

PRELIMINARY ETHNOBOTANICAL NOTES ON THE PLANTS OF AQUATIC HABITATS OF RAJASTHAN

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The present communication describes the ethnobotany of twenty species of aquatic habitats among the tribals of Rajasthan. In publications on ethnobotany of this State little attention has been given to aquatic species. The present paper therefore is an attempt to explore this area.

Keywords: Aquatic; Ethnobotany; Rajasthan

Introduction

With an approximate area of 342274 Sq.Km. the State of Rajasthan is situated in the North-West part of India between 23°-03' and 30°-12' North latitudes and 69°-30' and 78°-17' East longitudes. The State is rhomboidal in shape and is transversed by the Aravalli hill ranges diagonally with Guru Shikhar at Mount Abu its highest peak (1723m). In the South eastern part the Vindhyan ranges enter the State and also the Deccan Plateau. The Aravallian divide brings the State into two climatically and vegetationally different zones the dry and arid western and the relatively more fertile eastern.

The area is traversed by three major rivers viz. the *Chambal* in the eastern and the *Mahi* in the South and South western. The *Luni river* drains most of the western areas of the State and is the longest. Contrary to the notion that Rajasthan is an entirely desert State there are several large and small water bodies which come up especially

during rains and support water plants. Of an estimated 1500 angiosperm species in Rajasthan roughly one fifth are aquatic¹. When compared to the terrestrial plants the aquatic ones appear to be less significant economically as well as ethnobotanically. The most economically important plants of aquatic habitats in the State are *Typha* spp. (for fibre value), *Nymphaea* spp. and *Nelumbo* spp. (rhizomes and petioles sold as vegetable), *Vetiveria zizanioides* (rhizomes and roots woven into cooling screens), *Paspalum scrobiculatum* (edible grains sold), *Oryza sativa* (cultivated to a limited extent), medicinal herbs like *Centella asiatica* (Brahmi) and *Eclipta prostrata* (Bhringraj).

Materials and Methods

Ethnobotanical studies have received interest of workers in the State in the last decade. A perusal of the publications in this field²⁻¹² revealed that very few aquatic species figure in them.

The author is engaged in floristic studies on plants of aquatic habitats since 1984 and is presently carrying out ethnobotanical investigations on these plants amongst the various tribal and rural communities of the State. The major tribes covered are Bhils, Garasias, Damors,

Kathodias and Sahariyas. In the present communication a preliminary account of the ethnobotany of some aquatic species is presented. The voucher plant specimens of the plants under reference are deposited in RUBL (The herbarium of the Department of Botany, University of Rajasthan, Jaipur).

The terms used in the list, in order of sequence, are for botanical name, family, local name and tribe using it.

1. *Ammania baccifera* L. Lythraceae, LAL BABUSI, Bhils
Decumbent or erect herb of moist places. Plant paste applied locally in Guinea-worm disease. Decoction of the plant is given orally in seasonal fevers.
Collection no. & locality
Kamoda (Banswara district), P.J. 20895; Dev Somnath (Dungarpur district), P.J.21103.
2. *Arundo donax* L. Poaceae, BARU, All Tribes
Perennials having creeping rhizome.
Arrows are made out of the culms.
3. *Bacopa monnieri* (L) Wett. Scrophulariaceae, BAAM, Bhils & Damors
Creeping herbs, rooting at the nodes.
Whole plant crushed given orally in urinary tract inflammations. Lvs. boiled tied hot over abdomen in abdominal pains in children.
Collection no. & locality
Sarhuna Phalan (Dungarpur district), P.J. 20888.
4. *Blumea lacera* (Burm.f.) DC Asteraceae, PHATAKDI, Bhils
Herbs, 18-90 cm high.
Plant crushed and dropped in slow flowing or stagnant water as a fish stupifying agent.
Collection no. & locality
Kamoda (Banswara district), P.J. 20897.
5. *Cyperus rotundus* L. Cyperaceae, DOONGLA, Bhils
A glabrous herb.
Stem chewed in dizziness due to water snake-bite.
Rhizome crushed mixed with turmeric for its fragrance and applied on the body of bride & groom.
Screens for cooling effect prepared out of the plant.
Collection no. & locality
Bhuvneshwar (Dungarpur district) PJ. 21109.
6. *Cyperus tuberosus* Rottb. Cyperaceae, DOONGLA Bhils
Rhizomatous perennial herbs.
Rhizome paste rubbed inward on tongue in tonsillitis of children.
Collection no. & locality
Wer (Dungarpur district) P J. 20518
7. *Echinochloa colonum* (L) Link Poaceae, SAMA Bhils
Erect or geniculately ascending herb.
Grain powdered into flour, bread-baked of flour with or without mixing with cereals.

Cultivated also & songs sung on its cultivation.

Collection no. & locality

Palisoda (Dungarpur district), P.J. 20503.

8. *Enicostemma hyssopifolium* (Willd.) Verdoon Gentianaceae, NAHLI, NAVLI, Bhils

Diffuse herbs upto 30 cm high.

Leaf juice taken orally in fevers & Malaria.

The plant is tied as a charm on the arms in fever.

Collection no. & locality

Manipur (Dungarpur district), P.J. 20846.

9. *Ipomoea aquatica* Forsk. Convolvulaceae, NALI KA SAG,, Bhils

Perennials, rooting at node.

Leaves and stem boiled tried eaten,

Rhizome also cooked & eaten in winters.

(*Collection no & locality*)

Kanodi Chowki (Dungarpur district), RUBL 20893 (AKU)

10. *Limnophila indica* Druce. Scrophulariaceae, PAPRI, Bhils

Erect 7-20 cm high annuals.

Whole plant paste applied as ointment on pustular skin eruptions rainy season.

Collection no. & locality

Kamoda (Banswara district), P.J. 20893.

11. *Nymphaea pubescens* Willd. Nymphaeaceae, KAMAL, KAMVAL, Bhil

Floating-leaved anchored annuals.

Petioles used as tubes through which latex of *Jatropha curcus* L. is blown into balloons with which children play.

Petioles are also used as pipes. From one end a child speaks and another listens at the other end.

The flower is an important motif in painting.

Near Aspur (Dungarpur district) RUBL 21444 (K.K.S)

12. *Nymphoides cristatum* (Roxb.) Kuntze Menyanthaceae, BAANK, LODH, Bhils

Floating leaved anchored annuals.

Leaf decoction given orally for proper foetal development in pregnancy.

Collection no. & locality

Dev Somnath (Dungarpur districts), P.J.21102.

13. *Oryza sativa* L. Poaceae, SAAL, SAWAL, All tribes

Erect annual herbs.

1. Grains are important in religious ceremonies.

2. Proverb: "By ripening of rice good times don't arrive. Rice is grown at a minor scale only while failure of crop of other grains like maize forming the staple diet would result in a year long famine".

14. *Paspalum scrobiculatum* L. Poaceae, KODRA, All Tribes

Ascending or decumbent annuals.

Proverb: "On spreading grains of this plant on ground the buffaloes in greed of eating it get up in vain for neither can the spread grain be eaten by them easily nor can their hunger be satiated." Songs are sung on it's cultivation.

15. *Paspalidium flavidum* (Retz.) A. Camus Poaceae, SAMO, SAMLI, All Tribes

Tufted, geniculately-ascending annuals.

Grains cooked and eaten.

16. *Phoenix sylvestris* (L). Roxb., Areaceae, KHAJOOR Bhils
Lvs. pinnate, Leaflets entire, 8-16 m. tall tree.
Root crushed prepared into a drink and given orally in heartburn.
Paintings on walls often have the motif of this tree. Leaf pinna fashioned into whistle by children. Fruits eaten in dried or fresh form. The young tender shoots that sprout up following rains are cooked as vegetables. The farinaceous deposit from the apex of the tree eaten during scarcity. By giving a cut near the apex sap is obtained which is boiled down to sugar.
17. *Sesbania bispinosa* (Jacq) Wight Papilionaceae, DADEN, Bhils
Erect, weak-stemmed shrub.
Seed paste applied as ointment in cuts, wounds & burns.
It is a plant totem of a Bhil clan.
Cooked like rice & eaten.
Collection no. & locality
Wer (Dungarpur district), P J. 20507.
18. *Typha angustata* Bory & Chaub. Typhaceae, PATERA, Bhils
Emergent anchored perennials.
Inflorescence split into two halves, one half tied as dressing on deep unhealing wounds.
19. *Vetiveria zizanioides* (L.) Nash Poaceae, KHAS, Bhils
Erect, tufted perennials.
Worshipped as Katorma goddess of children responsible for their safety & welfare. Cold food is only eaten on the day of worship.
Collection no. & locality
Ranjihula forest (Dungarpur district) RUBL 20822 (KKS)
20. *Vitex negundo* L. Verbenaceae, NEGAD, NIRGUD, VEERU, Bhils & Kathodias
Shrubs, upto 2 m. tall.
Leaves crushed & smeared near nostrils and inhaled, sneezing brings relief. Seeds powdered & fried with 8 times their weight of flour.
Collection no. & locality
Karanji-ka-Pani (Udaipur district) P J. 20610

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