

Underground Parts of Some Medicinally Important Plant Species Useful for Cure of Gynaecological Disorders

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Abstract: Rural people of Indian states use several herbal drugs for treatment of several types of gynaecological disorders. A survey was conducted to gather the knowledge of the rural talk of Saran district with respect of the ethnobotanical importance of locally available medicinal plants. It was observed during present research work that rural women of the study area uses rhizome of four plant species, tuber of one plant species and root bark of two plant species for cure of at least nine types of gynaecological disorders.

Keywords: Underground parts, Plant species, Lure, gynaecological disorders

1. Introduction

In the beginning of 21st century the phytomedicines achieved the reliability to rescue the patients from several fatal diseases. Herbal medicines have many advantages such as no side effects, better patient's tolerance and relatively less expensive. Plant derived phytomedicines have shown great promise in the treatment of infectious diseases as well as Gynaecological disorders. Anti-infective agents derived from medicinal plants have important contributions for the treatment of different types of genital infections. In India according to Satyawati et al. (1987) about 95% of the Indian population is dependent on the traditional system of medicine. Specifically women of the rural parts of eastern India have a good deal of faith on local plants used for treatment of gynaecological problems.

Traditional medicine practices and ethno botanical information play an important role in the scientific research, by the proper evaluation of literature and fieldwork data. Though the area of Saran district is rich with regard to naturally growing medicinal plants. The rural-folk of this district is familiar with their uses.

Verma (1955) described about miraculous properties of Indian herbs. Ambasta (1992) described about many medicinal plants growing in India. Medicinal plants have therapeutic potential due to presence of specific types of tannins, steroids, resins, alkaloids, glycosides, gums, volatile oils etc. as secondary metabolites. Morya et al. (2018) surveyed indigenous knowledge of the people of Siwan district, Bihar about medicinal plants. They revealed the local biodiversity of medicinal plant growing in territory of Siwan district. They observed 30 species of medicinal plants during their study. These plants are commonly used as remedies for ailments by local people. They obtained these plant species from wild habitats.

Haines (1925) in his book described medicinal plants of Bihar. Bhattacharya and Sarkar (1998) described about medicinal plants growing in territory of the West Champaran district of Bihar. Singh (2018) explored the

ethno-botanical significant biodiversity of Saran district, Bihar. He observed that local people of Saran district are basically dependent on medicinal plants for cure of a lot of diseases.

2. Materials and Method

Data was collected on the specific parts of the plants used, such as root, rhizome, tuber and bark and the specific gynaecological disorder for which they were used.

The information on medicinal uses of the indigenous plants was described after gathering information from aged rural folk, traditional herbal medicine practitioners and local herbal drug sellers. These people transfer their knowledge to their next generation. Local elder and experienced rural people were interviewed and cross-interviewed by arranging meetings with them. Local "Vaidyas" and other people involved in prescribing herbal drugs. Who primarily deal with treatment of human diseases including gynaecological disorder were thoroughly interviewed and cross-interviewed regarding doses and administration of herbal drugs for specific gynaecological disorder. The medicinal plants specimens were collected and identified with the help of authentic specimens, books, journals and floras in the laboratory.

During field visits indigenous population actively participated and described the methodologies related to use of medicinal plants for treatment of gynaecological disorders. The collection of indigenous knowledge about these plants was based on direct interactions with respondents in the study area. The information were collected through interviews, meetings and group discussions with participants. Information regarding mode of administration and dosages with regard to each specimen was collected to widen the scope of our study. All acquired relevant information were presented in a chronological manner for further use by concerned persons and students as well as research scholars of Ethnobotany.

3.Result and Discussion

Women talk of Saran district uses rhizome, tuber and root bark of four, one and two species of plants for treatment of various gynaecological disorders (Table-1 and 2).

Tripathi et al. (2010) also reported that rural womenfolk of Madhya Pradesh usage paste of fleshy root of *Bombax ceiba* for regulation of irregular menstruation, decoction of whole plant of *Boerhaavia diffusa* to treat leucorrhoea, powder of the dried flower of *Butea monosperna* for

treatment of leucorrhoea, dysmenorrhoea and menstrual disorders, leaf juice of *Catharanthus roseus* to treat leucorrhoea and menorrhagia, leaf decoction of *Dalbergia sissoo* to treat menorrhagia and gonorrhoea, paste of the bark of *Ficus benghalensis* to treat leucorrhoea and menorrhagia, paste of the bark of *Ficus religiosa* to facilitate abortion upto 3-4 months of pregnancy, paste of stem bark of *Hibiscus rosa sinensis* for abortion and seed powder of *Mangifera indica* to treat leucorrhoea and menorrhagia.

Table 1: Rhizome/Tuber used for treatment of gynaecological disorders

Sl. No.	Local Name of Plant	Botanical Name	Family	Gynaecological Disorder	Method of Application
1.	Adrakh	<i>Zinziber officinale</i>	Zingiberaceae	Leucorrhoea, Dysmenorrhoea	One teaspoon juice of rhizome taken once a day orally for 5 days
2.	Haldi	<i>Curcuma longa</i>	Zingiberaceae	Syphilis Post-partum pain	Half-teaspoon juice of rhizome taken two times a day orally for four weeks.
3.	Kamal	<i>Nelumbo nucifera</i>	Nymphaeaceae	Leucorrhoea, Infertility	15ml decoction of rhizome of white flowered variety taken once a day in empty stomach.
4.	Motha	<i>Cyperus rotundus</i>	Cyperaceae	Galactagogue	Orally for two weeks paste of rhizome applied on the breasts.
5.	Back (Sweet flag)	<i>Acorus calamus</i>	Acoraceae	Menorrhagia, Metrorrhagia, Labour pain	Paste of tuber (one teaspoon) with water taken once a day orally for 10 days.

Table 2: Root bark used for treatment of gynaecological Disorders

Sl. No.	Local Name of Plant	Botanical Name	Family	Gynaecological Disorder	Method of Application
1.	Imli	<i>Tamarindus indica</i>	Caesalpinaceae	Amenorrhoea	Root bark is rubbed with cow milk and one tea spoon of this mixture taken orally once a day for 10 days.
2.	Panch Mukhi	<i>Adhatoda vasica</i>	Acanthaceae	Leucorrhoea	Two table spoon of the bark juice with honey taken orally once a day for two weeks.

Ayhan and Akalin (2021) Jasmine sp. during war of Turkey uses *Mentha* sp. and Jasmine sp. during pregnancy. They also use *Zingiber officinale*, *Centella asiatic* and *Asparagus* during pregnancy. Women folk of Saran district also usage paste of *Asparagus racemosus* root with cow milk for a week to treat Leucorrhoea, Menorrhagia, labour pain and as galactagogue.

Panda et al. (2018) reported that people residing in rural areas of Bhadrak district of odisha most frequently uses medicinal plants for cure of gynaecological disorders.

It was also reported by them that rural women uses bark of *Saraca asoca* for menstrual and uterine disorders; bark of *Moringa oleifera* to induce abortion, root of *Boerhavia diffusa* for treatment of leucorrhoea, and root of *Asparagus racemosus* for quick delivery.

Siddiqui et al. (1998) listed medicinal plants used for termination of pregnancy. Das and Satapathy (2016) surveyed about use of medicinal plants by Munda women of Jaipur district of Odisha for cure of gynaecological problems. Adnan et al. (2015) conducted a survey related to ethnogynaecological importance of medicinal plants

among Pashtun's tribal society and listed several plant species. Shinwari et al. (2017) also used by rural communities of Northern Pakistan. Women of saran district usage flowers of *Sesbania grandifolia*, *Curcuma longa* and *Syzygium cumini* to treat Dysmenorrhoea, syphilis and post partum pain respectively (Table-1).

Mahmood et al. (2012) stated that 80 percent of the population of developing countries still depends on medicinal plants for primary health care.

4.Conclusion

The main objective of this study was to establish a regional profile of the indigenous knowledge on the treatment of different gynaecological ailments by people of the rural areas of Saran district, Bihar (India). This study was also aimed to evaluate the ethno-gynaecological data to provide a baseline data for pharmaceutical industries to conduct research related to most valued phyto-constituents present in these medicinal plants. Rural people of the study area have positive attitude towards herbal medicines for the treatment of gynaecological disorders.

Gynaecological disorders are common among women of the Saran district. These disorders are prone in rural areas due to un-hygienic conditions and lack of proper knowledge about reproductive health among the women living in rural areas. These women use locally growing medicinal plants to cure gynaecological disorders. Thus proper documentation of this indigenous knowledge is needed.

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