NELUMBO 54:168-171, 2012 ISSN 0976 5069

UTILIZATION OF PITH PLANT AESCHYNOMENE ASPERA (LEGUMINOSAE: PAPILIONOIDEAE) BY TRADITIONAL FLORISTS CUM CRAFTSMEN IN J AJ PUR DISTRICT, ODISHA, INDIA

R.B. Mohanty¹, B.K. Tripathy² and T. Panda^{3*}

Department of Botany, N.C. (Autonomous) College, Jajpur - 755001, Odisha

Department of Botany, Dharmasala College, Jaraka, Jajpur - 755050, Odisha

Department of Botany, S.N. College, Rajkanika, Kendrapara - 754220, Odisha

E-mail:taranisenpanda@yahoo.co.in

ABSTRACT

Pith plant (*Aeschynomene aspera* L., Leguminosae:Papilionoideae) is found abundantly in the wetlands of Jajpur district, Odisha. The traditional florists and many craftsmen attached to various temples make good use of this plant for decoration purposes. The soft stem of the plant are used in many religious and socio-cultural functions in the district and has been instrumental in providing livelihood to this section of people. But with rapidly shrinking water bodies and loss of its natural habitat, the availability of this species is getting scarce. The fate of this traditional craft and of the craftsmen in the changing scenario is analysed.

Keywords: Pith plant, Water bodies, Traditional craftsmen, Temple rituals.

INTRODUCTION

Aeschynomene aspera L. (Leguminosae:Papilionoideae), commonly known as pith plant and locally 'Solo', is a herbaceous aquatic species found in shallow water bodies of Jajpur district of Odisha. In India, the species is generally distributed in Assam, West Bengal, Bihar, Odisha and Peninsular India. It is commonly grown in coastal wetlands of Odisha (Panda & Mishra, 2011). The soft and light weight wood of this plant has insulating property and is used in making boats, solo hats, toys, swimming jackets and life belts (Saxena & Brahmam, 1994; Mishra & Panda, 2008). The traditional florists-cum-craftsmen of Jajpur prepare artistic and delicate decoration materials for many temples. These art objects are an integral part of the temple rituals and various other social functions in rural Odisha from time immemorial. The socio-religious as well as socio-cultural significance of this ancient craft and the craftsmen in the changing scenario is analysed.

STUDY AREA

The Jajpur district of Odisha (20°33'N to 21°10'N latitude and 85°40' to 86°44'E longitude) covers an area of 2899 sq. kms. It has a population of 16.25 lakh as per the 2001 census (Anonymous, 2007). The district has 25% hilly area while the riverine and deltaic plains occupy around 75% of the total. Two main rivers the 'Brahmani' and the 'Baitarani' along with their branches criss-cross the district forming numerous wetlands and water bodies including small river systems, creeks, reservoirs, ponds, marshes, swamps and flood plains. These wetlands are rich in plant resources. Pith plant is a common weed in these wetlands and also in the rice fields of this district.

Jajpur was the capital of Odisha from 736 AD to 1110 AD during the rule of 'Bhauma' and Somavamsi 'Keshari' dynasty rulers(Panigrahi, 1961). But, it has a separate identity from ancient days in the temple culture of Odisha. It was once studded with scores of stone temples like the temple town Bhubaneswar or Puri. The place had lost its glory with the shifting of capital and most of the temples were destroyed during the Moghul period. In spite of it, now there are more than 100 temples surviving in this district, the most prominent among them being the Goddess 'Viraja' temple at Jajpur town on the bank of river 'Baitarani', a prominent 'Shaktipith' in the state.

Normally one or two families of traditional gardeners and florists are permanently attached to every temple for daily supply of flowers, garlands, Tulasi (Holy Basil) and Bael leaf and some other plant materials for day to day worship and rituals. They are also expert craftsmen who prepare and supply to temples items like medallion, crown and other craft materials made exclusively of pith plant on specific days and occasions.



Fig.1. *Aeschynomene aspera* L : **A.** Plant with Flower, **B.** Artisans Lane, **C.** Tableaux, **D.** Toy Boat, **E.** Chariot, **F.** Collected Material, **G.** Hanging Toy, **H.** Flowers, **I.** Bridal Crown, **J.** Medallion, **K.** Sun Drying, **L.** Finished Products, **M.** Flower Vase & Garland, **N.** Artisan at Work

MATERIAL AND METHODS

The present work is the outcome of the ethnobotanical survey conducted in Jajpur district of Odisha during the year 2009-10. Water bodies of the district with abundant growth of pith plant were visited and plant samples collected for taxonomic study and herbarium preparation. Voucher specimen was deposited in the herbarium of Department of Botany, N.C. (Autonomous) College, Jajpur. Visit to the traditional craftsmen and their workshops were made to collect first-hand information on the mode of collection, processing and preservation; - types and method of preparation of craft materials, their trade, etc. The data were recorded by consultation with different experienced craftsmen engaged in the same profession.

OBSERVATIONS

The stem is harvested manually by the craftsmen during September - October after attaining a minimum diameter of 3 cms, sun dried for a week, bundled and stored for future use. It requires no complicated tools to make the craft. Only sharp edged knives of different sizes, natural fibrous threads extracted from banana leaf sheaths and needles are used. Usually adult members of a family are allowed to prepare the artifacts. The outer brown layer of the stem is peeled by expert hand to expose the pith. The pith is then cut into different shapes as per requirement, coloured with paints and pasted using a natural gum prepared from Tamarind seeds to give the final structure.

DISCUSSION

Investigation on the natural and traditional relationship between plants and human societies has brought to light several little or unknown uses of plants developed through trial and error method as well as by the creative mind of the indigenous people all over the world (Borthakur & Gogoi, 1994; Jha & Basak, 1994; Radhakrishnan & al., 2000). Similarly various craft materials made from the pith plant by the artisans of Jajpur are one such typical use of the plant (Fig. 1: a-p). This material is much superior to the 'thermacol', which is a vinyl polymer and a synthetic industrial product widely used in modern day craft making, in terms of its malleability, texture, lusture and sponginess. It is also eco-friendly as biodegradable and freely available from the surrounding natural habitat. It provide livelihood to a sizeable number of artisans in rural Jajpur. The advancement of plastic technology and polymer science has however hit this craft badly. Moreover, the water bodies and wetlands of this district are rapidly shrinking due to population explosion and consequent human activities like construction of roads, housing, fishery, farming, etc. It has thus been instrumental in the gradual extinction of numerous wild but beneficial aquatic species including this pith plant and thereby hampering the livelihood of traditional 'Solo' artisans of this locality. As a result, new generations of the artisan's family are looking for some other source of income leaving this age old practice. Hence, protection of some selective water bodies is necessary where this species can grow undisturbed. Moreover, there is an urgent need of popularization as well as patronization of these craft materials by the Government or some NGOs to uplift the economic condition of the artisans. It will be helpful in conservation of this unique craft for the benefit of the posterity.

ACKNOWLEDGEMENTS

The authors are thankful to their respective college authorities for permission and providing necessary facilities. They are also grateful to the artisans concerned for sharing their traditional knowledge for documentation and photography.

REFERENCES

- Anonymous, 2007. District Statistical Handbook-Jajpur. Directorate of Economics and Statistics, Orissa, Bhubaneswar. 1-5.
- BORTHAKUR, S.K. AND P. GOGOI. 1994. Indigenous technology of making writing materials among the Tai Khamtis. *Ethnobotany* 6:5-8.
- JHA, V. AND P.K. BASAK. 1994. Ethnobotanical aspects of Mithila Paintings. Ethnobotany 6: 9-18.
- MISHRA, M.K. AND A. PANDA. 2008. Wetlands: Status, Utilization and Protection. Ecology and Floristic Laboratory, Dept. of Botany, Berhampur University, Orissa.14.

- PANDA, A. AND M.K. MISHRA. 2011. Ethnomedicinal survey of some wetland plants of South Orissa and their conservation. Indian Journal Traditional Knowledge 10 (2): 296 - 303.
- PANIGRAHI, K.C. 1961. Chronology of the Bahumakaras and the Somavamsis of Orissa. Madras Law Journal 1-47.
- RADHAKRISHNAN, K., A.G. PANDURANGAN AND P. PUSHPAGANDHAN. 2000. Tribal artifacts of Kerala. *Ethnobotany* 12: 67-71.
- SAXENA, H.O. AND M. BRAHMAM. 1994. *Flora of Orissa*. Vols. I-IV. Orissa forest development corporation, Bhubaneswar. 447.

t kt i ja ft y k] v koś M'kk Hkkjr e na i j Ei j kx r i čji C, o l k; h l g d kj hx j kna } kj k fi Fk i k/S k (, fLD u kośe u , l i js k] y nx taje u koś h % i kfi fy v kna kośn Mh) d h mi; kośx r k v kj-c h e kng Urh] c h d s f ≠ i k/B h , o a V h i . M k I ki ka k

t ktigift y k] v k6 M'kk d sue Hk6 ne e a ipp jgrk I smiy C/fi Fkik6 k (, fLduk6eu, Lijsk] y scheuks h % i kfi fy v kosko Mh) r kt ki kuh d h t kfr g & fo fHkLu e fanjkal sl Ei Drij Eijkxri tji C; o l k, h, o av u sl d kjhxj I t ko V g s qbI i k6 s d k mi; kos djrsg & b l d s d ke y rusbl ft y se av u sl / kfe v krsg & b u y kosko d ks; g i k6 k t hfo d kiskt v e ae n n djrk g & ?kVrst y k k, kos, o ab u d si kn ro kl d h d e h d s d kj. k b l t kfr d h miy C/rk?kVjg h g & c n y r s g q i fjo s k e ab l i kj Ei fjd d y k, o ad kj hxj kod h fu; fr d k fo'y š k k fd; kx; k g &