

Original Research Article

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An Analytical Study of Ethnomedicinal and Sacred Plants of Jharkhand

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ABSTRACT

Jharkhand is one of the notable abode of tribal populace. It is an irrefutable fact that nature has made it one of the richest regions of the earth. Among its various natural endowments vegetation is the most essential resource for mankind (Bedi, 1978). The socio-economic status and the culture of the tribals is woven around the forest. The Santhals and Mundas depend on indigenous and traditional medicine for the remedy of different diseases. An authentic investigation has been made with the assistance of village vaidyas and other educated tribals and list of plants with medicinal properties have been prepared by surveying in sample villages of Jharkhand District (Ghosh, 1971). Some plants were selected some plants from the districts of Jharkhand and compared its medicinal uses among the tribals. The study has revealed the fact that medicinal uses of these plants vary in these districts (Topno and Ghosh, 1999). For example cassia fistula is used by santhals in blood purification, diarrhoea, Jaundice and liver complain while in Ranchi district the Mundas use this plant in constipation, Snakebite, skin disease and rheumatism (Basu, 2005). It was also found that several plants have similar ethnomedicinal uses with valid scientific name (Jain, 1980).

Keywords

Ethnomedicinal,
Sacred Plants,
Jharkhand, Santhal,
Mundas

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Introduction

Our vedic hymns which dates back about 2500 years, contain earliest references of plants used in medicine. Archaeological sculptures of Harappa culture however give pre vedic informations of some plants. It is very difficult to establish identity of these plants due to lack of proper botanical descriptions or preserved specimen of plants referred in hymns of Rigveda. Ethnobotany deals with total direct relationship between man and plants. The term “Ethnobotany” was coined by Harshberger, an eminent American

Economic Botanist in 1896. “Ethnobotany is the study of the relationship which exists between people of primitive societies and their plant environment”. The flora of India is very rich. The total number of species of higher and lower plants is estimated to be about 45,000 (higher plants 15,000). There are over 400 different tribal and other ethnic groups in India. The tribal constitutes about 7.5 percent of India’s population. A part from the tribal groups many other forest dwellers and rural people also possess unique knowledge about plants. Some such folklore and tradition has survived also among urban

societies. There has been resurgence of interest in ethnobotany all over world during the last about 40 years. The search for new sources of drugs, foods and other life support species has compelled men to look again at nature (Ayyanar and Ignacimuthu, 2009). Most journals devoted to man-plant relationship have been publishing papers on the subject, though many do not use the word ethnobotany in the titles. The socio-religious activities of tribals centered around plants and flowers has been described by Gupta in 1971. The tribals depend on the traditional medicines for the remedy and cure of diseases. They use different parts of plants during different occasions like birth of child, marriages, worship of gods, worship of spirits, skin diseases and different types of wounds etc. Investigation on such plants may help in getting some effective medicines for different diseases.

Jharkhand is an ideal place for ethnobotanical study (Banerjee and Banerjee, 1969). So the author has decided to start a comparative ethnobotanical study of Santhals of Jamtara district and Mundas of Ranchi district. Among the tribals of Ranchi district, Mundas are the numerically dominant over other tribes whereas in Jamatara district Santhals are numerically dominant over other tribes (Basu, R, 2000a). Ethnically the Mundas are the Proto-Austroloids (Arora, 1980). They speak Mundari dialect of the Austro-Asiatic family. They are divided in two branches – Mahli Mundas and Kompah Mundas. The Mundas live in a mixed village with other tribes and castes (Basu and Mukherjee, 1996). Each village has three important sites - (i) Sarna (ii) Akhara and (iii) Sasan. The Sarna is sacred grove where village deities reside. The Akhara is an open space where panchayates take place and where young folks assemble to learn dance and singing. The Sasan is the burial ground. The Mundas erect their house with mud walls, wood, bamboo, phoos and

tiles. Some houses thatched with tiles have double storied. The middle floor is made by wood, bamboo, khar and soil. The clan names of the Mundas are Kunkal, Kujur, Aaind, Eragat, Tute, Dag, Dungdung, Dodrai, Tirky, Topno, Balmuchu, Bodra, Bhengra, Murun etc. The Mundas believe in numerous gods and deities. Their prime god is called ‘Singbonga’ whom they propitiate on every religious ceremony. Other important deities are Hatu Bongako (village deities) such as Desauli, Jaher, Buri, Chandi Bonga etc. They also recall Marang Buri for rainfall. The important festivals of the Mundas are Mage Parab, Phagu Parab, Karam Parab, Sarhul Parab, Aouba Parab and Sohrai Parab.

Materials and Methods

The ethnobotanical survey and studies were conducted in districts of Jharkhand viz. Ratu, Kanke, Lapung, Namkum, Ormanjhi, Sonahatu and Tamar blocks of Ranchi District and Nala, Kundahit, Narayampur, Mihijam, Fatehpur, Jamtara and Karmatar blocks of Jamtara District. The study shows that Mundas are the largest tribe in Ranchi district followed by the Oraons and the Lohras. In Jamtara district Santhal is the largest tribe. The tribal population of Jamtara district is 35.51% of the total population. The plants, their use as ethnomedicinal system, plant parts used, mode of preparation, locality of use and the particular group of tribals using the medicines were studied. Plant specimens were collected and documented in frequent field visits conducted from 2007-2011. The places of visit were the tribal villages of Jharkhand. The villages were visited in different seasons (summer, monsoon and winter) to avail most of the plant resources in their flowering conditions. In the actual method of field studies, informants from different tribes who are familiar with the plants and their use by the members of their respective communities were selected by

carefully taken interviews. Questions, problems and suggestions were put to them regarding the use of plants and their products in folk medicine and other uses. Mounted herbarium specimens known to grow in this area were placed to them and questions were asked on their usefulness. These were subsequently verified by taking them to field to identify plants on the basis of local tribal names previously noted from them. Local names and the areas were noted. Prior permission was taken from the informants for recording of the information. Photographs were taken of the plants and their uses. A large number of plants were collected to prepare herbarium.

Results and Discussion

A number of plants are being used by the tribals in some form or other for their daily medicinal uses. In the present study some ethno medicinal and sacred plants of Jharkhand have been studied which are given in Table 1.

Almost all the festivals of Munda's related to a crop or plant. For example in Sarhul and Sohrai festival the Sal flowers/twigs are brought to the sarna and the Pahan propitiates all gods of the Mundas. The Santhals speak 'Santhali' language, which has some connection with the Austro-Asiatic language. The Santhals are known by different 'Gotras' Such as Murmu, Hansdak, Marandi, Soren, Hembrom, Tudu, Kisku, Besra etc. Their Gotra belongs to a plant or an animal which is taboo for that particular Gotra. The Santhals have many gods. Their principal god or deity is 'Singbonga' who is the sun god. Marang Buru is the highest god after him. Other important village deity of the Santhal is Jaher – era. Besides these other principal deities of the Santhals are Gosai – Era, Pargana Bonga. Manjhi Haram Bonga, Orak Bonga and Abge Bonga. The Santhals celebrate many festivals

and ceremonies. They celebrate 'Erok' before sowing the seeds in the fields. "Richar" is celebrated in July – August for rich harvest. "Sohrai" is celebrated in the month of November –December after harvesting the crop. 'Baha' is celebrated in the month of Feb – March. 'Bandhana' festival takes place in the month of January.

In a close observation it has been seen that almost all the festival related to a plant or a crop. Also there is a nutritious value of these festivals. In each and every festival they use Alcoholic drink 'Modh' and "Handia". 'Modh' is made from juice of Mahua (*Madhuca indica*). "Handia" is made from juice of Rice (*oryza sativa*). Mundas make their Handia from Rice, Kodo (*Paspalum scrobiculatum*) and Maize (*Zea Mays*) whereas Santhal makes their Handia from Rice. They do not use Kodo and Maize. Both the tribes make "Modh" an Alcoholic drink, from Mahua (*Madhuca indica*). The flower of Mahua is used for this purpose. Handia/Modh is prepared by fermenting rice/Mahua with ranu. It is a popular drink and used in all celebrations including birth, marriage, death and other religious festivals. The plant materials like root, tubers, leaves, bark and fruits are collected from forests. People engaged in this profession have enough knowledge of habitat, distribution, phenology and ecological conditions of plants. During favourable season the tribals complete the collection of plants materials and store it for future.

Hoffmann (1950) listed about twenty plants which are used by Mundas in preparing "Handia". Gupta (1971) gave an account of use of Handia in cultural life of Mundas. In the present study about 15 plants have been studied which are actually used in preparing "Ranu" for fermenting rice and Mahua and e.g. are given in Table 2.

Table.1 List of Ethnomedicinal and Sacred plants of Jharkhand

Specifications	Monocotyledons	Dicotyledons	Total
Family	07	48	55
Genera	09	56	65
Species	09	64	73

Table.2 List of Ethnomedicinal and Sacred plants used by tribals of Jharkhand

Name of the Plants	Used by the tribals
<i>Asparagus racemosus</i>	used by Santhal
<i>Azadirachta indica</i>	By santhal and Munda
<i>Dipteracanthus suffruticosus</i>	By Santhal
<i>Hemidesmus indicus</i>	used by Munda
<i>Strychnos nux-vomica</i>	used by Munda
<i>Smilax macrophylla</i>	used by Santhal
<i>Zizyphus oenoplia</i>	By Santhal and Munda.

The main occupation of the tribal is agriculture. The Santhals and Mundas use traditional agricultural equipments like plough driven by Ox. They make plough from locally available timbers. The Santhals generally use the woods of *Siris (Albizia lebbek)*, *Syzygium cumini*, *Azadirachta indica*, *Butea monosperma*. The Mundas use the wood of *Shorea robusta*, *Gmelina arborea*, *Bombax ceiba* and *Madhuca indica*. A close study of other agricultural implements like Kudali, Gainta, Haswa, Yoke and leveller reveals the scientific ideas in their making and selection of quality timbers depending upon the purpose. Santhal and Munda also use different types of plants for different purpose like:- Fishing traps, Fishing nets, Container, Washing aids, Dye or Colour, House hold materials, Extracting fibre, Fuel, Bow and Arrow, Dhenki (Pounder), Musical instruments, Food plates, Brooms, tooth brush etc.

The tribals have good knowledge about the quality of timbers. For example, it may be interesting to note that *Santhals believe* that if lower frame of front door of the house is not

made out of Jambu wood (*Syzygium*) the house will be a den of bad spirit or witch (dyne). This taboo explains that they know the quality of Jambu wood which does not decay in water, therefore it should be useful to put it in the lower frame (chaukat) of the door though other frames may be made up of Sal or other wood. Mundas use wooden beams of Neem (*Azadirachta*) in their houses. They use Neem wood to store seeds or food grains so that these may be safe from attack of white ants or pests. Mundas use Sal wood (*Shorea robusta*) for making the doors, chaukhat, and windows. The wood of Mahua (*Madhuca indica*) is also used by Mundas for making doors and house beams.

In conclusion, the Santhals and Mundas depend on indigenous and traditional medicine for the remedy of different diseases. An authentic investigation has been made with the assistance of village Vaidyas and other educated tribals and list of plants with medicinal properties have been prepared by surveying in sample villages of Jamtara and Ranchi District. Some plants were selected from both the districts and compared its

medicinal uses between the Santhal and Mundas. The study has revealed the fact that medicinal uses of these plants vary in these two districts. For example cassia fistula is used by santhals in blood purification, diarrhoea, Jaundice and liver complain while in Ranchi district the Mundas use this plant in constipation, Snakebite, skin disease and rheumatism. It was also found that several plants have similar ethnomedicinal uses with valid scientific name, reference of plants as given in the book of Haines, short botanical descriptions, local names, and uses, place of collection, voucher number and distribution. It may be suggested that Santhals and Mundas have basic as well as practical knowledge of plants passed on through generation from their folk lore, folk tales and religious customs. The ethnobotanical study gives opportunity to gather new information's on plants to be utilized for the benefit of mankind. It is also suggested that over exploitation of plants for commercial use may lead to destruction of some important plants and they need to be conserved.

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