

THE FLOWERING TAAD

When my mother was leaving town, she gave me a present that she could not carry with her twenty five years ago. A beautiful cycad which was quite unusual in its long pinnate leaves, dark green in colour. It was a beauty to behold and admire the simple symmetry of the spiralling leaf base and scales. The sun filtered through the thick leaves down to the lotus pond above which it was perched and I would sit under it to keep from the sun. I recall her having it for over ten years in her garden in Delhi. That makes it thirty five years it has been in our family.

Being in the habit of naming each plant correctly, I identified it as *Cycas Circinalis* or Queen Sago. These sago cycas palms were known as living fossils or the dinosaurs of the plant kingdom because their evolution is primitive and ancient. Nothing much about them has changed since the last 200 million years! In fact they pre-date the dinosaurs and are even more ancient than them. At one stage they would have been a dominant feature of forests, deserts and open savannahs in the Jurassic period.



Pic: Ruchita Madhok

The megasporophylls arise at the tip of the plant acropetally forming a loose crown leaving the apical growing point free for further growth. There are many references to the aphrodisiac properties of the plant and its seeds, but also many warnings of toxicity! In fact the Hindi name of the plant is **jangli-madan-mast-ka-phul** suggests



Pic: Ruchita Madhok

that it is indeed intoxicating, but the Tamil name **canningay** suggests that the usage can lead to convulsions. Maybe some medicinal uses too. Sometimes they are mistaken for palms because of their shape but are more closely related to conifers than palms.

This monsoon, a strange thing happened to it for the first time in its history. A bulbulous structure started growing in the center of the cycas, and very slowly, over a four month period matured and grew hardier. I didn't know it then, but the plant was actually flowering! That's when my research began. I discovered that this variety of cycas is dieocious, with male and female reproductive parts on separate plants. In late winter the male and female "cones" emerge

from the centers of the plants. Pollen from the male cones fertilizes the female cones. A colorful show results later in the season when female plants produce large orange seeds in a conelike structure located in the center of the rosette of leaves. I also discovered my plant was a female!

The Queen Sago was indeed a queen. The seeds you can see on the outside of the fruit are typical of this plant because of its primitive origins. Pollination can happen through wind dispersal if there is a male species nearby and it is flowering at the same time.



Pic: Ruchita Madhok

The *Cycas Circinalis* is listed as an endangered species because the plant propagates largely vegetatively and sexual reproduction is rare. The medicinal industry harvests the pith and male cones for herbal medicinal usage, and the leaves are much in demand by florists

for their flower arrangements. The slow growth of the plant means that it reaches maturity over a fairly long period of time (about 50 years). All these factors combined see declining numbers of these cycads and people opt for the smaller *cycas revoluta* which is easier to propagate and maintain in smaller urban homes. It is vital to maintain and grow the numbers of cycas plants we cultivate.

Cycads have survived many millennia of climatic shifts and evolution. They are slow to respond to changing environmental conditions, but the biggest change they have to deal with is human change. Make a cycas your friend for the rest of your life!

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October 24, 2008.
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