

Various Ethno Medicinal Plants used for treatment of Reproductive Health Problems by Morans of Tinsukia district, Assam

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Abstract— The present paper makes an attempt to focus on the traditional medicines used by Moran community of Tinsukia district of Assam to cure various reproductive health problems. A total of 32 plants belonging to 24 families are being used as traditional medicines were documented and identified. The Bej, Kabiraj and traditional practitioners have good knowledge about the indigenous medicines usually treat the patient. Various plant parts like stem, root, leaf, bark, seed are used for the preparation of medicines. There is an urgent need on conservation of ethnomedicinal plants and pharmacological analysis for safer and convenient use for betterment of mankind.

Index Terms—Moran, Bej, Ethnomedicine, Reproductive Health Problems.

I. INTRODUCTION

Traditional medicine is an ancient medical practice which exists in the communities before the advent of modern healthcare. Folk medicine is based on indigenous theories, belief and experiences that are conserved from generations.

Assam, the land of red river and blue hills, is situated at North Eastern India located between 24°2' - 27°6' N latitude 88°8' - 96° E longitude. It has an average of 116 meters. Assam has 33 districts and Tinsukia is the easternmost district. Various ethnic groups like Moran, Mottok, Ahom, Chutiya are inhabited in Tinsukia. The Moran's is a lesser known community and originally belong to the Austric Moria clan. They are mainly concentrated in the Tinsukia district. Once they had an independent state known as Bengmora, but in 1841, the British annexed the Bengmora state to the British Empire. The Bengmora state is now known as Tinsukia district. A number of ethnomedicinal studies among different ethnic groups have been studied by different workers from different parts of northeast India such as Sharma and Thakur (1999), Das and Tag (2006), Sajem and Gosai (2006), Buragohain and Konwar (2007), Das *et al.* (2008), Kalita and Bora (2008), Sikdar and Dutta (2008), Saikia *et al.* (2010), Sarma and Sarma (2010), Barukial (2011), Buragohain (2011), Sonowal and Baruah (2011), Abujam and Shah (2012), Barua *et al.* (2012), Deka *et al.* (2012), Gam (2013), Sarma *et al.* (2013), Nath (2014), Talukdar (2014), Bailung & Puzari (2016) etc. The present study was done to report the ethno medicinal practices for treatment of

reproductive health among the indigenous Moran Community of Tinsukia district.

II. MATERIALS AND METHODS

The present study was done during 2015-2016 in 18 Villages of Tinsukia district such as Tezipather, Gormoratup, Hatigorh, Ubon, Kulipather, tongona, bormesai, Kothalguri, Ratanipather, Takeli, Langkashi, Dhulijan, Motapung, Barekuri, Philobari, Kachijan, Kherjan and Mamoroni.

Contacts were made with the village heads, herbal practitioner, kobiraj, bej elderly men & women. Prior informed consent was obtained from the village heads and from the participants of the study. Information on herbal medication was gathered through conversation, interviews & discussions. For this a questionnaire was prepared for interviewing the participants. The information gathered was crosschecked with available local Literature (Khanikar 2002; Nath 2001). The collected plant specimen were identified with the help of local flora (Bora & Kumar, 2003; Kanjilal *et al.* 1940).

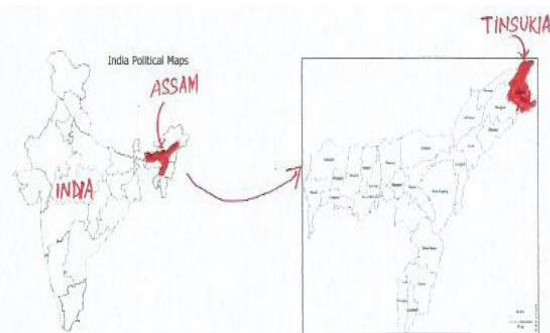


Fig. Location map of Tinsukia, Assam (India)

III. RESULTS

A brief information including botanical name, family, local name, parts used and their medicinal value by the peoples is given in the Table below.

Table 1:- List of Medicinal plants used for the treatment of Reproductive Health problems

Sl No	Botanical Name	Family	Local Name	Parts Used	Medicinal Value
1	<i>Abroma augusta</i> L.	Sterculiaceae	Gorokhia korai	Root	Root juice is considered as uterine tonic.
2	<i>Acoras calamus</i> L.	Anaceae	Bosh gos	Rhizome	Rhizome juice is provided to treat Irregularity in menstrual cycle.
3	<i>Alstonia scholaris</i> R.Br.	Apocynaceae	Sotiana	Bark	Fresh bark decoction mixed with milk is taken to increase lactation also reduce the viscosity of breast milk.
4	<i>Alternanthera sessilis</i>	Amaranthaceae	Matikanduri	Leaf & Stem	Leaf and stem used as food to increase lactation.
5	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Hati-khutura	Tender Shoot	Taking as vegetable of tender shoot to increase lactation in nursing mother.
6	<i>Baccaurea ramiflora</i> Lour.	Euphorbiaceae	Leteku	Stem Bark	Powdered dry bark is applied on infected umbilicus of newly born baby.
7	<i>Caryota urens</i> L.	Arecaceae	Seweza	Root	Decoction of root is provided to nursing mother to increase lactation.
8	<i>Catharanthus roseus</i>	Apocynaceae	Nayan tora	Root	Decoction of root is prescribed to enhance reproductive health.
9	<i>Celtis tetrandra</i> Roxb.	Ulmaceae	Sukuta	Tender leaf	Taking as vegetable to relieve pain after childbirth.
10	<i>Coccinia indica</i> W & A	Cucurbitaceae	Belipoka	Root	Root juice is taken orally to stop bleeding during pregnancy.
11	<i>Coix lachrya-jobi</i> L.	Poaceae	Kawri-moni	Root	Root juice is provided to overcome menstrual trouble.
12	<i>Cucurbita maxima</i> Duch.	Cucurbitaceae	Rongalao	Seed	Regular taking of fried seeds increase the sexual vigour.
13	<i>Cynodon dactylon</i> (L)Pers	Poaceae	Dubori Bon	Leaf	Juice is taken to stop menstrual bleeding; increase men sperm count
14	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Gakhiroti Bon	Tender shoot	Taking as vegetable to enhance lactation in nursing mother.
15	<i>Flemingia srobilifera</i> (L.) R.Br.	Fabaceae	Makhioti	Root	Root decoction is given to overcome menstrual irregularities.
16	<i>Ipomoea aquatica</i> Forsk.	Convolvulaceae	Pani kolmow	Tender Shoot	Taken as a vegetable to enhance lactation in nursing mothers.
17	<i>Hibiscus rosa-sinensis</i>	Malvaceae	Joba Phul	Root, Flower	Dried root powder is mixed with water and taken orally; flower paste is also used to treat Irregular menstruation. Flowers are kept with water overnight and are taken in empty stomach to increase sperm count in male.
18	<i>Justiicia adhatoda</i> L.	Acanthaceae	Boga-bahok	Root, Leaf	Warmed juice is used as message on lower abdomen after childbirth for uterus contraction.
19	<i>Lasia spinosa</i> (L.) Thw.	Araceae	Chengmora	Rhizome	Boiled rhizome is prescribed for irregular menstruation and juice of the same is given in leucorrhoea.
20	<i>Lindernia pusilla</i> (Willd.) Bold	Scrophulariaceae	Gakhiyoti bon	Whole plant	Decoction is given to women after childbirth to promote milk.
21	<i>Mimosa pudica</i> L.	Mimosaceae	Lajuki bon	Root	Taking root juice with milk is said to increase the sexual vigour.
22	<i>Mollugo pentaphylla</i> L.	Aizoaceae	Setkopora	Leaf	Leaf juice is prescribed to women after childbirth.
23	<i>Musa balbisiana Colla</i>	Musaceae	Bhimkol	Stem	Stem extract is used to enhance male fertility.
24	<i>Paederia foetida</i>	Rubiaceae	Bhadailota	Whole plant	Taken as paste to relieve pain after child birth.
25	<i>Phyllanthus emblica</i>	Phyllanthaceae	Amlokhi	Fruit	Fruit as raw, as juice and in dried form to treat anaemia.

26	<i>Ricinus communis</i>	Euphorbiaceae	Era	Leaf, Root	Juice of leaves and root taken orally to increase lactation in mother.
27	<i>Rubus moluccanus</i> Linn.	Rosaceae	Jutulipoka	Fruit	Enhance female fertility.
28	<i>Saraca indica</i>	Fabaceae	Ashok phul	Bark	Dried bark powder is mixed with milk to treat irregular menstruation.
29	<i>Thunbergia coccinea</i> Wall	Acanthaceae	Nilokontha	Root	Juice enhances fertility in both men & women.
30	<i>Trigonella foenumgraecum</i> Linn.	Fabaceae	Methi guti	Seed	Grinded seed taken with milk to fight with uterus infection.
31	<i>Tylophora asthamatica</i>	Asclepiadaceae	Antamol	Root	Roots decoction is taken in empty stomach to increase male fertility.
32	<i>Wedelia calendulaceae</i>	Asteraceae	Mahabhingara j	Leaf	Leaf juice is taken orally for 2-3 days to delay menstruation.

IV. DISCUSSION

The present study was primarily aimed to investigate the plants used by the local people of villages for their medicinal values. A total of 32 plant species belonging to 24 families are enumerated used for the treatment of 11 different ailments related to both male and female reproductive health. These species are commonly available and used for the treatment of various problems like lactation of nursing mother, uterine treatment, pain relief after childbirth, menstrual irregularities, infected umbilicus cord of new born baby, enhance reproductive health, stop bleeding during pregnancy, men sperm count, leucorrhoea, anaemia etc. Different parts of plant like seed, leaf, bark, root, rhizome, whole plant, fruit, flower etc. are used for treatment of different ailments. It was found that maximum number of plants i.e. 8 plants are used for lactation and treatment of menstrual irregularities. Most of plants are consumed as medicines in different forms like juice, decoction and vegetable. Powder form of dried bark or seeds are either consumed with milk or water or applied externally. Traditional practitioners also suggested that smoking and alcohol deeply affect the reproductive health, mainly in man it may reduce sperm count and in female it may affect on menstrual cycle and ovulation. During the survey it was also noticed that most of the people found reluctant to share their knowledge because of their conservative belief. The herbal practitioners got their knowledge on medicines from their forefathers and in many cases such knowledge system lost with the death of the practitioner. Hence to preserve and enable the transmission of this remarkable medical system for the benefit of future generation, there is an immediate need for proper scientific studies of the ethno medical knowledge.

V. CONCLUSION

The medicinal plants are value added for the content and chemical composition. The preliminary results obtained from this study reveals that the plants of medicinal value need to be investigated for pharmacology and phytochemical activity on the basis of ethno therapeutics being used by Moran community for its safe use..

VI. ACKNOWLEDGEMENT

The author is grateful to all traditional healers who willingly agreed to discuss and provided information that made this study possible.

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