

STUDIES OF ETHNO-MEDICINAL PLANTS USED FOR THE TREATMENT OF VARIOUS GYNAECOLOGICAL DISEASES AMONG THE TRIBES OF CHOTANAGPUR (JHARKHAND)

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Ethno-medico-botanical survey conducted during 2001-2002 in different tribal dominating community blocks of Chotanagpur plateau revealed that there are many medicinal plants growing in the pat forests of Chotanagpur which are used as drugs by the indigenous medical practioners i.e., Horopaths, the pahans, the kavirajs, the Vaid, for the treatment of various gynaecological problems such as miscarriage, unusual abortion, excess mensurations, gonorrhoea, dysuria etc among the tribal women. These plants are *Alstonia scholaris*; *Asparagus racemosus*; *Desmodium gangeticum*; *Dendrocalamus strictus*; *Gloriosa superba*; *Rumax maritimus*. This specific medicinal property of these plants are still not known to many people. This needs proper campaigning and awareness among general mass so that the benefit should be availed at larger scale.

Keywords : Ethnobotany; Ethno-medico-botany; Horopath; Gynaecological problems; Pat forests; Deforestation; Endangered; Pharmacognosy.

Chotanagpur plateau (Jharkhand, India) primarily dominated with different tribal and indigenous population is very rich in its biodiversity where most of the ethno-botanically and ethno-medico-botanically important plants are growing widely in pat forest or in remote undisturbed areas. Thirty different ethnic tribal groups reside in Chotanagpur plateau. Medicinal properties of the plants and their uses is mainly known to the tribal people who are engaged in collection and knowledgeable tribal herbal medicine practioners which they have inherited from their predecessors and preserved from generation to generation through practice only.

The present study was carried out to identify, enlist, collect and to preserve the ethno-medicinally important plants used for the treatment of various gynaecological problems found among the tribal women of Chotanagpur.

Thorough and extensive field work was carried out in different tribal dominating community Blocks/Villages of Chotanagpur plateau. Representative villages were selected randomly keeping in mind that the villagers are tribal dominating. The survey was conducted in the villages namely - Torpa, Kharsidag, Guru, Rabo, Hesapiri, Karge, Murumgara, Nimdih, Ketunga, Serenghatu, Bhutia, Sonahatu, Rahe, Banta-

Hazam, Ambajharia, Korla, Dorya, Khapchabera, Tati-silwai, Jonha. Interview was conducted with the tribal women, tribal knowledgeable persons who identifies the plants and are professional collectors of the raw materials and finally from the traditional herbal medicine practioners i.e., The Horopaths, The Pahans, The Kabirays and The Vaid. Detail informations :-

(1) Regarding the different gynaecological problems, its frequency and methods of treatments were recorded from the tribal women.

(2) Regarding the mode of treatment, doses, methods of application, names of the plants used were recorded from the traditional medicinal practioners of the area. Some of the important traditonal folk herbal medicine practioners contacted for the purpose of getting informations (See foot note).

As regards to the methods of survey, collection of materials, documentations, preservations, identifications and preparation of herbaria, the literatures and process as prescibed¹⁻⁷ were followed.

Observations and Findings : On the basis of the survey, field work and interview conducted as prescribed earlier a list of important plants being used as drugs for the treatment of various gynaecological diseases and the method of treatment and application was prepared which is being given below in

alphabetical order :-

1. *Abutilon indicum* (Linn.) Sw. syn., Local name - Kanghi, Family - Malvaceae.

Leaf used in gonorrhoea.

2. *Acacia arabica* Willd. Local Name - Babul, Family- Leguminosae.

Gum is considered effective for the contraction of uterus in post-natal days. The usual practice is to prepare various types of sweets mixing the gum and eaten in enough quantity by the mother.

3. *Alstonia scholaris* R. Br. Local name - Chatri, Family - Apocynaceae.

Bark-juice is considered a very good astringent. It is mostly prescribed for the post-natal women. The usual dose is about 2 teaspoons with milk or honey, 3 times a day for a week or even more.

4. *Areca catechu* Linn. Local Name - Supari, Family - Palmae.

One half - roasted and powdered nut with juice from the root paste of *Desmodium microphyllum* and lemon- juice, each about 2 teaspoon, are mixed and prescribed to induce fertility in the morning of 4th day of menstruation. The prescription is repeated in every fortnight as a protection against miscarriage.

5. *Asparagus racemosus* Willd. Local Name - Satmulia, Family - Liliaceae.

(i) Young shoots are consumed as vegetable; it is good tonic considered most suitable diet for the recovering of patients and post-natal women.

(ii) About 2 teaspoon of the root-paste is orally administered during labour pain to facilitate delivery. The medication is repeated every 2 hours. Sometimes, root-paste is also applied on the vagina for the same use.

6. *Betula alnoides* Buch. Ham. Syn. Local

name - Bhojpatra, Family - Betulaceae.

Stem-Bark is crushed with equal amount of the leaves of *Bacopa monnieri* to make a paste. The filtered juice is taken to cure excessive menstruation. The dose is 2 teaspoons, 2 times a day for a week or more.

7. *Bombax ceiba* Linn. Local Name - Simal, Family - Bombacaceae.

Bark is crushed with little water. The resultant slime is applied on the vagina to facilitate delivery. It is employed both for human and cattle.

8. *Centella asiatica* (Linn.) Urban. syn. Local Name - Beng sag, Family - Umbeliferae.

One teaspoon of the leaf-juice, mixed with equal proportion of that of *Cynodon dactylon* is orally administered by women in the morning and before bed-time with cold water for at least a week to overcome menorrhagia.

9. *Dendrocalamus strictus* (Roxb.) Nees. Local Name - Bans Family - Graminae

When a child starts weeping most of the times, accompanied by loss of appetite and sleep, resulting in general weakness of health, the symptom is popularly called 'Badhak' which literally means weeping sickness. It is supposed to cause by touching a pregnant women. A piece of the inner portion of the stem is tied on the neck, waist or arm of the child to overcome such problem.

10. *Desmodium gangeticum* DC. Local Name - Shalparni, Family Leguminosae.

About one and a half teaspoon of the root juice is taken in the morning by women for about a month since the 4th day of her menstruation. It is supposed to be a safety measure to overcome the possible abortion in future.

(i) Sri Naw Krishna Singh Munda (age-55 yrs.); Village- Hesapiri (Bundu) - renowned herbal folk medicine practioners since last 25 yrs.

(ii) Sri Palton Munda (age -40 yrs); Village-Rabo (Tamar) - engaged in indigenous herbal drugs since last 15 years.

(iii) Sri Ghui Charan Pramanik (age 77 yrs); Village Ambajharia (Angara) - Famous herbal medicine practioners since 1955.

(iv) Sri Raghu Nath Swansi (age 45 yrs); Village- Korla, (Torpa) - indigenous herbal drug practioner since 1980.

(v) Sri Fauda Kujur (Age - 75 yrs); Village-Khapchabera (Silli) - one of the oldest known indigenous herbal drug practioner of Eastern Ranchi; East and West Singhbhum.

(vi) Sri Bhusan Mahato (Age 52 yrs); Village-Serenghatu (Sonahatu) - well known herbal folk medicine practioner since 1970.

(vii) Sri Man Mohan Singh Munda (age- 75 yrs); Village-Dorya (Earki) - famous indigenous medicine practioner since 1942 specialist in gynaecological problems.

11. *Gloriosa superba* Linn. Local name - Kalihari Family - Liliaceae.

(a) Root is crushed to extract juice. Three-four teaspoon of it is mixed in cow's milk to induce menopause. The medication should begin on 4th day for 2 weeks. It checks menstrual flow for at least a year. It could be repeated every year. This medication is mainly intended for family planning, although some women consume only half of the prescribed dose for a day or two to shift the menstruation period for a few days, if required.

(b) Rhizome in small quantity is used for vitality and strength.

(c) Rhizome crushed, deeped and washed in water for 10-15 hours. Thick paste like substance (starch) accumulate in the base. This is used for the treatment of gonorrhoea. This starch is given internally ones or twice daily (dose 1-2 Ratti at a time) for 5-7 days, it is effective against gonorrhoea.

(d) The rhizome starch applied in very small quantity (one-two ratti is effective in promoting labour pain and expulsion of placenta).

12. *Hemidesmus indicus* R. Br. Local name - Anantmul, Family - Asclepiadaceae.

a. Root powder mixed with gur and jeera and used as a drug for the treatment of urinary problem - as less discharge of urine, reddish urine discharge and feeling of burning during urine discharge.

b. Roots are very good stimulators for sexual activities.

c. Root is also used for the treatment of sexually transmitted diseases like syphilis.

d. Roots are also effective in case of pregnancy problems. Root paste or powder is recommended to be used by pregnant woman from intial stage, at the dose of ½-1 teaspoon daily. It helps in normal delivery.

e. Three - four teaspoon of rhizome juice mixed with cow milk in equal propotion is effective in menopause. The medication is to begin on forth day of the period for two weeks, it cheek menstrual flow for at least a year. It is mainly used for family planning.

13. *Jatropha curcas* Linn. Local Name - Bagbherenda Family - Euphorbiaceae. Root - juice is orally administered as an abortifacient. Three teaspoons of the juice is taken 3 times with an interval of 6-8 hours to induce abortion but some times, 4-5 doses may also be necessary.

14. *Ocimum sanctum* Linn. Local Name - Tulsi, Family - Labiatae.

Four to six flowering tops with a few young leaves are eaten in the morning for 4-5 days to normalize the menstruation period as well as to conrol menorrhagia.

15. *Thespsia lamphus* Dalz. & Gibs. Local Name- Bankapas, Family - Malvaceae.

Used in gonorrhoea, syphilis, and Urinary problems.

16. *Tinospora cordifolia* (Willd.) Miers, Local name - Guloncho, Family- Menispermaece.

Leaf juice in gonorrhoea.

17. *Rumex maritimus* Linn. Local name - Ban Palak, Family - Polygonaceae. The root which crosses the brook or any natural water courses is crushed and made into a paste to extract the juice which is prescribed to infertile women to induce fertility. A teaspoon of the juice is orally administered before bed time for 4 weeks. The medication, however, is started from the 4th day of menstruation. Such roots are also collected for preservation.

The present study was chiefly confined with the collection of informations about the different ethno-medico-plants found in the pat-forests of Chotanagpur plateau being used by the indigenou tribal medicinal practioners for the treatment of various gynaecological disorders commonly found among the tribal women of Chotanagpur. Further scientific identification and documentation of those medicinal plants has been done and preserved as herbarium specimen in the Ethno-botanical laboratory, Post Graduate Department of Botany, Ranchi University, Ranchi.

It has been observed that the tribal

woman suffer from many gynaecological disorders as mentioned earlier and take indigenous herbal medicines from the local medicine practioners. Such pharmaceutical knowledge have inherited from their predecessors and preserved from generation to generation with practice only.

It has also been observed that due to continuous indiscriminate cutting of forest wealth, deforestation and desertification, industrialization and indiscriminate exploitation of natural resources and unplanned human interference many ethnobotanical and ethno-medicinal plants are becoming either endangered or are being eradicated from the area or are at the verge of extinction. If this trend continues unabated, there is every possibility that the valuable plant resources (ethno-botanical as well as ethno-medicinal) will be lost for ever. It is therefore, an urgent need to prepare the list of ethnobotanically important plant wealth in general and ethno-medicinal plants in particular of Chotanagpur plateau to salvage the traditional tribal knowledge about their uses before it is too late and also to find out ways and means to conserve these plant resources.

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