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Ethnobotanical Study of Important Medicinal Plants in Barwani District (M.P.)

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Abstract: Our aim of the study is to compile plants used for the treatment of Oral health occurrence in study area. Fieldwork was undertaken in a period of almost one year in Barwani district. Open-ended and semi structured questionnaire was used to interview a total of 50 people including traditional healers and local people. A total of 16 species of used for Oral health which might be dispensed in 8 genera belonging to 6 households maximum of the species have been belonging to Leguminosae own family. Chances of various growth forms are Herbs are 29% shrubs are 26% and tree are 45% discovered inside the study region. Leguminosae are maximum dominant circle of relatives. 2 species bark, 1 species branch node, 1 species flower, 3 species fruit, 2 species leaf, 5 species root, 6 species seeds, and 11 species stems are used for oral care. Stem were the most cited plant part used against oral care. Most of the said species have been timber in nature and stem by and large used externally. Our survey represents the preliminary statistics of certain medicinal plants having neutralizing results in opposition to oral care though in addition phytochemical investigation, validation, and medical trials ought to be carried out before the usage of these plants.

Keywords: Medicinal Plants, Barwani, Oral health, Ethnobotany,

1. Introduction

Today according to the World Health Organization (WHO), as many as 80% of the world's people depend on traditional medicine for their primary healthcare needs. There are considerable economic benefits in the development of indigenous medicines and in the use of medicinal plants for the treatment of various diseases. Due to less communication means, poverty, ignorance and unavailability of modern health facilities, most people especially rural people are still forced to practice traditional medicines for their common day ailments.[1] Most of these people form the poorest link in the trade of medicinal plants. A vast knowledge of how to use the plants against different illnesses may be expected to have accumulated in areas where the use of plants is still of great importance. (Hepatitis-Central.com, 2005). Some recently developed drugs against viral hepatitis are Lamivudine (3TC), Alfa-interferon and Ribavirin but their use is limited.[2]

The preliminary aspect of Ethnobotanical research is to study the tribal indigenous knowledge of plants. All native cultures of the world have used medicinal plants as source of medicine. WHO accords that herbal medicines serve the health needs of about 80% of the world's population, especially those residing in the rural areas of developing countries. Ethnobotanical studies enable the development of contemporary drugs and treatments through proper documentation of the medicinal use of plants as well as for plant conservation.[3] With a compelling tradition of more than 5000 years of plant-based medicines, India is a rich repository of traditional knowledge on medicinal plants. The ancient medicine systems of India like Ayurveda, Siddha, Sowa Rigpa (Amchi) and Unani are codified and with most cogent evidences showing their efficacy. Reports indicate that Ayurveda, Siddha and Unani systems use more than twelve thousand, nine hundred and seven hundred species of plants; respectively for the traditional medicinal preparations. The folk medicine in India have also been playing a key role, mainly in remote and rural areas and it is estimated that about 8000 plants species are used in folk medicines. Nearly 25,000 effective plant-based formulations are mused by local folk medicine practitioners in India.[4] These folk medicines are non-

codified. Tribal population and forest dwellers form a considerable part of the population of the region of Central India. Madhya Pradesh is home to a large population of tribal communities belonging to various ethnic groups.

Ethnobotany records the history and current state of human kind, even while foretelling the future. As a discipline ethnobotany gives us a profound understanding and appreciation of the richness and intimacy of relationships between humans and nature. Indigenous people throughout the world possess knowledge of their surrounding flora and fauna.[5] Tribal people are the ecosystem people who live in harmony with the nature and maintain a close link between man and environment. Plants are the basis of life on earth and are central to people's livelihoods. The life, tradition, culture of tribals have remained almost static since last several hundreds of years. The knowledge accumulated by them through a long series of observations from one generation to another is transmitted oral communication for power possessed by medicinal plants in cure of various diseases and ailments The need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources receives more and more recognition. Moreover, an increased emphasis is being placed on possible economic benefits especially of the medicinal use of tropical forest products instead of pure timber harvesting [6].

In the past, ethno-botanical research was predominately a survey of the plants used by villagers but modern ethnobotany concerned with documentation, description and explanation of complex relationships between cultures and (uses of) plants, focusing primarily on how plants used, managed and perceived across human societies (e.g as food; as medicines; in divination; in cosmetics; in dying; as textiles; in construction; as tools; as currency; as clothing; in literature; in rituals and in social life.[7]

The fundamental structure of ethnobotanical research is to examine the dynamic relationship between human populations, cultural values and plants recognizing that plants permeate materially and metaphorically many aspects of culture and that nature is by no means passive to human action but interacted with each other. Evidence shows that people who have lived in one locality for a long time have rich sets of knowledge about and cognition of plants and local ecology.[8]

Barwani district (22O10' N Latitude; 74" 55' E Longitude and 165.50m above msl) is one of the recently formed tribal districts of Madhya Pradesh. Formerly, it was a part of West Nimar district of Madhya Pradesh. The total area of the district is 3,69,639 ha. It is the home of many tribals. Nearly 30% of the population is tribal or forest dwellers. The main tribes of the district are Barela, Tadvi and Bhilala.[9] The fascinating story of the tribal people, their practices, their tradition and the dynamics of their society have attracted sensitive minds like Verrir Elwin who was a great friend of Nehru and a past General President of Indian Science Congress Association. According to him the tribal people must have developed, over the ages, ways to cure various diseases and combat natural disasters which need to be cashed upon so that others can be profited by them.[10]

2. Materials and Methods

Our study turned into performed in Barwani districts in Culgiri Hill Tracts in Madhya Pradesh, India that's positioned in Western Madhya Pradesh and bordered by way of Madhya Pradesh and Maharashtra state (21.996◦ N and seventy-four.862◦ E) with population of Barwani is 1385881 (census 2011) having number of smaller agencies of indigenous people have residing (determine 3). Narmada River paperwork its northern boundary and the Satpura tiers lie to its south component. The district is bordered via Maharashtra nation to the south, Gujarat to the west, Dhar district to the north and Khargone district to the east and overall region of the district is 5427 km2. Plants type of the examiner location falls beneath tropical evergreen and semi evergreen forests. Climate and soil of the region is very fruitful for cotton producer like chili, cotton has end up the lifeline of the people of Barwani district chili saplings from Rajpur are famous within the entire Barwani and have been Nimar place and these people usually depend upon the sources coming from the hilly regions.

Research of traditional medicinal flora have been accomplished in Barwani all through 2022-2023. Amassing the plant species and information in exclusive seasons. All habitats of the observe area surveyed carefully. Plant series completed with the aid of standard approach.[11] Plant specimens have been preserved by means of dipping the entire specimens in saturated solution of Mercuric chloride and alcohol. Dry and preserved vegetation set up on herbarium sheets by means of adhesive glue and fevicols. Identification of plant life completed with the assist of flora and other taxonomic literature.

3. Results and Discussion

The Ethnomedicinal plants are part of Indian flora. Those are categorized into climbers, Herb, Shrub, and tree. Humans are at once or circuitously used it as medicinal makes use of. Thus, the humans depend upon these taxa for several functions e.g. medicinal drug, cloths, meals, fodder and so on. But, no strive has been made as such to have a look at of traditional medicinal flora of Barwani. Initial have a look at of conventional medicinal plants suggests wealthy plant range in admire to 17 families and 24 genera and 30 species along with Climber, Herb, Shrub, and trees (Table-1) are recorded in the have a look at area. The 20 study species are the most not unusual used inside the exceptional category are listed in table-2. 20 Ethnomedicinal flowers used for exceptional classes out of them 5 species are utilized in wounds, 2 species are utilized in Ulcers, 6 species are utilized in Tonic, 2 species are used in Headache, 4 species are used in Fever, 2 species are utilized in Cough, 1 species are used in Antioxidant, Antidiabetic, Antifertility, allergies, coughs, Diarrhea & dysentery, Inflammations, pores and skin care, and utilized in stomach ache (Table-2). Leguminosae with 7 species is on pinnacle function in the take a look at. Taxonomic treatments comply with Bentham and Hooker (1862-1883) and the Angiosperm Phylogeny group.

TABLE 1: Number of Texa used for Different Categories

Sn	Ethnomedicinal plants used for different category	No. of texa
1.	Antidiabetic, Antifertility, Cough, Headache, Ulcers,	2
2.	Antioxidant& coughs	1
3.	Asthma	3
4.	Diarrhea & dysentery	7
5.	Fever	16
6.	Skin care	12
7.	Stomach ache	6
8.	Tonic	12
9.	Wounds	10
10.	Inflammations	8

TABLE 2: Ethnomedicinal Plant of the Study Area

Sn	*Families*	*Botanical name*	*Habitat*	Ethnomedicinal uses
1.	*Annonaceae*	*Annona reticulata L.*	Shrub	*Inflammations , wounds*
2.	*Menispermaceae*	*Tinospora sinensis (Lour.) Merr.*	Climber	*Fever , wounds*
3.	*Papaveraceae*	*Argemone mexicana L.*	Herb	*Skin care*
4.	*Polygalaceae*	*Polygala arvensis Willd.*	Herb	*Fever*
5.	*Dipterocarpaceae*	*Grewia flavescens Juss.*	Shrub	*Wounds*
6.	*Malpighiaceae*	*Hiptage benghalensis (L.) Kurz*	Herb	*Wound , Skin care,*
7.	*Oxalidaceae*	*Oxalis corniculata L.*	Herb	*Fever , Inflammations*
8.	*Rutaceae*	*Aegle marmelos (L.) Cor.*	Trees	*Wound , Antifertility,*
9.	*Simaroubaceae*	*Ailanthus excelsa Roxb.*	Trees	*Antifertility*
10.	*Meliaceae*	*Azadirachta indica Juss.*	Trees	*Fevers , Skin care*
11.	*Rhamnaceae*	*Ziziphus jujuba Mill*	Trees	*Stomachache, Liver tonic*
12.	*Sapindaceae*	*Cardiospermum halicacabum L.*	Climber	*Diarrhea , Skin care,*
13.	*Anacardiaceae*	*Mangifera indica L.*	Trees	*Tonic, Diarrhea & dysentery*
14.	*Leguminosae*	*Abrus precatorius L.*	Climber	*Fever*
15.	*Leguminosae*	*Aeschynomene aspera L.*	Herb	*Wounds , stomachache*
16.	*Leguminosae*	*Alysicarpus bupleurifolius (L.) DC.*	Herb	*Fever, Stomach ache,*
17.	*Leguminosae*	*Alysicarpus tetragonolobus Edgew.*	Herb	*Fever, Skin care*
18.	*Leguminosae*	*Butea monosperma (Lam.) Taub.*	Trees	*Skin care*
19.	*Leguminosae*	*Clitoria ternatea L.*	Climber	*Tonic*
20.	*Leguminosae*	*Indigofera tinctoria L.*	Herb	*Fever, wounds*

4. Conclusion

In the a few medicinal plants of district Barwani Madhya Pradesh, India a complete of twenty species, forty-nine genera and 30 households are recorded from the vicinity. In this topic it's far the pioneer research article. To check the scientific validity of the herbal practice or capsules, scientific studies are required to be performed. This will establish therapeutic homes of those preparations for secure and longer use. The indigenous knowledge and makes use of herbal medicinal plants of a selected area must be analyzed to develop suitable management measures (ex situ and in situ conservation) for excellent usage of natural aid.

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