

A VANISHING ENDEMIC CYCAD OF INDIAN PENINSULA

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ABSTRACT

The evergreen palm-like cycads comprise ca 20 species in wild or cultivation throughout the tropics and subtropics of the world. There are only 5 species of *Cycas* L. in India. *Cycas beddomei* Dyer is endemic to the Eastern Ghats of India with a limited distributional range covering the Cuddapah and Tirupati Hills of Andhra Pradesh. Geologically these hills are part of the 'chegyar' sub-series of cuddapah formation belonging to the erstwhile landmass of gondwanaland.

INTRODUCTION

Cycas beddomei occurs between 300-900 m altitude on lateritic soils of gneissic or quartzite origin. It is associated with other drought resistant species like *Phoenix farinifera* Roxb., *Decaschistia cuddapahensis* Paul et Nayar, *Gardenia gummifera* Linn. f. and *Pterocarpus santalinus* Linn. f. The sclerophyllous life-form of *Cycas* tation to the dry deciduous conditions that sustain it. This low shrub has a short stem which is exposed only to ca 10-15 cm above the ground and has dark brown, exfoliating, rectangular scales with yellow undersurface. The plant is gregarious in habit with 2-8 trunks in a clump. It sprouts new foliage in early summer and bears male and female cone separately on individuals. The male cone is pruned away by local tribals for its professed medicinal properties. Locally, the male cone is used as a major ingredient in rejuvenating tonics and, as such, is much in demand.

This cycad is endangered due to various anthropogenic factors. The species is almost lost from the Cuddapah hills and only a few pockets of surviving populations of this beautiful cycad are found in the Tirumala hills. It mostly grows in the denuded valleys of Papavinasanam and along rock-strewn streams (called 'teerta' in local language) of Tirumala hills. As

many as eight such ravines harbour colonies of this cycad.

It is unfortunate that such a beautiful cycad of medicinal and ornamental value is now threatened in its natural habitats due to indiscriminate/excessive collection and clearing to meet the fuel needs of Tirumala, the famous pilgrim centre of south India.

Over the years, the authors have noted the rapid decline in the density of *Cycas beddomei* populations at Tirumala. This sad trend does not augur well for the future of this plant, whose numbers are now falling below the critical level. Owing to the isolation and rarity of *Cycas beddomei* species and concomitant loss of mutability/genetic vigour through inbreeding, the contraction and subsequent extinction of this species is imminent. As the Tirumala region also harbours other plant genetic resources including some interesting endemics, establishment of "Plant sanctuaries" in this area is urgently warranted. This alone can save *Cycas beddomei* from being irrevocably lost to mankind.

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