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Folk herbal medicine used for male sterility in Ranchi district of Jharkhand

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ABSTRACT

Ranchi is located in Jharkhand state. The total area is 7574.17 sq.km. Jharkhand state has been the reservoir of enormous natural resources including vegetational wealth. The population of the area has distinct traditions and taboos in their lives. Local people have good ideas about such plant which prevent many diseases – sterility, diabetes, jaundice, dysentery etc. The medical ethnobotany deals with the nature and application of plants used in traditional medical system and it involves the identification of plants used in traditional remedies. Ethnobotanical inventories are made by conducting interviews with the tribal people, formal surveys in the field, collection and identification of plant specimen used. The information on medicinal plants was gathered from experienced tribal vaidyas which are being used as preventive against male sterility.

Key words : Ethnomedicine, Male sterility, Tradition

INTRODUCTION

Ranchi is located in Jharkhand state. The latitude and longitude of the district can be mentioned as 23.23N and 85.28E, respectively. The total area is 7574.17 sq. km, whereas the height of this district from sea level is 2140 ft. There are mainly three climates namely summer, winter and rainy seasons.

The main tribes are Oraon and Munda. The important crops are rice, pulses and oil seeds. The languages which are normally spoken are Hindi, Nagpuri, Oraon, Mundari and kurmalī etc. Some important rivers that flow through the district are mainly Subarnarekha, South Koel and Sankh. In various tribal families the medicine system is coming down from generation to generation, by words or by practice. The knowledge about uses of herb is now confined to a few tribal families in remote areas of the region. Some plants are also used in the treatment of male sterility.

Male sterility means inability on the part of the male to produce any offspring. Male sterility causes due to defective seminal discharge that means no sperms or undeveloped sperms or a few sperms, non motile sperm. This may be due to some previous or present disease of the testis like mumps, tuberculosis, gonorrhoea, syphilis etc. Systematic diseases like diabetes, endocrine disorders, heavy smoking, alcoholism, nervous tension, psychological

problems etc. are responsible for male sterility. Aging above 45 can also causes this disorder.

People dwelling this area are having a very long and intimate association with the indigenous flora for their basic needs and cultural activities. They are dependent upon the local flora for the treatment of diseases and relief from the suffering.

MATERIALS AND METHODS

During the course of studies in 2008-09 field survey were conducted by contacting village Vaidyas and knowledgeable persons. They were interviewed to record the information about different plants used for treatment of male sterility. Plants specimen were collected with the help of tribal vaidyas. The tribals having a long standing practice in ethnomedicine were interviewed to obtain the information on the use of medicinal plants. Questionnaire was prepared which containing the information about the tribal vaidya.

The plants were correctly identified with the help of book of Botany of Bihar and Orissa Vol. I and II and Vol III. Scientific techniques were used to prepare herbarium specimens which were maintained in the university department of Botany. Photographs of some plants were taken during field tours. Generally the tribal are conservative in nature. So they do not want to leak their

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Table 1 : Ethnobotanical account of medicinal plants

| Sr. No. | Name | Family | Local name | Used | Use |
|---------|--------------------------------------|-----------------|---|---------|---|
| 1. | <i>Withania somnifera</i> Linn. | Solanaceae | H-Aswagandha, | Root | Powder of the root is taken with milk daily, evening and morning. |
| 2. | <i>Ficus glomerata</i> Roxb. | Moraceae | H- Gular, Dumar M,S,K – Loa N – Dumair | Fruit | Powder is taken with milk in the morning and evening. |
| 3. | <i>Ocimum sanctum</i> Linn. | Lamiaceae | H – Tulsi M – Tunrusi | Seed | Powder of kali musli and tulsi seed is taken with milk. |
| 4. | <i>Tamarindus indica</i> Linn. | Caesalpiniaceae | H – Amlı, Imli, Ambica N – Tetair M, S – Jojo K – Jajo | Seed | Seed is kept in the water whole night then it is crushed and mixed with sugar and form small balls. It is taken evening and morning or simply powder seed is taken. |
| 5. | <i>Authocephalus cadamata</i> Linn. | Rubiaceae | H-Kadamb,kadamba | Fruit | Powder of fruit is taken daily, evening and morning |
| 6. | <i>Curcuma aromatica</i> Linn. | Zingiberaceae | H- Jangli Halıı M- Hatu bunu sasang, Bir sasang | Rhizome | Powder is taken with water twice, evening and morning. |
| 7. | <i>Phaseolus radiatus</i> Linn. | Fabaceae | H- Urad O-Masi | Seed | Seed is kept in the water and taken in the empty stomach. . |
| 8. | <i>Ficus benghalensis</i> Linn. | Moraceae | H – Bat, Bar M – Bari S- Bart Ho – Bai N – Bar | Leaf | The leaf is taken which is found on the top position, approx 3 months it is taken |
| 9. | <i>Phaseolus mungo</i> Linn. | Fabaceae | H – Moong K – Ramra M- Jugihore Jurhurrambra N – Urid | Seed | Dal is taken with rice daily approx six month. |
| 10. | <i>Bombax ceiba</i> Linn. | Bombacaceae | H – Semal K,M Edel daru S-Edledare N – Simbair Kh – Simri | Root | The powder of the root is taken twice daily. |
| 11. | <i>Asparagus racemosus</i> willd. | Liliaceae | H – Satawar M.K. – Huring atkir S- Kedarnanri N, Kh – Mahadeojat | Root | The powder of the Root is taken twice daily |
| 12. | <i>Tinospora cordifolia</i> Linn. | Menispermaceae | H- Gulancha, Gaduchi, Guruch, Giloe M- Harjora S – Hanru awar | Stem | The pulp of stem is taken in small amount with the leaf of pan in the morning about 30 days. |
| 13. | <i>Hibiscus abelmoschus</i> Linn. | Malvaceae | H – Muskdana M- Bir sanga, Gusum Sanga N – Bherwa Kanda | Root | The power of root is taken with misri and also one cup cold milk is taken about 30 days. |
| 14. | <i>Vitis adnata</i> Wall. | Vitaceae | S – Bodlarnari K- Bambor S- Bodlarmanri M – Togonanri | Rhizome | The powder of root is taken with misri and also one cup cold milk is taken about 30 days. |
| 15. | <i>Argyreia speciosa</i> Sweet. | Convolvulaceae | H – Samudra Shokh M – Marang harlu ara | Root | The powder of root is taken with misri and also one cup cold milk is taken about 30 days. |

precious knowledge. The data were gathered on ethnomedicinal uses of various plant species

RESULTS AND DISCUSSION

Various parts of the plant species enumerated in the present paper are effectively used by the tribals of Jharkhand.

In tribal families of Ranchi, the medicinal system is passed on from generation to generation. The investigated plants are highly medicinal. The frequent use is effective in male sterility.

Earlier work in this field have been done in different areas of Jharkhand (Hembrom, 1994). Meghalaya is also tribal dominated state, several folk herbal remedies were studied by many earlier workers (Dolui, 2004). Some work has also been done in sexual diseases in Rajasthan (Jain *et al.*, 2004)

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