



STUDIES ON THE USE OF PLANTS AND PLANT PARTS BY THE TRIBALS OF MALKANGIRI DISTRICT, ODISHA FOR DIFFERENT RITUALS AND MEDICINAL USES

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Abstract

In India, there is a mixture of 437 tribes, and the quantity of tribes in Odisha is 62. As indicated by 1991 identification, in Odisha the complete quality of tribal individuals in moderately 7,000,000 which is found 22.21% of the absolute populace of the entire state. Malkangiri locale harbours essentially 10 various types of tribes, for example, Bonda, Koya, Bhumiya, Paroja, Kondha, Matia, Gadaba, Dharua, Haluva, and Didayi. The tribal community believes that some Gods and divinities can be invited by some exceptional plants or their parts. It is basically founded on-field surveys did in villages and forest pockets, where occupants gave data on plant species utilized as in rituals. Tribals of this district were used various parts of the plant such as roots, stem, leaves, bark, organic products, seeds, bulb, or the entire plant is utilized for the whispered purpose of rituals, ceremonies as well as treatment of primary health care. During the study 36 plant species belongs to 27 families were documented which were used by the tribes of the Malkangiri district, in different rituals and ethnomedicinal uses.

Keywords: Ceremonies, Ethnomedicinal, Forest, Malkangiri, Plants, Rituals, Tribal

Introduction

The indigenous tribal people who inhabit mountain areas inside Malkangiri district. They have occupied this region for many generations before the district was established in 1991. A ritual is a religious facility or other ceremony which includes a sequence of actions performed in a immobile order. Protection of biodiversity is the essential significance of the present fundamentally helpless condition (Mahalik *et al.*, 2015). Efficient preservation can be conceivable just with the drawn-out investment and comprehension of the communities. Rituals convictions of the indigenous individuals are one of the significant tools to comprehend the communities and help nature protection. India is a nation with the strongest traditions of protection of nature and land of diverse natural resources. Since days of yore, the protection of natural resources has been an essential part of numerous indigenous communities everywhere throughout the world. India is one of the significant biodiversity communities with the nearness of more than 45000 distinctive plant species. Of these, around 15000-20000 plants have great therapeutic worth. In any case, just 7000-7500 species are utilized for their medicinal qualities by ethnic people (Subbu and Prabha, 2009).

Odisha, one of the states of eastern India, has a huge diversity in the midst of complex social assorted variety. The adjustment of the different human gatherings to the rich organic assets has produced invaluable local knowledge systems that remember broad data for plant utilizes when all is said in done, family unit, and custom helpful species specifically (Rout and Pandey, 2007). This indigenous progressivism has frequently been ascribed to otherworldly regard for, and a down to earth comprehension of the common world (Ecology, 1999). The ancestral proclivity to

backwoods of Odisha has been exceptionally high as far as the wellspring of living, lifestyle, and social moorings (Vecsey and Venables, 1980). The tribals were utilizing different plans customarily from age to age. Some of them have been in recorded structure and some are most certainly not. Out of the Sixty-two tribal communities for the state, upwards of 10 tribes are found in this district i.e. Koyas, Paraja, Dharua or Durua, Matia, Bhumia, Bonda, Kandh, Gadaba, Halwa, and Didayee (Prasad, 1998). The tribals of the Malkangiri district accept that specific plants have the promise of something better characters and some others are unpropitious. They have very good knowledge on traditional medicine. They utilize various plants (entire plant) and plant parts like leaf, bark, root, bloom, and so on. In spite of different developmental activities, the traditional medication framework and plants utilized for different rituals are quite stable in the investigation area. The present study highlights the utilization of plants in different rituals and traditional drugs of the tribal people of Malkangiri district, Odisha.

Materials and Methods

Study area

The history of Malkangiri seems to be in no way less thrilling and adventurous than any other place of India. The land of dense inaccessible forests, small but beautiful rivers, undulating plateaus and splendorous rich tribal culture. The district is situated in the South-western part of Odisha. Malkangiri is located at 18.35°N 81.90°E and altitude of 170 m (560 ft). Above sea level. It is bounded by district Koraput to the East, Sukma (Chhattisgarh) at the Northwest, in south Nashipatna (Andhra Pradesh). The total area of district is s 5,791 sq. miserere environment of dense forest, picturesque river valleys and mountain peaks with ancient shrines are further characteristic features of the district.



Fig. 1 : Map of study area

Floristic and Vegetation

Malkangiri falls under Deccan region of Hooker's sketch of Flora of British India, but Gamble (1915-36) placed it in the sal region of Madras presidency. The existing vegetation has surveyed now is found to fall broadly under following three types as per the classification of revised forest types of India (Champion and Seth, 1968). These are :

1. Tropical semi-evergreen forest
2. Tropical dry deciduous forest
3. Tropical moist deciduous forest

Methodology

The proposed investigation depended on personal interviews of different village headmen, spiritual leaders, clerics; educators, and so on. Various tribal rich forest pockets of the district viz. Chitrakonda, Jantapai, Balimela, Andrahah, Chitapari, Matapaka Mudulipada (Bonda hills), Korukonda, Chalanguda Goiparbat, Tentlipadar, Mathili, Biralaxmanpur, Govindpally, Disariguda, Sindrimal, Kalimela, Bejangwada, Motu, Khajuriguda Podia, Manobkona, Nalagunthi, Bhubanpally etc. were identified and field trips were conducted at regular intervals in different seasons. This investigation included checking and reverifying of a specific folklore claims by the various tenants of a similar tribe in various forest pockets. This strategy was followed to clear numerous questions with respect to the utilization and character of plant specimens. The detailed data about the plants, parts, dosages, duration, strategy for preparation, method of administration, precautions to be taken, and so on was recorded. The collected specimens were identified systematically with the assistance of "The Flora of Orissa" (1994-1996) (Saxena and Brahmam, 1994).

Results and Discussion

In the present study revealed that 36 plant species belongs to 27 families utilized by the tribals of Malkangiri district of Odisha for ritual ceremonies and traditional medicines were documented. The most dominated family are Poaceae followed by Apocynaceae, Moraceae, Arecaceae and Rutaceae (Fig. 2). To forestall the harming living space quick regenerative limit is required. So there a great need to indulge in the doctrine of improvement through preservation which will prompt advancement without making any damage the resource thus leading to conservation (Saxena, 1986).

Most of tribal used Betel (*Piper betel*), Coconut (*Cocos nucifera*), Chandan (*Santalum album*), Bela leaf (*Aegle marmelos*) and Mango leaf (*Mangifera indica*) for their worships. They use different flower for their worships especially, *Hibiscus rosa-sinensis* and some other flower like *Datura metel*, *Jasminum multiflorum*, *Clitoria ternatea* and *Plumeria rubra*.

The tribal people of Malkangiri celebrate some seasonal festivals where they use different, and fruits for worshipping god. Some festivals (Parba) like Chaita parba, Asha parba, Jana parba, Sima parba, Magha parba, Push parba and dasahara, Chaita parba are the biggest festivals in the study area where they use different flower and fruits in this ceremony. This festival comes in March to April. They place their god in a bottom part of a mahula tree (*Madhuca longifolia*) and Baragachha (*Ficus benghalensis*) uses different flower like *Holarrhena pubescens*, *Nelumbo nucifera*, etc. They give to the god some seasonal fruit like Jack Fruit (*Artocarpus heterophyllus*) in Push parba and Magha parba they use sala tree (*Shorea robusta*) small stem put into the ground and then they continue their ceremony. After the worship is done, they dance and enjoy life.

The Marriage ceremony was the same in all the tribes except the bonda's. In Marriage first, they put in the ground three plants in the same distance for good vibes, plant like *Diospyros melanoxylon*, *Madhuca longifolia*, *Shorea robusta* these plants put in their marriage bedi or stage. They decorate the whole house by different plant leaves like *Mangifera indica*, *Aegle marmelos*, *Musa acuminata* (whole plant), *Ficus racemosa* and *Annona squamosa* etc. Bridal girl put some handmade mehendis (*Lawsnia inermis*) in her hand. They made a crown for the bridal made up of some root and leave like *Coix lacryma-jobi*, *Melastoma malabatricum*. When the disari (priest) came he says some mantra (speech to god) for the marriage and uses a grass call duba (*Cynodon dactylon*) and then they use some flowers like *Jasminum multiflorum*, *Clitoria ternatea* and *Plumaria rubra*. This ritual was same for except Bonda's all tribes use three plants for good vibes but Bonda uses two plants *Diospyros melanoxylon* and *Shorea robusta*.

When someone dies in the village they performed a funeral ritual ceremony for a good future (for next birth) the use different plants leave and wood. The body was decorated by neem (*Azadirachata indica*), Sal leaf (*Shorea robusta*),

and holy basil (*Ocimum sanctum*). They made a bed made by Bamboo plant (*Bambusa bambos*) and use lemon (*Citrus limon*) that present in a side at the dead body. Tribal people burned the dead body by some especial woods like Kusum

(*Schleichera oleosa*) tree, Dumar (*Ziziphus mauritiana*), and some other trees. The uses of plant resources for herbal drugs and various rituals was recorded for the first time have been given in table 1.

Table 1: List of plants used as rituals and medicinal purpose by tribal people of Malkangiri district.

S. No.	Botanical Name	Family	Local Name	Use of Part	Purpose on celebrations	Ethnic uses
1.	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	Kendu	Whole plant	Used in Religious ceremonies	Used to cure dysentery
2.	<i>Madhuca longifolia</i> (Roxb.) A.Chev.	Sapotaceae	Mahula	Whole plant	Used in Religious ceremonies	Used to cure stomach disorder
3.	<i>Shorea robusta</i> Gaert.	Dipterocarpaceae	Sala	Whole plant	Used in Religious ceremonies	Used to cure urinary tract infections
4.	<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Kusuma	Leaves	Used in Religious ceremonies	Used against skin diseases
5.	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Jambo	Leaves	Used in Religious ceremonies	Used to cure stomach problem as well as used against diabetes
6.	<i>Mangifera indica</i> L.	Anacardiaceae	Amba	Leaves	Used in Religious ceremonies	Used to cure kidney stone
7.	<i>Ficus racemosa</i> L.	Moraceae	Dumru	Leaves	Used in Religious ceremonies	Used to cure dysentery and respiratory diseases
8.	<i>Aegle marmelos</i> (L.) Corr	Rutaceae	Bela	Leaves	Used in Religious ceremonies	Used to cure stomach disorders
9.	<i>Musa acuminata</i> L.	Musaceae	Kadali	Whole plant	Used in Religious ceremonies	Used against various stomach disorders
10.	<i>Ocimum sanctum</i> L.	Lamiaceae	Tulashi	Whole plant	Used in Religious ceremonies	Used to cure respirator problem, cold and fever
11.	<i>Holarrhena pubescens</i> Wall.ex G.Don	Apocynaceae	Dhalaphula, Kuruchi	Flower	Used in Religious ceremonies	Used to cure skin problem and rheumatic pain
12.	<i>Annona squamosa</i> L.	Annonaceae	Aata	Whole plant	Used in Religious ceremonies	Both fruit and leaves are used to cure skin diseases and dysentery
13.	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Mandara	Flower	Used in Religious ceremonies	Used against skin and hair loss
14.	<i>Jasminum multiflorum</i> (Burm.f)Andrews	Oleaceae	Malli	Flower	Used in Religious ceremonies	Flowers are used to detoxify body
15.	<i>Clitoria ternatea</i> L.	Fabaceae	Aparajita	Flower	Used in Religious ceremonies	Roots are used to cure jaundice
16.	<i>Plumeria rubra</i> L.	Apocyanaceae	Katha champa	Flower	Used in Religious ceremonies	Used against skin diseases
17.	<i>Cocos nucifera</i> L.	Arecaceae	Nadia	Fruit	Used in Religious ceremonies	Used to cure stomach diseases and dehydration
18.	<i>Quisqualis indica</i> L.	Combretaceae	Malati	Flower	Used in Religious ceremonies	Paste of flowers are used to stop bleeding
19.	<i>Datura metel</i> L.	Solanaceae	Dudura	Flower	Used in Religious ceremonies	Leaves are used against skin problem
20.	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Panasha	Fruit	Used in Religious ceremonies	Fruits are used to enrich their body as well as they used leaves to cure skin diseases
21.	<i>Catharanthus roseus</i> (L.) G. Don	Apocynaceae	Sadabahari	Flower	Used in Religious ceremonies	Used against various skin diseases
22.	<i>Citrus limon</i> (L.) Burm.f.	Rutaceae	Lembu	Fruit	Used in Religious ceremonies	Used against dysentery
23.	<i>Caryota urens</i> L.	Arecaceae	Solopa	Wine	Used in Religious ceremonies	Used against stomach disorders
24.	<i>Bambusa bambos</i> (L.) Voss	Poaceae	Baunsha	Whole plant	Used in Religious ceremonies	Paste of leaves are used to cure wound
25.	<i>Lawsonia inermis</i> L.	Lythraceae	Menjuati	Leaves	Used in Religious ceremonies	Used against jaundice

26.	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Nimba	Whole plant	Used in Religious ceremonies	Used to cure skin disease
27.	<i>Santalum album</i> L.	Santalaceae	Chandan	Bark	Used in Religious ceremonies	Used to cure gastrointestinal disorders
28.	<i>Oryza sativa</i> L.	Poaceae	Dhana	Fruit	Used in Religious ceremonies	Used to enrich their body and the brew are used against dysentery
29.	<i>Sesamum indicum</i> L.	Pedaliaceae	Rashi	Fruit	Used in Religious ceremonies	Used against skin and stomach problems
30.	<i>Nelumbo nucifera</i> Gaertn.	Nymphaeaceae	Bhanda, Padma	Flower/ Fruit	Used in Religious ceremonies	Used to cure gastrointestinal disorders
31.	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Duba	Whole plant	Used in Religious ceremonies	Used to cure gastrointestinal disorders and urinary tract infection
32.	<i>Ficus benghalensis</i> L.	Moraceae	Baragachha	Whole plant	Used in Religious ceremonies	Used to cure dysentery and respiratory diseases
33.	<i>Piper betel</i> L.	Piperaceae	Pana	Leaves	Used in Religious ceremonies	Used against stomach disorders and some respiratory problems
34.	<i>Coix lacryma-jobi</i> L.	Poaceae	Ghasi	Whole plant	Used in Religious ceremonies	Decoction used to cure cough
35.	<i>Melastoma malabatricum</i> L.	Melastomataceae	Phul	Flower	Used in Religious ceremonies	Used to cure gastrointestinal disorders
36.	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Dumar / Barakoli	Leaves	Used in Religious ceremonies	Leaves are used to cure wound.

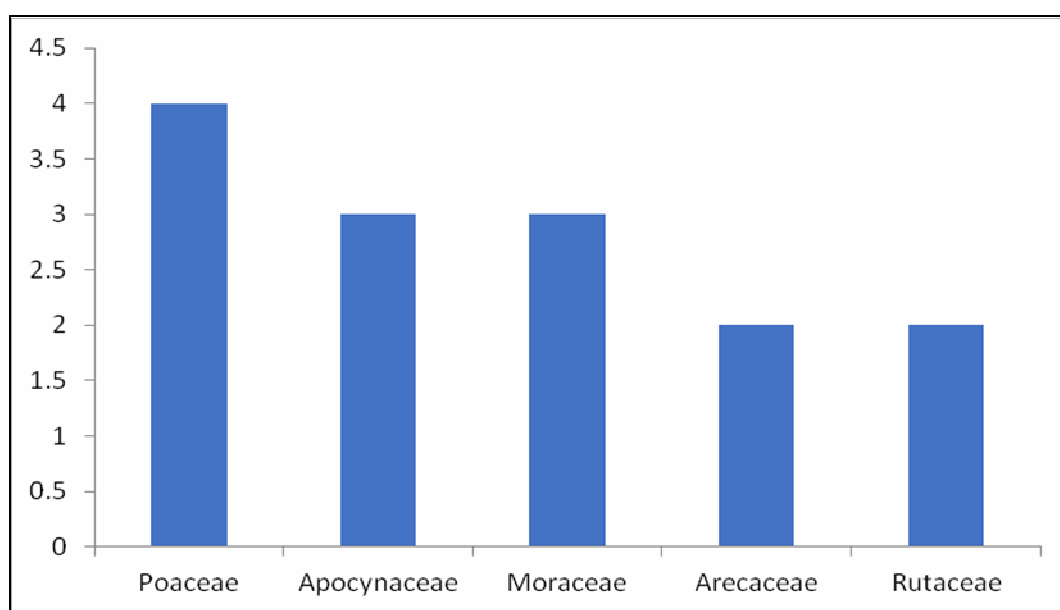


Fig. 2 : Dominated family of study area

Conclusion

The tribal people group of Malkangiri have a social natural legacy as this protection practice, the information on which should be saved and appreciated. The plants related to rituals and beliefs are commonly planted in home nurseries for simple accessibility for various services. Continuation of the ritual practices has significant potential for loss of natural resources conservation. In this manner, it is sensible to keep alive the traditional convictions and practices that can fundamentally add to country improvement and nature preservation. With the impacts of globalization and a change in the conviction frameworks, the vast majority of the traditional and rituals are being forgotten. Documentation of plants associated with rituals and traditional medicine is important as it signifies the age-old relationship of human with plants. Another important aspect is that the rituals and

associated beliefs also help in conservation of plants. In this manner, there is an earnest need not exclusively to protect RET (rare, endangered, and threatened) plants but additionally to restore and rethink such traditional practice of nature conservation and ecological management.

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Conflict of interest

Authors do not have any conflict of interest to declare

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