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Investigation of Traditional Medicinal Flora of Sendhwa (M.P.), India

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Abstract: Humans are rely on this texa for several purposes e.g. medicine, cloths, food, fodder and many others. Initial have a look at of conventional medicinal plant life shows wealthy plant variety in admire to 34 families and 49 genera and 50 species alongside 6 Climber, 22 Herb, 7 Shrub, and 15 trees are recorded. The 50 Ethnomedicinal plants species are the most not unusual used within the exclusive categories out of them 16 species used in Fever, followed by Tonic (12), Pores and skin care (12), Wounds(10), Ulcers & Headache (04), Cough & Antioxidant (03), Antidiabetic, & Antifertility (04), Asthma (03), Coughs (01), Diarrhea & dysentery (07), Inflammations (08), and Stomach ache (06). Leguminosae with 17 species is on top function within the have a look at area. Taxonomic remedies comply with Bentham and Hooker and the APG Classification.

Keywords: Ethno botany, Satpura hills, Malwa plateau, Narmada valley and Sendhwa Fort.

I. INTRODUCTION

Ethno botany is the study of the interactions between plants and those through the years and area. Therefore, vegetation is critical to the functioning of all social societies and to the operation of all ecosystems. Owing to the top notch charge of artificial drug treatments and inaccessibility of medicinal health care offerings in lots of urban areas, the inhabitants are confident to rely upon medicinal plant life. Between 35,000 and 70,000 plant species are charity in traditional medicines to treat exceptional sicknesses (Lewington, 1990).about 70-80% of the arena inhabitants nevertheless use conventional medication. Herbal remedy is presently experiencing a revival within the global. In the early instances, distinct plant life- whether or not herbs, shrubs were used by humans for diverse purposes. Looking for food and the approaches to cope up correctly with human suffering, primitive man started out to differentiate those flowers appropriate for nutritional reason from others with precise pharmacological motion (Bora, et.al. 2012). Traditional remedy is used during the arena as it is dependent on domestically to be had vegetation, which can be easily on hand, and capitalizes on traditional wisdom-repository of expertise, simple to use and low cost. These clinical systems are closely depending on diverse plant species and plant based totally products (Bekele & Reddy 2015). The plant diversity at any website is stimulated through species distribution and abundance styles (Reddy et al. 2014). The richness of flowering flowers makes India one of the mega variety countries inside the world with 4 biodiversity hotspots and 3 mega facilities of endemism. India ranked seventh among 17 mega range international locations of the sector and extra than 17,000 species of higher flowers are pronounced to India (nameless 1993, Shiva 1996). Biodiversity continues the ecological tactics in a balanced state, that is essential for human survival (Kaur & Sharma 2014). Within the present paintings is designed with an objective to examine conventional medicinal plants of Sendhwa (M.P.), India.

Sendhwa is the headquarters for Sendhwa tehsil, and, the largest metropolis in the district. The name Sendhwa was derived after the rulers Sendhwa at period of holkars (Sisodiya & Sainkhediya 2018) Geographically Sendhwa is located 16 km from Maharashtra & Madhya Pradesh Border. Sendhwa lies among parallel of latitude 21°41′05″N and between parallel of longitudes 75°05′43″E. The vicinity is bounded by means of the Rajpur tehsil to the north, Warla tehsil in south, Niwali to west, and Khargone district to east .The eastern part of the district is covered by means of Satpura hill degrees and northerly part of Malwa plateau, and Narmada valley. Sendhwa fort becomes built in 10th Century. It's miles situated in center of metropolis. It's far classical example of 4 directional Gate with Temple at primary access gate. The land surface attains a maximum altitude of 409 m (1,342 feet) above imply sea degree. Demographically Sendhwa had a population of 56,485 (census 2011). Sendhwa has a median literacy rate of 63%.

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II. METHODOLOGY

Research of traditional medicinal flora have been accomplished in Sendhwa all through 2020-2021. 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 (Jain and Rao, 1977). 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 (Verma et.al., 1993; Mudgal et al,.1997; Khanna et al., 2001; Oommachan, 1977; Shah, 1978; Duthi, 1960; Gamble, 1915; Hains,1921-1924; cook, 1903; Hooker, 1872-1897; Naik, 1998) and other taxonomic literature.

III. REVIEW OF LITERATURE

Ethnobotanical observe is an essential prerequisite for a whole lot important studies in tropical network ecology. For the conservation and sustainable management of any wooded area; it calls for an exquisite terrific know-how of its biodiversity (Sainkhediya 2016). The richness of flowering flowers makes India one of the mega variety international locations inside the international with 4 biodiversity hotspots and 3 mega facilities of endemism. India ranked 7th among 17 mega variety worldwide locations of the world and greater than 17,000 species of better flowers are said to India (anonymous 1993). Ethnobotanical understanding is critical for human survival due to lack of medicinal treatment are not to be had in far off areas in this place so humans have rely on conventional natural medicinal drug.

In special part of India research on Ethnomedicinal flora undertaken by means of some of employees (Jain, 1963, Jain and Tarafdar, 1970; Bhatnagar et al., 1973; Sahu, 1983, Mishra and Sahu, 1984; Saxena, 1986; Lal, 1993; Oommachan et al., 1990; Pandey et al., 1991; Jain, 1992; Bhalla et al., 1992, Khan et al., 1994; Maheshwari, 1996; Khan and Singh, 1996; Bajpai and Mitra, 1997; Kumar and Jain, 1998; Dubey et al., 2001).

keeping this in mind this examine is completed to explore Ethnobotanical information in Sendhwa dist. Barwani, Madhya Pradesh, India due to the fact there can be no work is performed in this region. A small portray is finished on Sendhwa region thru Sainkhediya and Ray 2014, Sisodiya & Sainkhediya 2018, Sainkhediya & Patil 2019, Sainkhediya 2019, Sainkhediya 2021, Ahirwar & Sainkhediya 2021, Sainkhediya et. al. 2021, Sainkhediya & Trivedi 2021, Sainkhediya 2022; Sainkhediya & Rawat 2022; Sainkhediya & Aske 2022, Sainkhediya & Muwel 2022; Sainkhediya & Ahirwar 2022, Mishra et.al.2022,Chouhan 2022,Trivedi & Sainkhediya 2022, Sainkhediya et.al.2022 and so forth.

IV. 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 this texa 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 Sendhwa. Initial have a look at of conventional medicinal plants suggests wealthy plant range in admire to 34 families and 49 genera and 50 species along with 6 Climber, 22 Herb, 7 Shrub, and 15 trees (table-2 & Fig.-1) are recorded in the have a look at area. The 50 study species are the most not unusual used inside the exceptional category are listed in table-2. 50 Ethnomedicinal flowers used for exceptional classes out of them 10 species are utilized in wounds,2 species are utilized in Cough, 1 species are used in Antioxidant,2 species are used in Antidiabetic,2 species are utilized in Antifertility,3 species are used in allergies,1 species are used in coughs,7 species are used in Diarrhea & dysentery,8 species are used in Inflammations ,12 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.

V. CONCLUSION

Human interplay with the flowering plant life is an essential biological interest. As we recognize all residing animals even person depend upon angiosperms for substance. the world 20,000 years ago turned into probable a whole lot more familiar with the nearby flowers, in phrases of species recognition than most of the people today because a nearby angiosperms flowers offer a mosaic of valuable assets as food, medicine, and many others. In the a few medicinal plants

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of Sendhwa district Barwani Madhya Pradesh, India a complete of fifty species, forty nine genera and 34 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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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

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
21.	Leguminosae	Pongamia pinnata (L.) Pierre	Trees	Skin care, ulcer
22.	Leguminosae	Rhynchosia minima (L.) DC.	Herb	Inflammations
<i>23</i> .	Leguminosae	Tephrosia purpurea (L.) Pers.	Herb	Fever, wounds
24.	Leguminosae	Bauhinia purpurea L.	Trees	Antidiabetic, inflammation,
25.	Leguminosae	Caesalpinia bonduc (L.) Roxb.	Shrub	Fever, inflammation,
26.	Leguminosae	Cassia fistula L.	Trees	Tonic, Asthma
27.	Leguminosae	Senna alata (L.) Roxb.	Herb	Fever, Skin care
28.	Leguminosae	Tamarindus indica L.	Trees	Wounds, stomachache
<i>29</i> .	Leguminosae	Acacia nilotica (L.) Delile	Trees	Wounds, stomachache
30.	Leguminosae	Pithecellobium dulce (Roxb.) Benth.	Trees	Stomachache, Diarrhea & dysentery
31.	Myrtaceae	Syzygium cumini (L.) Skeels	Trees	Asthma, Diarrhea & dysentery
32.	Cucurbitaceae	Citrullus colocynthis (L.) Schrad.	Climber	stomachache

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33.	Compositae	Eclipta prostrata (L.) L.	Herb	Fever, tonic(hair)
34.	Compositae	Tridax procumbens (L.) L.	Herb	Wounds, Diarrhea & dysentery
35.	Sapotaceae	Madhuca longifolia (Roxb.) A.Chev.	Trees	Tonic
36.	Oleaceae	Nyctanthes arbor-tristis L.	Shrub	Tonic, Skin care
37.	Apocynaceae	Calotropis gigantea (L.) Dryand.	Shrub	Diarrhea, Fever;
<i>38</i> .	Gentianaceae	Enicostema axillare (Poir. ex Lam.) Raynal	Herb	Fever
<i>39</i> .	Convolvulaceae	Argyreia bella Raizada	Climber	Antioxidant, Skin care
40.	Solanaceae	Physalis minima L.	Herb	Anti-diabetic, inflammation,
41.	Acanthaceae	Barleria cristata L.	Shrub	Fever
42.	Lamiaceae	Ocimum basilicum L.	Herb	Headache, coughs,
43.	Nyctaginaceae	Boerhavia diffusa L.	Herb	Cough , Skin care,
44.	Amaranthaceae	Achyranthes aspera L.	Herb	Headache, Tonic
45.	Euphorbiaceae	Jatropha gossypiifolia L.	Shrub	Wounds, Skin care
46.	Phyllanthaceae	Phyllanthus emblica L.	Trees	Tonic
47.	Hypoxidaceae	Curculigo orchioides Gaertn.	Herb	Tonic, Skin care,
48.	Commelinaceae	Commelina benghalensis L.	Herb	Inflammations
<i>49</i> .	Cyperaceae	Cyperus rotundus L.	Herb	Fever, inflammation
50.	Poaceae	Cynodon dactylon (L.) Pers.	Herb	Cough, diarrhea, dysentery,









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BIOGRAPHY



Prof. Dr. Jeetendra Sainkhediya is a outstanding Professor of taxonomy at branch of botany in government. P. G. college Sendhwa district Barwani, Madhya Pradesh, India, for the reason that August 2014. He has finished M.Sc. (Botany), in 2009 with specialization in Taxonomy from Holkar science college, Indore and M.Phil. (Botany) from Vikram university, Ujjain (M.P.) inside the year 2010. He has been awarded her Ph.D. degree from Botany in "Flora of Harda district of Madhya Pradesh, India" in DAVV, Indore, Madhya Pradesh. He has successfully finished her Minor research project of three years during Ph.D. studies work funded by M.P. state Biodiversity, Bhopal.

Prof. Dr. Jeetendra Sainkhediya overall taxonomical research output has culminated in greater than 60 publications in internationally respected journals, 20 abstracts in countrywide and global conferences, 3 patents from distinct patents office as well as India and overseas usa. he is the author of 05 books and written articles in numerous mag related to surroundings and serving as Editor of IRWJMSR (worldwide studies international journal of Multidisciplinary scientific research) and Sustainability, Reviewer of many Journals and Editorial Board Member of numerous global Journals. He has been provided youth teacher award 2019 and excellent research paper presentation award 2019 and great researcher award 2021and many others. he's writing many books e.g. "sendhwa kile ka etihas" in 2018 and "some medicinal plants of Barwani district of Madhya Pradesh, India utilization and conservation" and" some plants used by Bhils in Western Madhya Pradesh especially diarrhea and dysentery" in 2022 etc.



Prof. Suresh Rawat is a distinguished Professor of Ethno-botany at department of botany in Raja Bhoj Govt. College Katangi, Balaghat, M. P., India, since 2020. He has completed M.Sc. (Botany), in 2012 from PMB Gujarati Science College, Indore. Prof. Suresh Rawat overall phytochemical research output has culminated in more than 03 publications in internationally respected journals, 02 abstracts in national and international conferences, 01 patents from Indian patents office. He is the author of 02 books chapter and written articles in various newspaper related to environment etc.