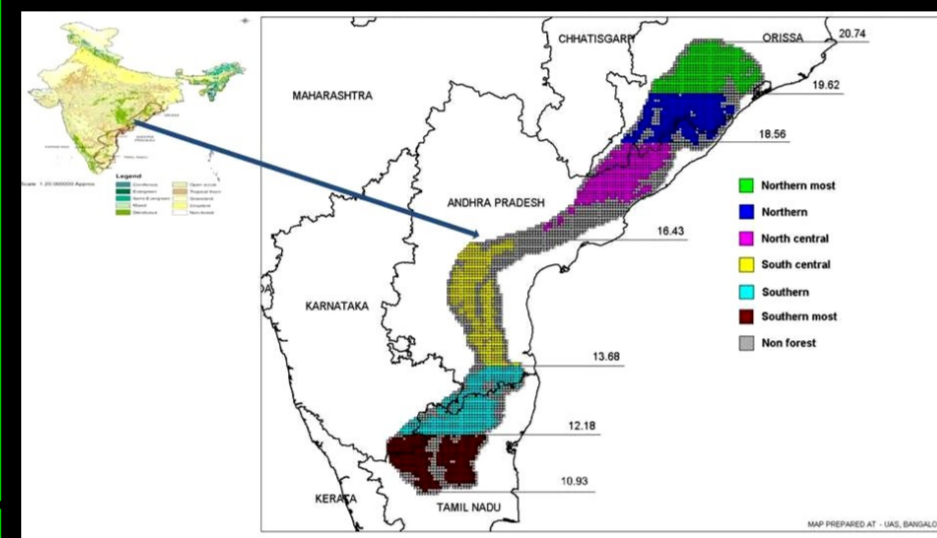
Fruiting time: August–October

Conservation Status

Data Deficient



Cycas sphaerica - An ovule bearing plant



Distribution map of *Cycas Sphaerica* in Eastern Ghat region in India.



Seed germination of *Cycas Sphaerica*



Megasporophyll with Ovule

Description

Habit :- *Cycas* plant is a slow growing, long-lived, evergreen, arborescent. Sporophyte grows up to a height of 2-5 meters. It has unbranched woody stem which is termed as Caudex.

Leaf :- *Cycas* shows habitual heterophylly condition with morphologically two different types of leaves i.e. scale leaves & foliage leaves.

Scale leaves:- These are small, rough, dry, triangular and densely covered with brown ramenta .These are arranged in close spiral succession alternate to foliage leaves.

Foliage leaves:- Foliage leaves are spirally developed as a terminal crown. Each leaf is 1.5-2.7 m long. Petiole is about 35- 60 cm long with laterally spinous to near the base. The leaves are pinnately compound , dark green in colour with 55-130 leaflets. Leaflets linear, subfalcate, acuminate or finely acute with flat margins.

Male cone:- Narrowly ovoid, orange in colour with compact and spirally arranged numerous, dorsiventral microsporophylls. Microsporophylls are 3.2-3.7 cm to base of the uncurved tip which is densely tomentose and armed with a sharp 1-3-fid upcurved spine up to 1.8 cm long. Lower part of the sporophyll beneath densely covered with pollen sacs.



Male Cone

Female cone:- It bears comparatively large megasporophylls, which are loosely packed. Each megasporophyll is 15-25 cm long, brown-tomentose with ovate-lanceolate or lanceolate apex and toothed margin with the lateral teeth 7-10 mm long. Each megasporophyll bears three to eight ovules at the proximal fertile end.



Female Cone

Seed:- Subglobose, sarcotesta yellow, fibrous layer present, sclerotesta smooth, spongy endocarp absent.

Uses

The Cycad is an important ornamental plant. In urban areas, they are commonly grown in gardens.

The leaf, fruits and seeds are used in traditional medicine and other purposes.

Leaf :- Leaves are used to prepare bouquets, floral decoration and in religious ceremonies. Young leaflets are also eaten as leafy vegetables.

Pith:- Piths are used to make Sago flour; Sometimes used as an adulterate for baby foods.

Male Cone:- Male cones are used as mosquito & bed bug repellents.

Ovule :- Endosperm of mature fruits are used for preparing idlis, cake and other food items.

Preparation of making an edible cake using *Cycas Sphaerica* Ovule

Source

- Reddy, C.S., K.S. Rao, C.Pattanaik, K.N. Reddy, and V.S. Raju, 2007. *Cycas sphaerica* Roxb.: A little known endemic species from Eastern Ghats, India. *Journal of Plant Science* 2: 362-5.
- Saxena, H.O. & Brahmam, M. (1994). The Flora of Orissa, Vol. IV, pp: 2526-2527
- Singh, R. & K.J. Singh (2011). The importance of Odisha *Cycas* in India. *Biodiversity* 12 (1):21-27
- www.en.wikipedia.org/wiki / *Cycas_sphaerica*

