



RITUAL PLANTS USED BY INDIGENOUS AND ETHNIC SOCIETIES OF DISTRICT SAWAI MADHOPUR RAJASTHAN, INDIA

P. K. SHARMA¹, NEERJA SHRIVASTAVA² and KULBHOOSHAN SAINI^{*3}

¹Department of Botany, M.S.J. Government College, Bharatpur, Rajasthan, India

^{2,3}Department of Botany, Govt. College, Kota, Rajasthan, India

*Corresponding author: E-mail: kulbhooshan.saini@gmail.com

Rajasthan is one of the largest states located in the North-western part of India. The south east part of Rajasthan state comprises of a large population of tribal communities belonging to various ethnic groups. The tribal community believes that some Gods and deities can be welcomed by some special plants or their parts. So they conserve some plant species due to the traditional ritual ceremonies. These forest dwellers live in forests and possess a vast knowledge on various aspects of plants. An extensive survey of Sawai madhopur District was documented to the traditional knowledge of plants used by tribal communities. Tribal like Mina, Bhil, Seharia and Mongiya community are residing in the area. These people have strong traditions, cultural activities, beliefs, taboos, totems, performing religious rituals and valuable information about properties and medicinal uses of plants. Different parts of plant (roots, stem, leaves, bark, fruits, seeds, bulb, etc.) or the whole plant/herb is used for the said purpose of rituals and ceremonies. In this study deals with the documents of 35 plant species used by the rural people of Sawai madhopur Rajasthan in ritual ceremonies are reported. Out of 35 plants studied, 30 species belonging to dicotyledons and 5 to monocotyledons, being used traditionally by the tribal.

Key words: Ethnobotany, Indigenous knowledge, Mongiya community, Natural conservation, Ritual ceremonies, Tribal of Sawai madhopur

Introduction

India is one of the important biodiversity centres with presence of over 45000 different plant species. Of these, about 15000-20000 plants have good medicinal value. However, only 7000-7500 species are used for their medicinal values by traditional communities¹. India is a country with the strongest traditions of conservation of nature and land of diverse natural resources. Since time immemorial, conservation of natural resources has been an integral aspect of

many indigenous communities all over the world. India has suffered an almost unabated devastation of its natural biological heritage and much of what remains has been preserved through the ages because of a host of conservation oriented socio-cultural and religious traditions. These tribes move around the forest for their day-to-day requirements, cultural activities, beliefs, taboos, totems and performing religious rituals. These people are largely dependent on their traditional system for their

information is passed on from generation to generation through the word of mouth. India has suffered an almost unabated devastation of its natural biological heritage and remains conservation-oriented socio-cultural and religious traditions.

The significant tradition of nature conservation is to dedicating patches of forests or groves to some deities and spirits by tribal and rural peoples or sometimes conservation of the rituals. The indigenous people are illiterate but have scrupulously nurtured their traditional customs, folklores, ceremonies and a way of forest life through folk beliefs. Since the Vedic times, the human race has used various plants for ritual purposes. The tribals of Sawai madhopur believe that certain plants have good omen characters and some others are ominous. As such, the good omen plants are scared, used in worship and offered to God. They also use them in their social ceremonies to keep themselves fit and prosperous. Very little work has been done on such plants in district Sawai madhopur Rajasthan. However, ethno-botanical and ethno-medicinal aspects have drawn the attention of several workers in Rajasthan²⁻⁹. The Sawai madhopur is well known for its scenic beauty, fascinating culture and tradition based on intricate relationship with the nature. These tribes move around the forest for their day-to-day requirements, cultural activities, beliefs, taboos, totems and performing religious rituals. With this realization, the recent upsurge of interests in studying rituals or medicinal plants.

A significant contribution has been made by several workers on the ethnobiology from various part of world viz. Meghalaya¹⁰, Arunachal Pradesh¹¹, Bahrain¹², Nepal¹³, including India¹⁴. In Rajasthan Ethnobotanical studies have been carried out by several scientists from different parts of the state namely Alwar¹⁵, Mount Abu¹⁶, Udaipur^{17,18}, Eastern

Rajasthan¹⁹, Aravalli hills of Rajasthan²⁰ and Hadoti Plateau²¹.

Study Area

Rajasthan is one of the largest states located in the Northwestern part of India (Figure-1). Geographically, it lies between 23°3' to 30°12' longitudes and 69°30' to 78°17' latitudes. The study area, Sawai madhopur is a district of Rajasthan State in North Western India and known as land of Tiger with an area of 5042 square kilometres in between 22°45' N to 26°41' N latitudes and 75°59' E to 77°00' E longitudes .



Figure 1: Map of study area (Source- Maps of India)

The district gives a Rectangular look in its general shape and falls in the category of the eastern district of the state. District Sawai madhopur has partly plain and partly undulating hilly terrain. The Sawai madhopur sub-division can be described as hilly areas while the remaining tract is generally level and plain. The plain is fertile and then soil in most of the parts in light & sandy. The South and south-east portion of the district comprise hills and broken ground which form a part of a vast track of rugged region enclosing the narrow valley of the Chambal River. Ranges of Aravali hills lie in the northern, western and southern parts of the district. Sawai madhopur sub-division is more or less a mountainous tract. The

drainage system belongs to the Chambal, Banas, Morel as main River and annual average rainfall is 873.40 mm. it becomes one of the richest spot for the growth of varied vegetation includes variety of trees, shrubs, herbs, climbers and grasses.

On account of the district unique location character, an overwhelming majority of tribals, the forest-fringe villages not only depend on the surrounding medicinal plants for home remedies but also protect these plants through village sacred groves and uses in rituals.

Material and Methods

The proposed study was based on personal interviews of various groups like village headman, spiritual leader, priest, bhopa etc. of tehsil sawaimadhopur, Gangapur, Bamanvas, Bonli, Khandar, Chouthka Barbara who could give correct information and mode of uses. The field tours for study were made at regular intervals in years 2016–2018 in order to cover the tribal areas in different seasons to collect the maximum information at the time of marriage ceremonies, local fairs at Ganesh Chaturthi, Chouthmata, Shiv ratri (Ghusmeshwar mahadev) Kalyan ji and Local HAATS. The data obtained in local language collected through questionnaire from different localities and villages was compared and cross linked so as to ascertain their validity and integrity. During the study, daily activities were closely observed and interpersonal contacts on different rituals ceremonies were established by participating in several social and religious ceremonies. The collected specimens were identified taxonomically with the help of Flora of Indian Desert¹⁶, Flora of North East Rajasthan²³, Flora of Upper Gangetic Plain and the Adjacent Siwalic and Sub Himalaya Tract²⁴. The verification and authentication of collected data were made in the light of standard literature^{25,26}. Identification of plants was done on the basis of for local

uses, a cross discussion of tribals were interviewed and cross interviewed for final conclusion of study.

Results and Discussion

In the present study of district Sawai madhopur (Rajasthan) documented of 35 plant species used by the rural people in ritual ceremonies are reported. Out of 35 plants studied, 30 species belonging to dicotyledons and 05 to monocotyledons being used traditionally by the tribals (Table 1). To prevent the damaging habitat fast regenerative capacity is needed. So there a great need to indulge in the doctrine of development through conservation which will lead to development without causing any harm to the resources thus leading to conservation²⁸. Many plants species are utilised by Tribals in different Traditional Magico-religious. Plants ways but this does not affect their conservational aspects²⁸⁻³⁰. Like all other indigenous tribal communities, tribes of Sawai madhopur close association with nature and have developed an indigenous knowledge of environmental protection as well as biodiversity conservation. Various cultural and religious rites and rituals are also performed except for medicinal purpose; none of the plant species is harmed in any way^{31, 32}. It was observed in this study that different parts of plant (roots, stem, leaves, bark, fruits, seeds, bulb, or their extracts or by-products etc.) or the whole plant is used as various cultural, religious rites and rituals purpose.

It was also reported that these plants or plant parts used in various cultural and religious rites and rituals are of medicinal uses also and tribals try to live in contacts of these plants for their better health as well the spiritual promotions. The use of such plants in ethnomedicine was reported previously^{33, 34}. The conservation and protection of medicinal plants against over exploitation by domestic and foreign commercial interest

S. No.	Botanical Name	Family	Local Name	Use of Part	Purpose on celebrations
1	<i>Acacia nilotica</i> (L.) Willd.	Mimosaceae	Bamoor	Whole plant	Used in Havan, aahuti etc.
2	<i>Adansoniadigitata</i> L.	Bombacaceae	Kalpvrksh	Whole plant	Holly plant used in worship
3	<i>Aeglemarmelos</i> L. Corr.	Rutaceae	Bel	Leaves	Offered to Lord Shiva
4	<i>Annona squamosa</i> L.	Annonaceae	Seetaphal	Leaves and Fruit	Used in Religious ceremonies
5	<i>Azadirachtaindica</i> A. Juss	Meliaceae	Neem	Leaves	Used in Reception, Devoted to Bhairav/Bhairu Baba
6	<i>Buteamonosperma</i> (Lam). Taub	Fabaceae	Chhola / Cheela	Flowers	Used in worship of loard shiva, Holi/Dhulandi festival
7	<i>Calotropisprocera</i> (Ait.)Ait. F.	Asclepiadaceae	Aankota	Flowers	Offered to the Lord Shiva and Hanuman
8	<i>Calotropisgigantia</i> (L.)R. Br.	Asclepiadaceae	Safedaankota	Flowers	Offered to the Lord Shiva and Hanuman
9	<i>Cannabis sativa</i> L.	Cannabinaceae	Bhang	Leaves	Offered to Lord Shiva in festivals
10	<i>Capsicum annum</i> L.	Solanaceae	Mirach	Fruit	Used to remove evil sight
11	<i>Catharanthusroseus</i> (L.) G. Don	Apocyanaceae	Sadaphuli	Flowers	Offered to God and goddess Laxmi
12	<i>Citrus aurentifolia</i> (Christm.) Swingle	Rutaceae	kaggi Neebu	Fruit	Offered in various festivals
13	<i>Cocospucifera</i> L.	Arecaceae	Khopra	Fruit	Used in many religious and social ceremonies
14	<i>Cucurbita maxima</i> Duch. Ex Lam.	Cucurbitaceae	Koala	fruit	Sacrifice after worship
15	<i>Curcuma longa</i> L.	Zingiberaceae	Haldi	Rhizome	Marriage ceremony
16	<i>Cynodondactylon</i> (L.) Pers.	Poaceae	Dub/daubri	Leaves	Ritual, offered to lord Ganesh or different deties (Pooja)
17	<i>Daturainnoxia</i> Mill.	Solanaceae	Dhaturo	Flowers	Offered to the lord Shiva
18	<i>Ficusbenghalensis</i> L.	Moraceae	Bad / Bar	Whole plant	Holly tree, worship of hanuman
19	<i>Ficusreligiosa</i> L.	Moraceae	Peepal	Whole plant	Holly tree and ladies worship on the occasion of SheetlaSaptami, Devoted to Pret baba
20	<i>Hibiscus rosinensis</i> L.	Malvaceaea	Gurhal	Flower	Offered to goddess Kali
21	<i>Lawsoniainermis</i> L.	Lythraceae	Mehndi	Whole	Marriage and religious

				plant	ceremony
22	<i>Madhucaindica</i> J.F. Gmelin	Sapotaceae	Mahua	Whole plant	Religious belief
23	<i>Mangiferaindica</i> L.	Anacardiaceae	Aam/ Amba/ Kairi	Leaves	In marriage ceremony and Festival auspicious, garland hung around gate
24	<i>Musa paradisiaca</i> L.	Musaceae	Kela	Leaves	Ritual
25	<i>Nelumbonucifera</i> Gaertn.	Nelumbonaceae	Kamal	Flower	Offered to the lord Shiva
26	<i>Neriumindicum</i> Mill.	Apocynaceae	Kaner	Flowers	Used in Festival and Fairs, they wear its flowers at ears.
27	<i>Ocimumbasilicum</i> L.	Lamiaceae	Marva	Whole plant	Holly plant to pray loard Saligram (loard Vishnu)
28	<i>Ocimumtenuiflorum</i> L.	Lamiaceae	Tursi	Whole plant	Holly plant, used in fast worship of the lord Vishnu
29	<i>Pandanusfascicularis</i> Lam.	Pandanaceaea	Kerva	Leaves	Ladies worship, holly plant
30	<i>Prosopis cineraria</i> (L.) Druce	Fabaceaea	Khejdo / Chhonkar	Stem	Used in Havan, aahuti etc.
31	<i>Saccharumofficinarum</i> L.	Poaceae	Ganna / Gande	Whole Plant/Stem	Holly plant, used in worship of goddess Lakshmi
32	<i>Saracaindica</i> / <i>Saracaasoca</i> (Roxb.) Wilde	Caeselpiniaceae	Asha-Pala	Leaves	Used in making Toran in marriage ceremony
33	<i>Santalum album</i> L.	Santalaceae	Sandan	Wood	Worshiped in various ceremonies
34	<i>Sesamumorientale</i> L.	Pedaliaceae	Til	Seeds	Offered to Chouthmata, Used in Puja and havan
35	<i>Ziziphusmauritiana</i> Lam.	Rhamnaceae	Beriya	Leaves	Used in festival and ceremonies

Table 1: List of plant species used in rituals in district SawaiMadhopur Rajasthan

Without benefits accruing to the nation are clearly our priorities³⁵. The uses of such plants in various cultural and religious rites and rituals are a mode of conservation of natural wealth of earth. As we are trying to conserve by different ways as in situ, botanical gardens, germ-plasm banks etc³⁶⁻³⁹. The present note is prescribed here to focus on good omen plants.

Conclusion-

Various religious beliefs and myths are attributed to conserve the biodiversity of the

region. Tribal communities of Sawai madhopur have a cultural ecological heritage in the form of this in-situ conservation practice, the knowledge of which needs to be preserved and appreciated. Their presence in agricultural lands; grazing, fragmentation of the grove-owning families and erosion of cultural and religious beliefs and taboos are the major reasons. Therefore, there is an urgent need not only to protect rare, endangered and medicinal plants, but also to revive and

reinvent such traditional practice of nature conservation and environmental management.

References-

1. Subbu RR and Prabha AC 2009, Medicinal plant diversity of Virudhnagar district, Tamil Nadu. *Current Biotica*, 3 3 373-385
2. Joshi P 1995, Ethnobotany of the primitive tribes in Rajasthan. Printwell publishers, Jaipur, pp 313
3. Katewa SS and Guria BD 1997, Ethnomedicinal observations on certain wild plants from southern Aravalli hills in Rajasthan. *Vasundhara*, 85-88
4. Sinha S 1999, Ethnobotanical and biodiversity studies of plants used in traditional medicines in Jaipur (Rajasthan), Ph.D. Thesis, University of Rajasthan, Jaipur.
5. Katewa SS and Galav PK 2005, Traditional herbal medicines from Shekhawati region of Rajasthan. *Indian Journal Traditional Knowledge*, 4 3 237-245
6. Katewa SS 2009, Indigenous people and forests: Perspectives of an Ethnobotanical study from Rajasthan (India)-Herbal Drugs: *Ethnomedicine to Modern Medicine* (Springer, Berlin), 33-56
7. Meena KL and Yadav BL 2010, Some Traditional Ethnomedicinal plants of Southern Rajasthan. *Indian Journal of Traditional Knowledge*, 9 3 471-474
8. Sharma L and Khandelwal S 2010, Traditional uses of plants as cooling agents by the tribal and traditional communities of Dang region in Rajasthan, India. *Ethnobotanical Leaflets*, 14 218-224
9. Rana S Sharma DK Paliwal PP and Nandini Sharma 2014, Ethno-medicinal explorations of some important plants of district Banswara (South Rajasthan) used by tribal community. *International Journal of Bioassays*, 3 2 1729-1733
10. Rao RR 1981, Ethnobotany of Meghalaya: Medicinal plants used by Khasi and Garo tribes. *Economic Botany*, 35 41- 9
11. Gangwar AK Ramakrishnan PS 1990, Ethnobiological notes on some tribes of Arunachal Pradesh, Northeast India. *Economic Botany*, 44 94-105
12. Abbas JA El-Oqlash AA Mahasneh AM 1992, Herbal plants in the traditional medicine of Bahrain. *Economic Botany*, 46 153
13. Mannandher NP 1995, An inventory of some herbal drugs of Myagdi district Nepal. *Economic Botany*, 49 4: 371-379
14. Jain SK 1975, Medicinal Plants (2nd Edn.). *National book trust of India*, New Delhi
15. Singh GS 1999, A contribution of ethnomedicine of Alwar district of Rajasthan. *Ethnobotany*, 11 97
16. Sebastian MK and Bhandari MM 1984, Medicoethnobotany of Mt Abu, Rajasthan. *Journal Ethnopharmacol*, 12 233
17. Sebastian MK Bhandari MM 1988, Medicinal plant lore of Udaipur district Rajasthan. *Bull Med Ethnobot Res*, 53-4 133
18. Katewa SS Arora A 1997, Some plants of folk medicine of Udaipur district, Rajasthan. *Ethnobotany*, 9: 48
19. Singh V and Panday RP 1980, Medicinal plant lore of the tribals of eastern Rajasthan. *Journal Economic Taxon Bot*, 1 137
20. Katewa SS Chaudhary BL and Galav PK 2003, Traditional uses of plant biodiversity from Aravalli hills of Rajasthan. *Indian journal of Traditional Knowledge*, 2(3): 124-126.
21. Sharma NK 2002, Ethno-medico-religious plants of Hadoti Plateau (SE Rajasthan)-A Preliminary Survey. In: *Ethnobotany*, edited by PC Trivedi, Aavishkar Publishers & Distributors,

- Jaipur. pp- 186
22. Bhandari MM 1990, Flora of Indian desert, MPS Repros, Jodhpur
 23. Sharma S and Tiagi B 1979, Flora of North East Rajasthan. *Kalyani Publication, New Delhi*
 24. Duthie JF 1903-1929, Flora of Upper Gangetic Plain and of the Adjacent Siwalik and Sub- Himalyan tracts. Calcutta. 3 vols.
 25. Jain SK 1963, Studies in Indian Ethnobotany-I, Plants used in medicine by tribals of Madhya Pradesh. *Bull Res Jammu*, 1126-128
 26. Jain SK 1991, Dictionary of Indian folk medicines and ethnobotany. *Deep Publication, New Delhi*, pp- 276.
 27. Chopra RN 1982, Indigenous Drugs of India. *Academic Publication, New Delhi*, pp-319.
 28. Sexena HO 1986, Observations on the Ethnobotany of Madhya Pradesh. *Bull. Bot. Surv. India*, 28149-156
 29. Singh NP Khanna KK Mudgal V and Dixit RD 2001, Flora of Madhya Pradesh, *Botanical survey of India*. Volume -3. pp-279.
 30. VermaP Khan AA and Singh KK 1995, Traditional phytotherapy among the Baiga Tribe of Shahdol District of Madhya Pradesh, India. *Ethnobotany*, 769-73
 31. Jeeva S Mishra BP Venugopal N and Laloo RC 2005, sacred forests: Traditional ecological heritage in Meghalaya. *J Scott Res Forum*, 1 93-97
 32. Jeeva S Mishra BP Venugopal N Kharlukhi L and Laloo RC 2006, Traditional knowledge and biodiversity conservation in the sacred groves of Meghalaya. *Indian Journal of traditional knowledge*, 5 4 563-568
 33. Rai R 2007, Some traditional medicinal plants used for cold, cough and fever by tribal of Bastar (Chhattisgarh). *Journal of Indian Botanical Society*, 86 1-2 27-36
 34. Sen A and Batra A 2008, Economically important plant system: *Melia azedarach* L. and its biotechnological approaches. In: National Seminar on Biotechnology in sustainable Agriculture and Environment Management, Jaipur, p-84
 35. Natesh S and Mohan Ram HY 1999, An update of green medicine. *Journal of Indian Botanical Society*, 78 13-23
 36. Borthakur SK 1981, Native phytotherapy for child and woman diseases from Assam in dye stuffs. *Glimpses of Indian Ethnobotany* pp-182-190
 37. Negi KS Tiwari JK Gour RD and Pant KC 1993, Notes on ethnobotany of five districts of Garhwal Himalaya, Uttar Pradesh, India. *Ethnobotany*, 573-81
 38. Rana TS Bhasker D and Rao RR 1994, Strategies for sustainable utilisation of plant resources by the tribals of the Tona valley, western Himalaya. *Ethnobotany*, 896-104
 39. Kapoor BBS Khatri JS Sudan S and Bhumika 2008, Herbal plants of Rajasthan desert: A good source of anti-microbial principles. In National Seminar on conservation and utilization of natural resources and their role in sustainable development, Jhunjhunu , pp. 87-90