

## Some Classic Formulation used by the Native Practitioners of South Tripura District, Tripura, North-East India

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### Abstract

This article highlights some classic formulations used by the traditional practitioners of *Bangalee* community in Belonia bio – region of South Tripura district for the treatment of various human ailments. A field survey revealed nine classic formulations those were important folklore medicines for various ailments. Where, 23 different plants species and five organic and inorganic entities have identified those used as components for nine formulations and two species of plants *Citrus limon* Linn, *Azadirachta indica* (A). Juss recorded in more than one formulation. The name and address of traditional practitioners, the composition of formulations, disease, sign and syndrome have detailed in this article. Apart from traditional knowledge few traditional mindset on ghost action, restriction for pregnant women has also been documented. With the advent of the modern exotic culture and the parallel development of modern or allopathic medicines, the rich Indian traditional system of health care practices have sidelined and neglected. Resultantly, the village-based wisdom of the traditional system of health care practices has not seriously been referred, not well documented and conveyed properly over generations. With this background, our survey on Tripura traditional medicine (TTM) may help in the discovery of safe, natural remedy for some dreaded ailments and sustainable development of ethno-medicinal bioresources.

**Keywords:** *Citrus limon*, *Azadirachta indica*.

### 1. Introduction

The human developed indigenous technology for their needs through informal experimentations in the process of evaluation [1,2]. Traditional knowledge helps to prevent and cure ailments [3]. The traditional healthcare practices in the North – East India is only healthcare facility available in several villages of this region [3]. However, with the advent of the modern exotic culture and the parallel development of modern or allopathic medicines, the rich Indian traditional system of health care practices have sidelined and neglected. Resultantly, the village-based wisdom of the traditional system of health care practices has not seriously been referred, not well documented and

conveyed properly over generations [2,4]. With this background, we conducted a field survey in Belonia bio – region of South Tripura district, India.

### 2. Methodology

During the ethnopharmacological survey in Belonia bio – region of South Tripura district, India, a four member's team interacted with traditional practitioners of *Bangalee* community of the region. The information obtained have further verified by cross checking with villagers of the region those have used. According to the earlier study [2], a questioner has prepared for that survey in the following format:

**Table 1: Ethno-pharmacological Information:**

Sl. No	Name of traditional practitioner & address	Formulation used with dosages forms & dose (TTM)	Disease as per practitioner	Sign & symptoms
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As part of the verification, actual uses of folk medicine have documented as per the patients under treatment.

The research Samples and its photographs have collected from the region with the help of traditional practitioners. After compilation of survey data identified unique bioresources.

The herbarium specimens were prepared and deposited in life science department, Tripura University.

### 3. Observations

Compilation of survey data revealed nine classic formulations those are important folklore medicines for various ailments used by the traditional practitioners of *Bangalee* community of the region, and the questioners have designed for the collection of information, following name and address of traditional practitioners, the composition of formulations, disease, sign and syndrome. The observations, made during ethnopharmacological survey have presented in Table 2.

**Table 2: Traditional medicines of Tripura used by traditional practitioners of South Tripura District for different diseases**

Sl. No.	Name of traditional practitioner & address	Formulation used with dosages forms & dose (TTM)	Disease as per practitioner	Sign & symptoms
1.	Sri. Nitai Charan Debnath, S/o Lt. Prasanna Kr Debnath, Vill :- North Julaihari, P.O. Julaihari, P.S. Bhaikhora, Sub-Div:- shantirbazar, Dist:- South Tripura Mob:- 09612285350	Kurchi Bark ( <b>1. <i>Holarrhena antidysenterica</i></b> , Wall), Baraha Kranta leaf ( <b>2. <i>Abroma augusta</i></b> ), Shimul flower ( <b>3. <i>Ceiba pentandra</i></b> ), Iron dust etc.	Leucorrhoea	a). White vaginal discharge b). Weakness c). Vertigo d). Itching
2.	Smt. Pratibha Majumder W/o Sri Chinta Haran Majumder, Vill:- Madhyam Pilak, PO:- Debdaru P.S. Bhaikhora, Sub- Div:- shantirbazar, Dis:- South Tripura, Mob:- 09612471801 (son)	Dhup ( <b>4. <i>Styrax benzoin</i></b> , Dryander), Coccunut Oil ( <b>5. <i>Cocos nucifera</i></b> Linn.), Camphor ( <b>6. <i>Cinnamomum camphora</i></b> (L.) J. Presl.),	Burn	a). Watery blister b). Burning pain c). Ulcer
3.	Sri. Parimal Biswas S/o Lt. Ramani Kanta Biswas, Vill +P.O:- Thakurchara, P.S. Bhaikhora, Sub- Div:- shantirbazar, Dis:- South Tripura Mob:- 09862010490	Mauri ( <b>7. <i>Foeniculum vulgare</i></b> , Mill), Bit lobon (Black Salt), Baranebu or lemon juice ( <b>8. <i>Citrus limon</i></b> , Linn), water.	Gastric Disorder	a). Constipation b). Loss of appetite c). Abdominal Burn d). Gas/ Acidity
4.	Sri. Sadhan Baisnab S/o Lt. Ambika Baisnab Vill +P.O:- Debdaru, P.S. Bhaikhora, Sub-Div:- shantirbazar, Dis:- South Tripura, Mob:- 09862620032	Kamranga juice ( <b>9. <i>Averrhoa carambola</i></b> ), Kakrol Juice ( <b>10. <i>Momordica dioica</i></b> , Roxb. Ex Willd.), Amlokhi ( <b>11. <i>Embilica officinale</i></b> ). The stem of <b>12. <i>Plumbago zeylanica</i></b> L in small pieces with rhizome of <b>13. <i>Curcuma longa</i></b> are tied together and wear in the neck with cotton thread to cure jaundice	Jaundice	a). Yellowish Eyes, b). Loss of appetite c). Weakness d). Enlarged Liver
5.	Sri. Tapan das, S/o Mr. Brajendra Das, Vill +P.O:- Debdaru, P.S. Bhaikhora Sub- Div:- shantirbazar, Dis:- South Tripura. Mob:- 09612267392	Sharnalata ( <b>14. <i>Cuscuta reflexa</i></b> Roxb.), Swarna Sindur, Naphthalene, Boric Acid, Sada-pata ( <b>15. <i>Nicotiana tabacum</i></b> , leaf)	A). Eczema B). White spot	a). Itching b). Burning c). Watery blister a). White spot on face & all body
6.	Smt. Bakul Bala Shill, W/o Lt. Nepal Shail, Vill +P.O:- Debdaru, P.S. Bhaikhora Sub- Div:- shantirbazar, Dis:- South Tripura. Mob:- 09612173260	Arhar leaf ( <b>16. <i>Cajanus cajan</i></b> Linn.), molasses ( <b>17. <i>Saccharum officinarum</i></b> , Linn.).	Jaundice	a). Yellowish Eyes, b). Loss of appetite c). Weakness d). Enlarged Liver
7.	Sri. Gopal Baidya Vill :- North Julaihari, P.O. Julaihari, P.S. Bhaikhora, Sub- Div:- shantirbazar, Dis:- South Tripura Mob:-09436492068	Neem leaf ( <b>18. <i>Azadirachta indica</i></b> , A. Juss.), karala leaf ( <b>19. <i>Momordica charatia</i></b> , L.),	Chicken Pox	a). Blister in whole body & mouth b). Fever c). Pain d). Itching
8.	Sri. Suresh Chandra Banda, S/o Lt. Gagan Chandra Banda, Vill:- Bagmara, Dis:- South Tripura, Mob:- 09862344880	Mango bark ( <b>20. <i>Mangifera indica</i></b> L.), lime water (8. <i>Citrus limon</i> , Linn.)	Jaundice	a). Yellowish Eyes, b). Loss of appetite c). Weakness d). Enlarged Liver
9.	Smt. Nirmala Banda, W/o Lt. Atul Chandra Banda, Vill:- Bagmara, Dist:- South Tripura Mob:- 09615258012	Kurchi Bark ( <b>21. <i>Holarrhena antidysenterica</i></b> , Wall), Neem bark (18. <i>Azadirachta indica</i> , A. Juss.), durva ( <b>22. <i>Cynodon dactylon</i></b> (L.) Pers.), lime water (8. <i>Citrus limon</i> , Linn), Thankuni leaf ( <b>23. <i>Centella asiatica</i></b> , Linn.).	Abdominal disorder	a). Mucusy stool b). Worm troubles c). Itching on rectum d). Acidity

**Note:** In Table 2, Serial No. 1-23 given to the medicinal plants used by Folklore healers those numbers referred in Table 3 instead of full name of medicinal plants.

**Table 3: Analysis of data showing commonly used medicinal plants listed under table 2**

S. No. of Formulation as per table 2	Serial number assigned in table -1 for medicinal plants used in different nine classic formulations in Superscript																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1.	Y	Y	Y																				
2.				Y	Y	Y																	
3.							Y	Y															
4.									Y	Y	Y	Y	Y										
5.														Y	Y								
6.																Y	Y						
7.																		Y	Y				
8.								Y											Y				
9.								Y										Y			Y	Y	Y

The Plant, *Citrus limon*, Linn[8], *Azadirachta indica*, A. Juss.[18] used in more than one formulation by different traditional practitioners.

#### 4. Discussion and conclusion

This work was an intensive, systematic ethnopharmacological studies conducted in different areas of Belonia bio – region of South Tripura district, Tripura, India. A diverse use of the medicinal plant for the treatment of various diseases has documented. Altogether, 23 different plants species and five organic and inorganic entities were identified those used as components for nine different formulations. Of these two species of plants *Citrus limon* Linn. and *Azadirachta indica*, (A.) Juss recorded in more than one formulation (Table 2 and 3).

Apart from traditional knowledge, a few unconventional incidences have documented during this survey. According to the villagers of kakraban, Udaipur Sub-division, South Tripura district in several incidences pregnant women have got the abortion when they have visited a particular area, mostly in the afternoon and early evening. The particular area has been located during the survey and noticed an area (one side of bank of a fishpond) densely populated shrubby perennial herb locally called as 'Rakt-Chitrak' (*Plumbago indica* Linn.). The herb *Plumbago indica* or *Plumbago rosea* reported for its strong anti-fertility activity [5-7]. Possibly phytochemicals present in the *Plumbago indica* plants had evaporated out when sufficiently heated under sunlight and pregnant women may get the abortion may be due to inhalation of those abortifacient phytochemicals through systemic action. The traditional mindset and the restrictions for pregnant women in the movement especially, in particular time and places observed in villages of Tripura since ancient time. However, a details study required for identification of volatile phytochemicals and established their 'ghost action.'

The modern amenities are slowly diminishing of traditional knowledge. Hence, as an immediate measure the present ethnopharmacological survey and documentation work help to preserve information of curing human sufferings for future generation. The documentation of useful bioresources will reach herbal industries as published document and create an opportunity for commercial cultivation in the region and marketing. The commercial cultivation of useful bioresources improves their socioeconomic status of villagers of the region and also

enhances the conservation activity among the community by reducing the pressure on the natural stand that will. The wealth of traditional knowledge of the people of Tripura needs to trapped and preserved for sustainable utilization. These bioresources also can exploit in a positive manner for scientific validation, pharmacological screening, and phytochemical characterization for drug discovery. This strategy will help in saving a few valuable and potential drug yielding species.

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