International Journal of Pharmaceutical Research and Applications
Volume 6, Issue 2 Mar-Apr 2021, pp: 341-345 www.ijprajournal.com ISSN: 2249-7781

A Review on Ethnomedicinal plants of Burhanpur region of Madhya Pradesh

Aqsa Rahi,*Sheikh Risal, Dr. Pankaj Kushwaha, Dr. Nandu Kayande
Thakur shivkumarsingh memorial group of institute, Burhanpur(M.P.) India

Date Of Submission: 20-03-2021 Date Of Acceptance: 05-04-2021

ABSTRACT: The present study was carried out in Burhanpur region of Madhya Pradesh, India to document the ethnomedicinal values of some plants majorly including following species - Catharanthus roseus, Tribulus Terristries, Piperlingum Linn, curcuma Longa, Lawsonia Innermis, Ocimum Sanctum, Slavia Officinalis, Barbadesis Mill, Alium Sativum, And Zingeber Officinale. Which are commonly used by local people for medicinal purpose. A list of plant species along with their local names, botanical names, phytochemical present, plant parts used and their therapeutic activity has been given.

Key words: Ethnomedicine, Phytoconstituents, Phytochemistry

I.INTRODUCTION:

Ethno botany deals with studies among the tribal and rural people for recording their unique knowledge about plant wealth and for search of new resource of herbal drugs, edible plants and other aspect of plants, The research in the field of Ethno botany in India was initiated by Dr. E.K.Janki Ammal from Botanical survey of India Solve time in mid-fifties, who made in sensitive studies on the food plants of certain tribes. India is one of the twelve mega biodiversity country of the world, having rich vegetation with a wide variety of plants of medicinal value. In the world 85% of the traditional medicines used for primary health care are derived from plants. Herbal drugs obtained from plants are believed to be much safer in the treatment of various ailments. Man used wild plants to supply medicine, crafts and cosmetics to rural and urban area. In addition wild plants are a source of income and employment particularly in the rural areas. Traditional medicine and ethno botanical information plays on important role in scientific research particularly when the literature and field work data have been properly evaluated plant have been associated with the health of mankind from times immemorial. They have been one of the important sources of medicines used by man from prehistoric times for relieving suffering and curing ailments. The early origins of traditional medicine must have had their roots in ethno botanical folklore.

Madhya Pradesh has the largest area among the Indian state. It covers the central part of the country, where a no. of biodiversitically hot spot exist District Burhanpur is located between 210.50-210 . 37 N latitude and 750 .13-760 .48E longitude in M.P. Holy Tapti River (Surya Putri) is one of the major perennial rivers flowing towards west coast of India is an important source of fresh water to this region. The 720Km. long river originates near Multai in the Betul District of M.P. The Surya Putri kuwari Holy Tapti River flows to the west from historical Burhanpur. Burhanpur is glorified by nature having various holy ponds (Triveni sangam of Tapti, Utawali and Mona river) and elevated satpura hills. The entire forest area, exquisite waterfalls (Mahal Gurara, Jammupani) and rich biodiversity make this place a great destination for both religious place a great destination for both religious minded people and the researchers.

The present study was carried out in Dist. Burhanpur of Madhya Pradesh, India to document the ethno medicinal uses of plants. The traditional knowledge of medicinal plants used by the tribal communities, Tribal's like: Gond, Korku, Bhill, Tadvi, Banjara and Baige. These people have valuable information about medicinal property and medicinal use of manyplants. A large member of traditional herbal healers exist belonging to the tribal community and are utilizing local plants in ethno medicinal practice prevalent in the area. A total of 135 species belonging to 128 genere and 59 families have been reported plant species commonly used by local people for food, fodder and medicinal purpose.

1.1 PHYTOCHEMISTRY:

Phytochemistry is the study of the chemicals produced by plants, particularly the secondary metabolites which are synthesized as a

International Journal of Pharmaceutical Research and Applications
Volume 6, Issue 2 Mar-Apr 2021, pp: 341-345 www.ijprajournal.com ISSN: 2249-7781

measure for self-defense against insects, pests, pathogens, herbivores, UV exposure and environmental hazards. Phytochemistry takes into account the structural compositions of these metabolites, the biosynthetic pathways, functions, mechanisms of actions in the living systems and it's medicinal, industrial, and commercial applications.[1]

1.2 PHARMACOGNOSY:

It is the study of those natural substances principally plants that find use in medicine. or define asa highly specialized & applied science that dealswith biologic, biochemical, & economic features ofdrugs of biological/natural origin & their constituents.[2]

- Biological–botanical sources, history, distribution,collection, etc
- Biochemical - how drugs are formed in plant
- Economic–how drugs are produced[3]

1.3 MEDICINAL PLANTS:

The term "**medicinal plant**" include various types of plants used in herbalism ("herbology" or "herbal medicine"). It is the use of plants for medicinal purposes, and the study of such uses.[4] Plant is an important source of medicine and plays a key role in world health. Medicinal herbs or plants have been known to be an important potential source of therapeutics or curative aids. The use of medicinal plants has attained a commanding role in health system all over the world. This involves the use of medicinal plants not only for the treatment of diseases but also as potential material for maintaining good health and conditions.[5]

I.4. PHYTOCONTITUENTS:

Phytocontituents are naturally occurring chemical compounds, responsible for colour, odour and therapeutic potential of plants. Plants synthesize these compounds as weapons for defense against biotic and abiotic stresses.[6]

II. MATERIALS & METHEDOLOGY:

Reconnaissance surveys were under taken of some villages of dist. Burhanpur M.P. like that Bhatkheda, Jainabad, Chinchala, Asirgardh, Chandni, Nimbola, Basad, Raipura, Sarola, Mahal Gurara, Khaknar and adjacent areas of Burhanpur. Ethno medicinal information on the species was collected through interviewing local communities. The informants were vaidhyas, priests and village headman. The main tribal groups in this regions are Bhil, Bhilalas, Chamhar, Dhumakkar, Korku, Banjara Who commonly communicate through Hindi, Gujarati, Marathi, Sindhi, Panjabi, Urdu & Nimadi languages. A structured questionnaire was used to collect data on local plant names, uses, parts used and mode of application. Recorded plant species were identified with the help of experts, Local floras, and previous works & using standard literature (Hooker 1872-1897, Ray 1984, Mudgal 1997, Singh et at 2001, Sinha and Shukla 2007, Verma et at 1993)

III. PLANT PROFILE

Sr. No.	Scientific Name	Common Name	Phytoconstituents	Medicinal Uses
01	Catharanthus roseus [7]	periwinkle	Alkaloids:vincristine,vinblastine. Flavonoids, saponins	Anti-neoplastic, Anti-microbial Anti-protozoal, Ant-oxidant
02	Tribulus Terristries [8,9]	Gokhru	Alkaloids, flavonoids, saponins, fixed oil	Diuretics, heart disorder, anti-inflammatory, abdominal dysfunction
03	Piper Longum [10,11]	Long Pepper	Alkaloids:piperine, volatile oil, organic acids, ligans	Bronchitis, constipation, respiratory infection, paralysis of tongue

International Journal of Pharmaceutical Research and Applications
Volume 6, Issue 2 Mar-Apr 2021, pp: 341-345 www.ijprajournal.com ISSN: 2249-7781

04	Lawsonia Innermis [12,13]	Henna	Flavonoid,Caumarin,Steroid, Tannin, galic acid, resin, manitol Essential oil, alkaloid, sugars	Analgesic, anti-inflammatory, anti-septic, anti-oxidant, anti-cancer, immune stimulant.
05	Ocimum Sanctum [14,15]	Tulsi	Volatile oil, phenolics, flavonoids,lignans, terpenoids, fatty-acid derivatives	Expectorant, analgesic, bronch odilator, abdominal disorder, boost immunity
06	Barbadesis Mill [16,17]	Aloe Vera	Polysaccharides, sugars, minerals, protiens, lipids, phenolic compounds	Anti-inflammatory, laxative, anti-septic,anti-ageing,Skin protection from UV, X-rays
07	Allium Sativum [18,19]	Garlic	Sulfur:ajoene Thiosulfinates: allicin Sulfides:diallyl Di S, diallyl Tri S	Anti-carcinogenic, anti-oxidant, anti-diabetic,anti-atherosclerotic,anti-hypertensive
08	Zingeber Officinale [20,21,22]	Ginger	Zingiberone, bisabolene Volatileoil: Gingerols,shogaols	Anti-viral, radio-protective, anti-neoplastic, enhance appetite, upgrade enzyme actions, balance circulation
09	Salvia Officinalis [23,24]	Sage	Alkaloids, Carbohydrate, Fatty acids, Glycosidic derivatives(cardiac, flavonoids)	Anti-cancer, Anti-mutagenic, Anti-oxidant, Anti-Septic, Anti-Inflammatory, Cognitive & memory enhancer
10	Curcuma Longa [25,26,27]	Turmeric	Curcumanoids Volatile oil: ketone, alcohol, terpenoids Sugars, protiens Starch, resins	Anti-oxidant, Anti-inflamma Tory, Anti-carcinogenic,Anti-Microbial, Cardio-vascular

IV. RESULT AND DISCUSSION:

The present communication documented 10 plant species that are being traditionally used in the area. The following herbal plants- Catharanthus Roseus, Tribulus Terristries, Piper longum, Lawsonia Innermis, Ocimum Sanctum, Barbadesis Mill, Allium Sativum, Zingeber Officinale and Salvia Officinalis are effective against cuts and wounds, fever. Joint pain, headache, constipation, diarrhea, eye disorders, skin ailments, cough& cold anti dote for poisonous insects, stomach disorders, urinary troubles, liver complaints, digestive

International Journal of Pharmaceutical Research and Applications
Volume 6, Issue 2 Mar-Apr 2021, pp: 341-345 www.ijprajournal.com ISSN: 2249-7781

problems, Jaundice, asthma, bronchitis, inflammations and anemia, piles, mental disorders, Adnominal pain and bone fracture, paralysis, epilepsy, impotency, general weakness etc.

Ethnomedicinal plants discussed above include numerous phytoconstituents such as alkaloids, glucosides, volatile oils, tannins, saponins, lipids, fatty- acids, minerals,organic acids and phenolic compounds which are responsible for their medicinal effects mainly termed as:- anti-oxidant, anti-septic, anti-inflammatory, anti-cancer, analgesics, diuretics, anti-hypertensive, anti-neoplastic, carminative, cognitive, memory enhancer, immune-stimulant respectively.

V. CONCLUSION:

Nature is a unique source of structures of high phytochemical diversity, many of them possessing interesting biological activities and medicinal properties. In the context of the worldwide spread different diseases such as AIDS, chronic diseases and a variety of cancers, an intensive search for new lead compounds for the development of novel pharmacological therapeutics is extremely important. With the present information are reported in this review, it is difficult to establish clear functionality and structure–activity relationships regarding the effects of phytochemicals in biological systems activity. This is largely due to the occurrence of a vast number of phytochemicals with similar chemical structures, and to the complexity of physiological reactions. Moreover, given the number of phytochemicals isolated so far, nature must still have many more in store. With the advances in synthetic methodology and the development of more sophisticated isolation and analytical techniques, many more of these phytochemicals should be identified.

REFERENCE:

[1]. Egbuna, Chukwuebuka & Ifemeje, Jonathan & Kryeziu, Toskë & Mukherjee, Minakshi & Shah, Hameed & Narasimha Rao, Geddada & Gido, Laurence & Tijjani, Habibu. (2018). Introduction To Phytochemistry. 10.13140/Rg.2.2.18812.23687.

[2]. Aiza J. Datu-Dacula, Rph. Introduction To Pharmacognosy, Website: Https://Www.Coursehero.Com/File/37303494/1-Introduction-To-Pharmacognosy-Cpdf/

[3]. Tyler, Varroe, Braddy, Lynnr, Robbers, Jamese. (1988). Introduction To Pharmacognosy, Publishers: Lia And Febigars, Us. International Edition

[4]. Zahid, Et Al.(2016).Introduction & Importance Of Medicinal Plants And Herbs. Published By:Nhpindia

[5]. Da-Cheng Hao(2019), "Genomics And Evolution Of Medicinal Plants", Ranunculales Medicinal Plants

[6]. Neeraj Varma.(2016). Phytocontituents And Their Mode Of Extractions: An Overview. Research Journal Of Chemical And Environmental Science. Vol 4 [2].Pp: 08-15

[7]. Suddasuchi Das, Amit B. Sharangi(2017). Madagascar Periwinkle(Catharanthus Roseus L.): Diverse Medicinal And Therapeutic Benefits To Humankind. Journal Of Pharmacognosy And Phytochemistry. Vol. 6(5). Pp: 1695-1701.

[8]. Deshpande Et Al. (2018). A Review On Plant Profile, Standardization Method And Pharmacological Activities Of Tribulus Terristries (Gokhru). Journal Of Ravishankar University (Part-B: Science),vol. 31 (1), Pp. 40-45.

[9]. Patil A., Ladea B. D.(2016). Pharmacological Aspects Of Tribulus Terristries Linn.(Gokhru): Progress And Prospects. Therapeutic Medicinal Plants. Isbn: 9780429159657, Edition 1st

[10]. Khushbu, Chauhan & Roshni, Solanki & Patel, Anar & Macwan, Carol & Mayuree, Patel. (2011). Phytochemical And Therapeutic Potential Of Piper Longum Linn : A Review. International Journal Of Research In Ayurveda And Pharmacy. Issn: 2229-3566, Vol. 2. Pp: 157-161

[11]. Suresh K., Jitpal K., Suman, Sunil S.,(2011).Overview For Various Aspects Of The Health Benefits Of Piper Longum Linn. Fruit. Journal Of Acupuncture And Meridian Studies, Vol. 4, Issue 2, Pp 134-140, Issn 2005-290.

[12]. Wagini N., Amira S. H. Soliman, Badawy, El-Saady, Abbas, Mohamed, Hanafy, Yasser. (2014). Some Of Phytochemical, Pharmacological And Toxicological Properties Of Henna (Lawsonia Inermis L.): A Review Of Recent Researches.

[13]. Kamal, Mehnaz & Jawaid, Talha. (2011). Pharmacological Activities Of Lawsonia Inermis L., A Review. International Journal Of Biomedical Research. Vol. 1(2). Doi: 10.7439/Ijbr.V1i2.56.

[14]. Singh, Deepika & Chaudhuri, Prabir. (2018). A Review On Phytochemical And Pharmacological Properties Of Holy Basil (Ocimum Sanctum L.). Industrial Crops And Products. Vol.118. Pp: 367-382.
[15]. Rakesh Kumar J.(2017). Phytoconstituents, Traditional, Medicinal And Bioactive Uses Of Tulsi (Ocimum Sanctum Linn): A Review. Journal Of Pharmacognosy And Phytochemistry. Issn: 2278-4136, Vol. 6(2). Pp: 261-264
[16]. Sanjeet K.K. And Tushar K.B.(2019). Phytochemical Constituents Of Aloe Vera And Their Multifunctional Properties: A Comprehensive Review. International Journal Of Pharmaceutical Science And Research. Issn:0975-8232. Pp: 1416-1423
[17]. R. Rajeshwari, M. Madhuri, C. Sharmila And R. Pushpa(2012). Aloe Vera: The Miracle Plant Its Medicinal And Traditional Use In India. Journal Of Pharmacognosy And Phytochemistry. Issn: 2278-4136. Vol. 1(4)
[18]. P.V. Kadam, K.N. Yadav, F.A. Karjikar, F.A. Patel, M. K. Patidar And M.J. Patil(2019).Pharmacognostic, Phytochemical And Physicochemical Studies Of Allium Sativum Linn. Bulb (Liliaceae). International Journal Of Pharmaceutical Science And Research. Issn: 0975-8232. Pp: 3524-3531
[19]. El-Saber Batiha, G., Magdy Beshbishy, A., G Wasef, L., Elewa, Y., A Al-Sagan, A., Abd El-Hack, M. E., Taha, A. E., M Abd-Elhakim, Y., & Prasad Devkota, H. (2020). Chemical Constituents And Pharmacological Activities Of Garlic (Allium Sativum L.): A Review. Nutrients, Vol. 12(3), 872.
[20]. R. Wachkaur And S. Ganguly(2018). Phytochemistry And Pharmacognosy Of Ginger (Zingiber Officinale). In Book: Molecular Biology &Pharmacognosy& Beneficial Plants. Edition 2018. Pp: 97-103
[21]. Sahdeo P. And Amit K. Tyagi(2015). Ginger And Its Constituents: Role In Preservation And Treatment Of Gastrointestinal Cancer. Gastroenterology Research And Practice. Vol. 2015 Pp: 11
[22]. Kankanam G. C., Dissanayaka, Walwita A., Liyange C. W., Ruwan P. L.(2020).A Review On Medicinal Uses Of Zingiber Officinale (Ginger). International Journal Of Health Science And Research. Issn: 2245-9571. Vol. 10(6)
[23]. Ahmad G. And Mahdi E.(2017). Pharmacological Properties Of Salvia Officinalis And Its Components. Journal Of Traditional And Complimentary Medicine. Vol. 4. Pp: 433-440
[24]. Yashaswini S., John F. And Jim S.(2019). Ethnobotany, Phytochemistry, Cultivation And Medicinal Properties Of Garden Sage (Salvia Officinalis L.). Journal Of Pharmacognosy And Phytochemistry. Issn: 2278-4136, Vol. 8(3). Pp: 3139-3148
[25]. Sayantani C., And T.V. Ramachandran(2019). Phytochemical And Pharmacological Importance Of Turmeric (Curcuma Longa): A Review. Research And Review: A Journal Of Pharmacology. Vol. 99(1). Issn: 2230-9861.
[26]. Ahmad Rs, Hussain Mb, Sultan Mt, Arshad Ms, Waheed M, Shariati Ma, Plygun S, Hashempur Mh.(2020).Biochemistry, Safety, Pharmacological Activities, And Clinical Applications Of Turmeric: A Mechanistic Review. Evidence Based Complementary And Alternative Medicine. Isbn: 2020:7656919.
[27]. Hewlings, S. J., & Kalman, D. S. (2017). Curcumin: A Review Of Its Effects On Human Health. Foods (Basel, Switzerland), Vol. 6(10), Pp: 92