

## **An Ethno-Medico-Botanical Study of Bolangir, Orissa, India: Native Plant Remedies Against Gynaecological Diseases**

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### **ABSTRACT**

The present paper enumerates 33 plant species belonging to 24 families used by the tribal of Bolangir District of Orissa for the cure of Gynaecological diseases. Tribal generally collect these plants from the nearby forest and prepare the medicine under the guidance of vaidya or village medicine man in a traditional way. These medicinal plants are becoming extinct day by day by heavy use of such plants and transport to urban areas for commercial purposes. These plants definitely help the pharma industry for developing medicines in a hygienic way.

**Key Words:** Yunani, Vaidya, Siddha, Ethno-Medico-Botany, Gynaecological diseases, Bolangir.

### **INTRODUCTION**

India is predominantly a village based country. Use of common plants around us is of holistic nature which took in to the account of all aspects of human health and diseases. The philosophy of the treatment enunciated by great Rishis bear testimony to our tradition, in the health care of our people. The major part of population lives with poor socio-economic status, inadequate transport and communication facilities and poor hygienic condition. The first hand and timely provision of treatment becomes impracticable.

So the people of rural India, by the large, are still dependent on traditional medicine for their health care and treatment of diseases. These medicines have been developed through the experience of many generations assimilating the knowledge, in course of time, from fragments of Siddha, Ayurveda, Yunani as well as tribal system of medicine. This paper deals with the native plants and their uses for the cure of gynaecological disorders practiced by the tribal of Bolangir Dist. of Orissa.

### **METHODOLOGY**

The district of Bolangir is flanked in the north west by Gandhamardhan hills, a name of Ramayan fame, the north east by the rock infested Mahanadi. It lies between 20<sup>0</sup>11' 40" – 21<sup>0</sup> 05' 08" northern latitude and 82<sup>0</sup> 41' 15" – 83<sup>0</sup> 40' 22" east latitude. The district is situated in the valley of rivers like Ang and Tel. It is in the western highlands of Orissa state with an average rain fall of about 1230 cm. and red sandy to red loamy soil nature. . In the Bolangir district less than 25% of the area is under forests which are basically scrub and dry deciduous which is reported botanically under explored (Panigrahi, 2002).

Ethno- botanical surveys were conducted in the eleven tribal villages (randomly selected) of three panchayat namely Chikalbahal, Kudasingha and Bhutiyarbahal of Bolangir Dist. of Orissa. Out of 6 million tribal about 62 notified tribes are seen in Orissa ( Mohapatra, 1993 ).Bolangir is dominated by tribal like Sangara, Kondha, Mahar, Gond etc. First hand information regarding the therapeutic properties of wild plants was recorded from these areas. Frequent visits were made to collect plants from the forest. The ethno-medico-botanical information was collected on the basis of interviews and cross examination of the inhabitant and village medicine man commonly known as Vaidya or Kabiraj during field trips. Information was collected in respect of 33 ethno medicinal plants belonging to 24 families used by the tribal of Bolangir of Orissa to cure various gynaecological diseases. Voucher specimen were collected and preserved as herbarium specimen and deposited in the department of Botany, Ravenshaw University, Cuttack. Identification of plants was done using Haines (1921-25) and Saxena and Brahmam(1994-96).

## ENUMERATION

The plant species are arranged in alphabetical order. The description follows binomial, family name, local name, name in Hindi and name in Sanskrit, name of locality and voucher specimen number. This is followed with details such as the part(s) used singly or in combination with other plants, methods of preparation and dosage. The following is the list of 33 plants belonging to 24 families.

1. ***Abutilon indicum***(L.) Sweet. (Malvaceae) 'Pedipedica'(O) 'Petari' (H) 'Atibala' (S) Bhutiyarbahal-101  
The bread prepared from the mixture of leaf powder (10 gm.) and wheat flour (200gm.) is taken daily during night for about one month for the cure of uterus displacement.
- 2.. ***Aloe vera*** Mill.(liliaceae) 'Gheekuanri'( O ) 'Ghneekuanri' ( H ) 'Grutkumari (S ) Chikalbahal-187  
Leaf juice (5 gm.) along with turmeric & black salt is taken twice daily in empty stomach to cure irregular periods.
3. ***Alstonia scholaris***(L.) R.Br. (Apocynaceae) 'Chatiana'(O) 'Chatiwan'(H) 'Saptaparni'(S) Chikalbahal-177  
The powder of the bark with equal amount of sunthi powder (one spoon) is taken along with cow's milk (one cup) twice to cure post-pregnancy fever.
4. ***Amaranthus spinosus*** (L) (Amaranthaceae) 'Kantamarisha'(O) 'Choulai'(H) 'Meghanad'(S) Chikalbahal-111  
The paste of *Amaranthus* root (10gm.) along with rice washed water is taken twice daily for three- four days to cure menorrhoea.
5. ***Azadirachta indica*** A.Juss. (Meliaceae) 'Limba' (O) 'Neem'(H) 'Nimba'(S) Chikalbahal-474  
The bark of the tree (20gm) & bark of *Acacia nelotica* (20gm.) is boiled in three glasses of water and filtered. The filtrate (one glass) is taken in the morning in empty stomach for one week to cure white discharge.
6. ***Basella alba***(L.) (Chenopodiaceae) 'Poi'(O) 'Poi'(H) 'Upodika' (S) Nuniadhipa-115

The paste of root of red *Basella* (10gm.) along with rice washed water is taken in the morning in empty stomach for one month to cure irregular periods.

7. ***Bombax ceiba* (L.)** (Bombaceae) 'Semel'(O) 'Semel'(H) 'Mocha'(S) Chikalbahal-602

The petals of the flower fried in desi-ghee, is taken with black salt for one week to cure menorrhoea.

8. ***Butea monosperma*(Lam.)** Taub. (Fabaceae) 'Palsa'(O) 'Dhak'(H) 'Palasa'(S) Kudasingha-76

The powder of the dry leaf (one spoon) is taken twice daily for one month to cure white discharge and menorrhoea.

9. ***Cynodon dactylon*(L.)** (Poaceae) 'Dub' (O) 'Dub' (H) 'Durba'(S) Siris-202

The whole plant, flower of *Hibiscus rosa-sinensis*, old molasses are crushed with rice washed water and taken once daily in empty stomach to cure menorrhoea.

10. ***Erythrina variegata*(L.)** (Fabaceae) 'Paldhua'(O) 'Farhad'(H) 'Paribhadra'(S) Nuapada-271

The leaf juice (four spoon) is taken twice daily for one-two month to cure irregular periods.

11. ***Ferronia limonia*(L.)**Sw. (Rutaceae) 'Kaintha'(O) 'Kavitha'(H) 'Kapitha'(S)Chikalbahal-39

The paste of the leaf (15gm.) & leaf of bamboo (15gm.) along with rice washed water is taken twice daily to cure menorrhoea.

12. ***Ficus glomerata*** Roxb. (Moraceae) 'Dumer'(O) 'Gular'(H) 'Udumbar'(S) Chikalbahal-134

The paste of the bark (10gm.) with water is taken twice to cure white discharge & menorrhoea.

13. ***Ficus religiosa*(L.)** (Moraceae) 'Pippala'(O) 'Pippal'(H) 'Aswatatha'(S) Kudasingha-307

The paste of the bark (10gm.) is taken with water (one glass) twice daily for one month to cure white discharge.

14. ***Gmelina arborea*** Roxb. (verbenaceae) 'Gambhari(O) 'Gambhar'(H) 'Gambhari'(S) Dhanaradadar-444

The root (20gm.) is boiled in water (one glass) & then filtered. The filtrate (half glass) is taken twice to cure post-pregnancy weakness.

15. ***Hibiscus rosa-sinensis*(L.)** (Malvaceae) 'Mandar'(O) 'Jabakusam'(H) 'Japapuspa'(S) Rajamunda-313

a. White flower of the plant (five no.) taken in the morning in empty stomach for about two-three months to cure white discharge.

b. Red flower of the plant (four-five no.) fried with desi-ghee taken in the morning daily to cure irregular periods.

16. ***Holarrhena pubescens***(Buch-Ham.) Wall.ex.G.Don (Apocynaceae) 'Kurei'(O) 'Kuda'(H) 'Kutaj'(S) Chikalbahal-692

The powder of the bark (one spoon) along with rice washed water is taken twice for a week to cure menorrhoea.

17. ***Holoptelea integrifolia***(Roxb.) Planch. (Ulmaceae) 'Dharanj'(O) 'Chilbil'(H) 'Chirabilwa'(S) Kudasingha-511

The paste of the bark (5gm.) with water (one glass) is taken in the morning in the empty stomach to cure post-pregnancy fever.

18. ***Mangifera indica*(L.)** (Anacardiaceae) 'Amba'(O) 'Aam'(H) 'Amra'(S) Bhutiyarbahal-12

The skin of unripe mango fried in desi-ghee is taken daily to cure menorrhoea.

19. ***Mimosa pudica*(L.)** (Mimosaceae) 'Lajkoli'(O) 'Lajwanti'(H) 'Lajjawati'(S) Chikalbahal-223

The powder of Mimosa leaf (5gm.) is taken daily in empty stomach for one month to cure menorrhoea.

20. ***Mimusops elengi*(L.)** (Sapotaceae) 'Boula'(O) 'Malesree'(H) 'Bakula'(S) Phatkera-806

The powder of the bark (one spoon) is taken twice daily in empty stomach for four-five days to cure uterus problems.

21. ***Musa paradisiaca*(L.)** (Musaceae) 'Kadel'(O) 'Kela'(H) 'Kadali'(S) Chikalbahal-379

The stem juice (one cup) is taken twice daily for one month to cure menorrhoea.

22. *Phyllanthus neruri* Webst. ( Euphorbiaceae) ‘Badionla’(O) ‘Jharamla’(H) ‘Bhuamalika’(S) Kuthurla-90  
The paste of whole plant or fruit (5gm.) along with rice washed water is taken twice daily in empty stomach for three-four days to cure menorrhoea.
23. *Ricinus communis*(L.) (Euphorbiaceae) ‘Gaba’(O) ‘Arandi’(H) ‘Aranda’(S) Siris-32  
The stem of *Ricinus* is cut into pieces and is sun dried and then burnt. The ash along with equal amount of amla powder is taken (one spoon) twice daily in empty stomach to cure white discharge and menorrhoea.
24. *Saraca asoca*(Roxb.) de.Wilde (Caesalpiniaceae) ‘Ashok’(O) ‘Ashok’(H) ‘Ashoka’(S)Siris-437  
The bark of the plant (120gm.) & black rasi (120gm.) is boiled in one glass of milk and three glasses of water for sometime. The rest part (milk) is taken thrice daily in empty stomach to cure white discharge, menorrhoea and irregular periods.
25. *Schleichera oleosa*(Lour.) Oken. (Sapindaceae) ‘Kusum’(O) ‘Kusum’(H) ‘Kosamra’(S) Chikalbahal-702  
The paste of the bark (10gm.) along with water (one cup) is taken twice to cure menorrhoea.
26. *Sesbania grandiflora*(L.) Poir. (Fabaceae) ‘Agasthi’ (O) ‘Agasthi’ (H) ‘Agasthya’ (S) Chikalbahal-241  
The juice of *Sesbania* flower (20ml.) is taken daily in the morning to cure white discharge.
27. *Sida cordifolia*(L.) ( Malvaceae) ‘Bajramuli’(O) ‘Pitbarela’(H) ‘Bala’(S) Chikalbahal-82  
The root powder (5gm.) along with honey (one spoon) & milk (one cup) is taken twice daily in empty stomach to cure white discharge.
28. *Stereospermum chelonoides*(L.F.)DC (Bignoniaceae) ‘Padhel’(O) ‘Padhar’(H) ‘Patala’(S) Phatkera-333  
The bark (20gm.) is boiled in water (two glasses) and then filtered. The filtrate is taken twice daily for one month to cure post-pregnancy weakness.
29. *Streblus asper* Lour. (Moraceae) ‘Sahadda’(O) ‘Sahoda’(H) ‘Sakhota’(S) Bandhakeda-731  
The bark of the root (5gm.) along with rice washed water is taken twice daily to cure white discharge along with pus and blood.
30. *Syzygium cuminii*(L.) Skeels. (Myrtaceae) ‘Jamu’(O) ‘Jamun’(H) ‘Jambu’(S) Rajamunda-402  
The soft leaf or the bark juice (10ml.) along with rice washed water is taken twice in empty stomach to cure menorrhoea.
31. *Tamarindus indica*(L.) (Caesalpiniaceae) ‘Tentel’(O) ‘Imli’(H) ‘Tentula’(S) Bandhakeda-86  
The seeds are soaked overnight, then the paste of those soaked seed (two spoons) along with milk (one glass) is taken twice daily to cure white discharge.
32. *Tinospora cordifolia*(L.) Merr. ( Menispermaceae) ‘Gulchi’ (O) ‘Giloy’ (H) ‘Amruta’(S) Rajamunda-281  
About 50 gm. of Gulchi (stem) first soaked in two glasses of water and then filtered, the filtrate is taken daily for one month to cure white discharge.
33. *Woodfordia fruticosa*(L.) Kurz. (Lythraceae) ‘Dhatuki’(O) ‘Dhaya’(H) ‘Dhataki’(S) Bhutiyarbahal-617  
The powder of flower (10gm.) along with honey is taken thrice daily in empty stomach to cure white discharge and menorrhoea.

## DISCUSSION & CONCLUSION

The ethno-medico-botanical survey of the area revealed that the people of the area are possessing good knowledge of herbal drugs but, as the people of the societies are in progressive exposure to modernization; their knowledge of traditional uses of plants may be lost in due course. So it is important to study and record the uses of the plant by

different tribe and sub tribe for future study. Such studies may also provide some information to phyto-chemists and pharmacologists in screening of individual species in rapid accessing of phyto constituents.

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## **REFERENCES**

- (1) Hains H.H , 1921-25 – Botany of Bihar and Orissa (Ed.1961), Botanical survey of India, Calcutta 1-537.
- (2) Mohapatra S, 1993 – The tangled web tribal life and culture, Orissa Sahitya Academy Publication, BBSR, 1-148 pp.
- (3) Panigrahi G, 2002 – Taxonomy, Nomenclature and Conservation of Biodiversities with special reference to under explored region of Orissa. In plant resource utilization ( Ed. Sahoo et al.) Allied Publication, New Delhi 3-5.
- (4) Saxsena H.O. and Brahmam. M ,1994-96 – Flora of Orissa, Forest Development Corporation Ltd., BBSR, Orissa 1-2918 pp.