

DOI-10.53571/NJESR.2022.4.12.68-80

**Study The Sacred Grove's Ethno-Medico Plants Of Sursam Balaji, Jhalawar(Rajasthan)
And Its Importance In Human Health Care**

¹Prakash Yadav, ²Dr. Savita Gupta. ³Dr. Sulekha Joshi

¹Research Scholar, Govt. College Kota, Department of Botany, University of Kota, Kota

²Associate Professor, Department of Botany, Government College Kota, Kota

³Associate Professor, Department of Botany, Government College Kota, Kota

(Received:10November2022/Revised:20November2022/Accepted:30November2022/Published:29December2022)

Abstract

South-east Rajasthan includes the area of the Jhalawar district. As of late Ethnomedicinal studies have acquired significance during ongoing years. However, their widespread use, evaluation, and validation are hindered by the fact that this valuable source of knowledge is not adequately documented. Here, in the current work fifteen chose restorative plant species, utilized widely by neighborhood individuals and ancestral networks dwelling in the Jhalawar region have been screened subjectively to find out their Ethnomedicinal properties. These plants are frequently used to treat nausea, vomiting, diarrhea, ringworm, ear pain, gastric problems, stones, infertility, diabetes, high blood pressure, and other conditions. Some plants' ethnomedicinal uses and botanical names are included in the current work listing. This work provides up-to-date information that may encourage proper evaluation of the plant's potential as a medicine for many human diseases. The present study emphasizes the significance of ethnomedicinal plants from various Rajasthani regions. A comprehensive survey was carried out in four districts of Rajasthan—Kota, Bundi, Jhalawar, and Baran mostly in the Hadauti region. Information regarding the use of medicine was gathered through frequent interviews with indigenous medicine practitioners, villagers, priests, and tribal people. The plants were distinguished by utilizing standard monographs and vegetation. Ethano-botanical plants have also been used to treat serious diseases like cancer, diabetes, AIDS, skin diseases, depression, and others, according to previous research. The goal of this research is to effectively learn about the medicinal properties of specific plants so that herbal medicines can be used to treat diseases without side effects. In India, medicinal plants play a crucial role in providing health care to approximately 80% of the population. Precursors and products used in the pharmaceutical, food,

cosmetic, and agrochemical industries, among others, have come largely from plants. In India, the spread of traditional medical practices like Ayurveda gradually followed the popularity of local remedies. Tribals in India's Rajasthan have long used herbal remedies.

Keywords: Ethnomedicinal, Jhalawar, Diseases, Vomiting, Diarrhea.

Introduction

An interdisciplinary field of study known as "Ethnobotany" was established as a result of the study of the primitive aboriginal societies' use of medicinal herbs and medical practices^[1]. According to Schultes^[2], ethnobotany is usually the study of how people of a primitive society interact with the plants in their environment. Ethnobotany must have been the first knowledge that man had, as it was something he had to do^[3,4].

According to Jain, ethnobotany is the study of all-natural and traditional connections between humans, their domesticated animals, and plants^[5].

Traditional knowledge is under threat since the 20th century. First, because of the destruction of the forest, native tribes' homes, and the environment in which traditional knowledge originated, flourished, and survived. Second, ethnobotany became an organized science in a short period of time because of the rapid acculturation that affected ethnic culture as a result of this pressure^[6]. Additionally, the resurgence of interest in natural foods and drugs has made ethnobotany an organized science.

Over the past three decades, research on ethnomedicinal plants has made incredible progress. There is a huge demand for information about the properties and applications of medicinal plants as a result of the global trend toward the use of natural plant remedies. India is well-known for its abundance of medicinal plants that thrive in its many different climates and physical conditions. This has provided us with approximately 45,000 plant taxa, among which 2000 are frequently mentioned in the literature. For a resource person in each tribal group, the preservation of ethnobotanical traditional knowledge of the origins of plants and animals in memory is truly a gift from God. The ethnobotanical knowledge of each tribe differs from that of its neighbors and is either acculturated or lost with the tribe's knowledgeable members.

The purpose of this investigation is to investigate the significance of ethnomedicinal plants and the medicinal uses that the people of Rajasthan's Jhalawar district make of these plants. Traditional herbal and folk remedies based on plants are well-known in this district's communities.

When it comes to human health care, medicinal plants are of the utmost importance. Both developing and developed nations are seeing an increase in the demand for medicinal plants. According to Katewa (2009), a significant role has been played by indigenous traditional medicine in the development of new plant-based products. According to Gadgil (1996), approximately 5,00,000 of the planet's 10 to 30 million species are found in India's forests. According to Kushalappa and Bhagwat (2001), the fragmentation of sacred groves has resulted in habitat disruption and poor regeneration for numerous economically important species. The objective of this study was to determine the genetic diversity of floral species.

Scarcity of water for farming, husbandry and drinking purposes is a big problem in Rajasthan. However, forests in hill areas resist the soil runoff and therefore aid in ground water recharge. Thus water becomes accessible to sacred groves that ultimately encourage the preservation and regeneration of biological diversity in the localized area. It is worth noting that these sacred groves provide ethno-socio-ecological forums to the local communities (Singh *et al.*, 2019)

Significant orans at Sirohi in the half-desert region of Rajasthan, incorporate Pichheshwar Mahadeo close to Pindwara, Voreshwar Mahadeo in Sheoganj, and Sarneshwar Mahadev close to Sirohi (renowned for its progression well) and Mochal Mataji in Sheoganj (uniquely popular for creatures, for example, Chinkara and Nilgai), and Varada Hanuman Ji. A memorable sanctuary of Shiv Bhagwan, encompassed by mountains, is Nai-Ka-Nath (bassi, banskho). The sanctuary is where travelers come and supplicate from everywhere Madhogarh and its towns. Each Monday a reasonable is held close to the sanctuary and a reasonable of great scope is there on Mahashivratri and individuals from encompassing towns come in thousands by transports, camels, bicycles, vehicles and whatever method of transport is accessible to give their petitions to Shiva (Patel *et al.*, 2014).

The significance of sacred groves in both social and religious life Sacred groves are referred to by a variety of names in various regions, particularly in Rajasthan, including Oran's, Kenkris, and Jogmaya. The sacred groves are a cultural and traditional treasure that the majority of Jhalawar district residents have preserved. Reason for the field overview of this study on the grounds that the immediate contact can be laid out valid data of the purposes of plants. These plants are used for food, feed, drugs, gum, dye, and other purposes. and a site that protects biodiversity.. The studies on sacred groves that have been conducted in India up to this point can be divided into three time periods based on the aspects that researchers and individuals who are

interested in the subject chose to focus on. The first time period is prior to 1970 when studies focused on social, anthropogenic, and forest reports. Second, biodiversity assessment, inventory, and documentation are the most important aspects at this time, along with social issues. The functioning of the ecosystem comes in at number three.

Study Area

There are a lot of plants in Rajasthan's rich biodiversity, some of which are used for medicinal purposes. Rajasthan is one of the biggest provinces of India. The state of Rajasthan is broadly divided into three main regions: Rajasthan's western, central, and southern-east regions. The districts of Kota, Bundi, Baran, and Jhalawar make up the south-east portion of Rajasthan, which is also known as the Hadoti region. According to evidence in some of the hilly tracts, the region of Jhalawar, which gets its name from famous Jhala soothsayers, had a glorious past when early humans lived there.

Jhalawar joined India union in 1947, shortly after independence. The united states of Rajasthan then merged with Jhalawar and other South-Eastern Rajasthan states in March 1948. It was given the status of a fully fledged district and placed under the administrative control of a District Magistrate after it was integrated into the state of Rajasthan in 1950. The study area is Shri Sursam Balaji temple, Jhalawar.

Sites of much diversification were selected for the study. In this work, Shri Sursam Balaji temple, Kalmandi kala, Jhalrapatan, Jhalawar.localities of Jhalawar district is selected. Shri Sursam Balaji temple at Kalmandi Kalan village is located in Jhalrapatan Tehsil of Jhalawardistrict in Rajasthan, India (Joshi, 1985). It is situated 11km away from sub-district headquarter Jhalrapatan and 12km away from district headquarter Jhalawar for study the ethno-medico plants like *Citrus limon*, *Adansonia digitata*, *Mangifera indica*, *Alangium salvifolium*, *Phyllanthus emblica*, field area of Sursam Balaji with the help of tribe peoples and study by the interview and questionnaire methods.

District- Jhalawar

Geography- - 23°45'20'' to 24°52'17'' North latitude and 72°27'35''to N 76°56'48''East longitude.

Area - 6928 sq.km

Population - 11, 80,342

Temperature - 47°C (Max.) and 9.5°C (Min.)

Rain fall- 943 mm. (per year)

Soil- Jhalawar district is an expanse of fertile plain having rich black cotton soil. The soil of North Western area of Jhalawar is hard and stony and the soils of Dag area are red in colour.



Figure- Shri Sursam Balaji Temple

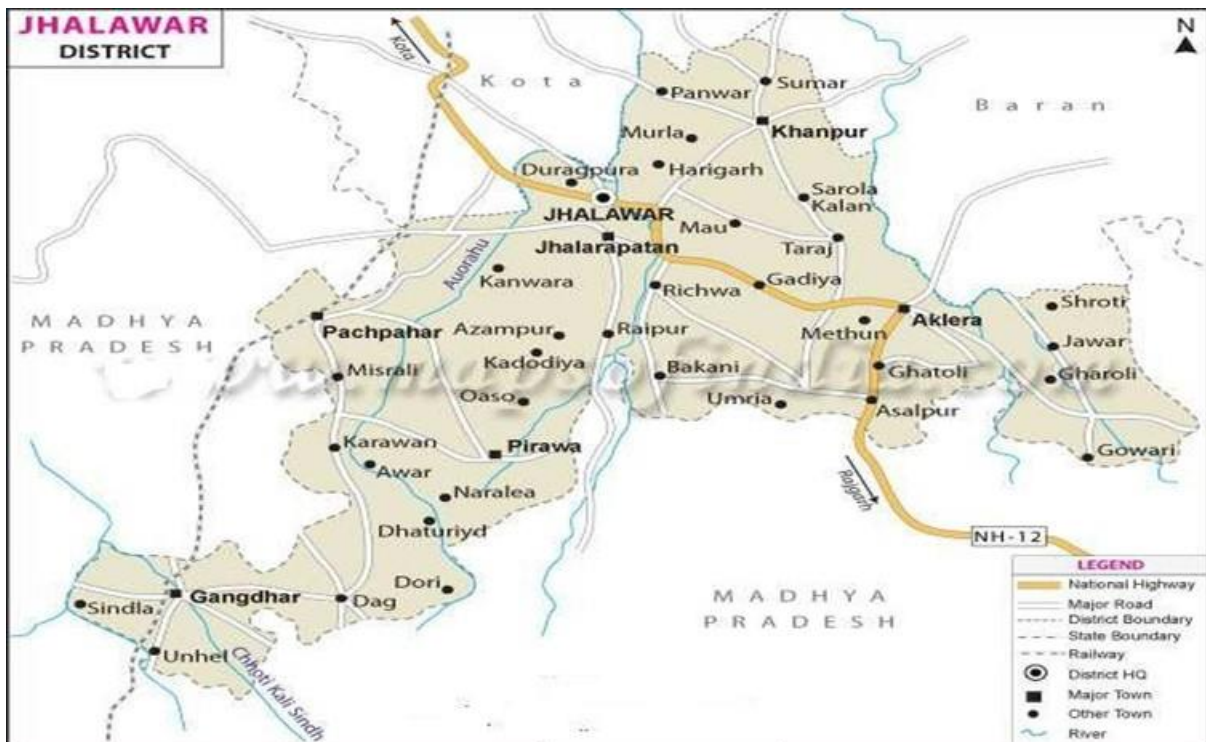


Figure: Jhalawar District MAP Courtesy By Maps Of india.com (Website)

Material And Methodology

Important plant visits were planned all around the ethnic area of Jhalawar district—the tribal's coverage area—in order to conduct a thorough ethnomedical research study. The direct, natural, and traditional relationship that exists between human society and plants is the focus of ethnobotany. It has been acknowledged as a multidisciplinary field that incorporates numerous interesting and useful aspects of literature, anthropology, history, and literature. Its significance was primarily demonstrated by the numerous economic and therapeutic uses of plants in primitive human societies. During ethnomedicinal field trips in various ancestral's towns of the Jhalawar locale during 2014. The author came across a lot of tribal people, village informants, and medicine men who were using plants to treat illnesses.

As a result, the author was interested in learning how the tribe actually used these plants in their daily lives. The findings of the study are the culmination of a year's worth of intensive exploration in the Jhalawar district region, which is rich in both primitive tribes and plants. Local community uses these sacred groves in a limited way hence giving enough time to maintain sustainability. Sacred groves are indicator of natural productivity of the region. Several festivals and fairs/mela are hosted around sacred groves. Sacred groves also help in Soil and water conservation and also stop desertification of lands. Sacred groves also provide fuel wood, fodder, food and livelihood to humans

Ethnobotanical Studies On Some Important Herbal Medicines Of Rajasthan

According to Kirtikar and Basu (1935)^[9], "the ancient Hindus should be given the credit for cultivating what is now called ethnobotany," the term "Ethnobotany" is not new even to India. Ethnobotany is "the study of the relationship which exists between people of primitive societies and their plant environment," as defined by Schultes (1962)^[13]. Ethnobotanical research can be done in a number of ways, but the ones that are most relevant to medicinal plants are archaeological literature searches, herbaria, and field studies. Ethnobotany as a whole is practically a new field of study; however, if it is investigated in depth and in a methodical manner, it will produce results that will be of great value to ethnologists, archaeologists, anthropologists, plant-geographers, pharmacologists. Basic documentation, quantitative evaluation of use and management, and experimental assessment are all part of basic quantitative and experimental ethnobotany (Choudhary et al., 2008)^[3]. Many tribal or rural human societies still hold a wealth of valuable knowledge about the uses of plants, including their medicinal

properties. The ayurvedic arrangement of medication not just gives fix to countless general and persistent sicknesses yet it additionally reinforces the inward body strength.

According to estimates from the World Health Organization, herbal medicines account for approximately 80% of the primary health care requirements of the majority of people living in developing nations. 42 lakh tribals in Rajasthan have used approximately 610 species of medicinal plants (Singh and Pandey, 1998)^[18]. Rajasthan, where 80 percent of the population lives in rural areas and cannot afford expensive healthcare. For their medicinal requirements, they rely on the vegetation that surrounds them. In order to assess the potential of plant resources for contemporary treatments, a floristic survey of ethnomedicinal plants found in Rajasthan's tribal region was carried out. The Aravalli hill range and other regions, including the less welcoming North-West Rajasthan, are home to a significant number of medicinally significant tree species. Ethnobotanical studies of the region's tree species are currently being carried out in great detail. A floristic survey found 38 families and 61 ethnomedical plant species from the Mewar region of Rajasthan's Aravalli hills (Katewa et al., 2004;^[7,8] (Katewa, 2009). Jain et al. reported ethnomedical uses of biodiversity from the Rajasthani Tadgarh-Raoli wildlife sanctuary (2007)^[5]. Jain et al. reported an ethnobotanical survey of the Sariska and Siliserh regions from the Alwar district.2009)^[6]. a categorical list of plant species, their used plant parts, and the method of administration that has been shown to be effective for controlling various diseases. The true stewards of the medicinal plants up to this point are the tribal people whose livelihoods are based primarily on forest wealth. According to Singh and Pandey (1980), rapid deforestation caused by the over-harvesting and exploitative trade of medicinal plants has significantly reduced the availability of these plants in Rajasthan's semi-arid and arid regions^[17]. According to Mishra and Kuamr (2001)^[12], the general populace is well-versed in the therapeutic properties of the vegetation that surrounds them, particularly as it relates to their health. It has traditionally been eaten and taken as medicine. Singh and other, 2007)^[16] According to Gupta and Kumar (2002)^[4], natural products and herbal remedies are now recommended for diabetes treatment. According to Menghani and Ojha (2010)^[11], over 50 plants with potential to prevent diabetes are found in Rajasthan's arid region. According to Sharma and Khandelwal (2010)^[15], 36 plant species are utilized in the Dang region of Rajasthan as cooling agents during the summer. Meena and Yadav (2010)^[10] conducted a comprehensive survey of the southern part of Rajasthan,

including the Chittorgarh, Udaipur, Banswara, and Dungarpur districts, to document tribal communities' traditional knowledge of medicinal plants.

Results And Discussion

In the result different plants properties have different human health activity. *Citrus limon* are rich in vitamin C which use for warding off infections. *Adansonia digitata*, *Tectona grandis* and *Neolamarckia cadamba* used for fever and other treatments. *Megnifera indica* used as antiseptic, astringent, tonic e.t.c. *Alangium salvifolium* plant leaves are used for treatment of diabetes. *Phyllanthus emblica* plant use for the treatment of diarrhoea and inflammation. *Tamarindus indica* plant used in abnormal pain. *Bahunia variegata* plant is used in the treatment of ulcer and skin treatment. So that final conclusion is ethnobotany plants helps to corelate the relationship between plant and people and sacred groves plant protects the environment and human health also. Phytosociological study is described the vegetative environment in the area of Sursam Balaji.

In Rajasthan (India), ancestral's are involving home grown medication for long time. Our research reveals that each of the Fifteen plants can treat a variety of diseases, including: joint pain, rheumatism, diarrhea, tuberculosis, cancer, dysentery, malaria, diabetes, skin conditions, scurvy, respiratory problems, asthma, and bones Harmonal imbalance as shown in the Table:1 These 15 plants are used a lot by tribal people, but modern medicine hasn't studied all of them. The current study provides useful ethnobotanical data on the plant uses made by Rajasthani tribal communities. Ecological monitoring is the most important method for conserving biodiversity in the Hadoti region due to the plant parts used in a variety of ailments. Hadoti has a lot of biodiversity, but the climate is always changing, affecting the growing area and natural habitats. The ethnomedicinal plants that had been collected were listed in alphabetical order according to their botanical names, family, and potential applications, and some photographs were included in Figure 1. Different ethnic groups and rural residents of the Jhalawar district use these plants.

Table: 1. List Of Plant Species That Were Identified In Sursam Balaji SG

S.No	Botanical Name	Vernacular Name	Family	Medicinal Uses
1.	<i>Adansonia digitata</i> ,	Kalp viriksh	Malvaceae	Diarrhea and dysentery , treat painful swellings

2.	<i>Adhatoda zeylamica</i>	Vasaka	Acanthaceae	Antitussive,antibacterial, abortifacient,anti-inflammatory and antiulcer.
3.	<i>Alangium salvifolium,</i>	Akol	Cornaceae	Diabetes, wound healing, dog bite, and as a poultice in rheumatism.
4.	<i>Argemone maxicana</i>	Satyanashi	Papaveraceae	Tumors,warts, skin diseases, inflammations, rheumatism, jaundice, leprosy, microbial infections,
5.	<i>Bahunia variegate</i>	Kachnar	Fabaceae	Treatment of ulcers
6.	<i>Butea monosperma</i>	Palash / Flame of The Forest.	Fabaceae.	Palash flowers and leaves are diuretic, aphrodisiac, astringent and increase the flow of blood in the pelvic region
7.	<i>Citrus limon</i>	Lemon	Rutaceae	High blood pressure, the common cold, and irregular menstruation
8.	<i>Convolvulus microphyllus</i>	Sankhapushpi	Convolvulaceae	Epilepsy, vomiting, diabetes, sun stroke and bleeding
9.	<i>Cynodon dactylon</i>	Bermuda grass	Poaceae	Hysteria, measles, rubella, snakebite, sores, stones
10.	<i>Hemidesmus</i>	Indian sarsaparilla	Apocynaceae	Venereal diseases, herpes, skin diseases, arthritis, rheumatism, gout, epilepsy.

11.	<i>Mangifera indica,</i>	Mango	Anacardiaceae	Anti-oxidant, anti-viral, cardiotonic, hypotensive, anti-inflammatory properties.
12.	<i>Neolamarckia cadamba</i>	Burflower-tree, Kadam	Rubiaceae	Tumour, anaemia, eye inflammation and diarrhoea
13.	<i>Phyllanthus emblica</i>	Amla	Phyllanthaceae	Diarrhea, jaundice, and inflammation.
14.	<i>Tamarindus indica</i>	Imli	Fabaceae	Parasitic infestation, fever, malaria and respiratory problems
15.	<i>Tectona grandis</i>	Teak	Verbenaceae	Treat typhoid fever and several other diseases.

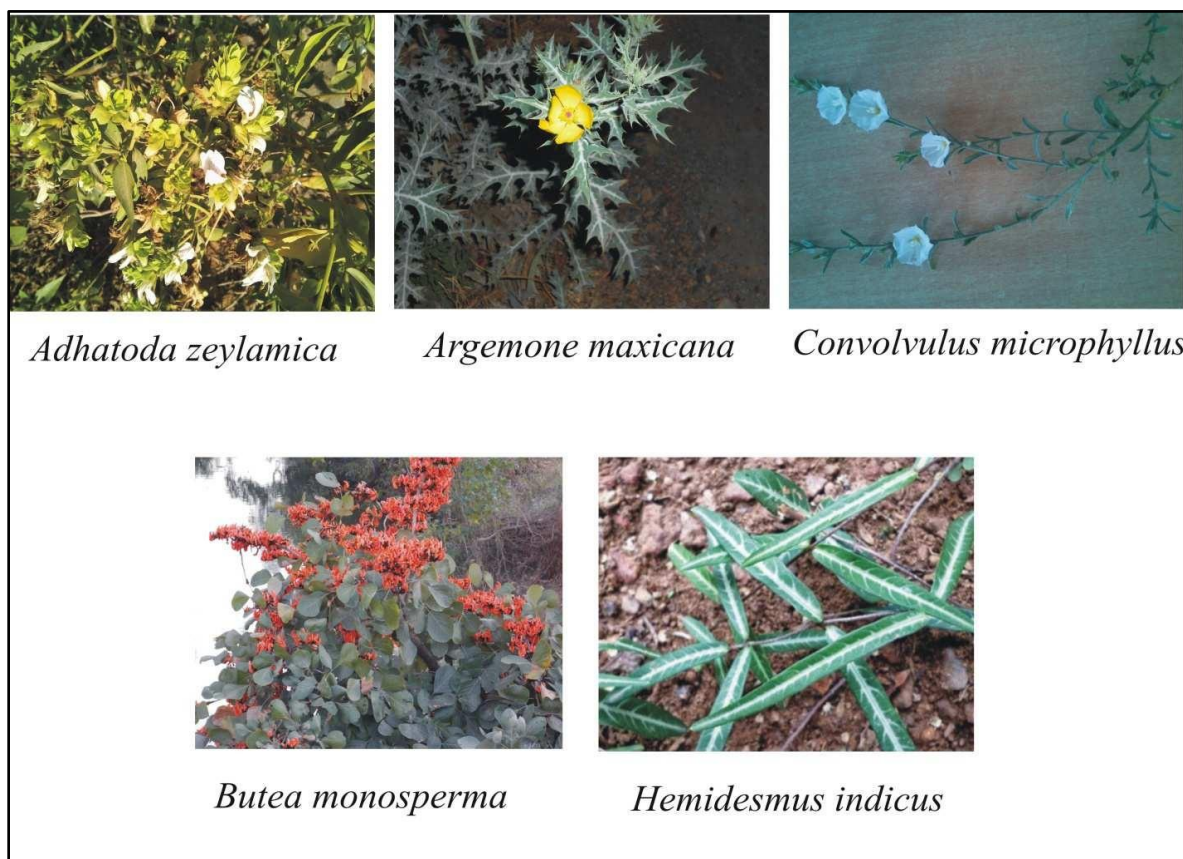


Figure-1: Some Important Ethnomedicinal Plants



Figure-2:Some Important Ethnomedicinal Plants Collection



Figure-3:Male & Female Kalp Vriksh Tree At Surshyam Balaji SG. Jhalawar

Conclusion

In the result different plants properties have different human health activity. *Citrus limon* are rich in vitamin C which use for warding off infections. *Adansonia digitata*, *Tectona grandis* and *Neolamarckia cadamba* used for fever and other treatments. *Megnifera indica* used as antiseptic, astringent, tonic e.t.c. *Alangium salvifolium* plant leaves are used for treatment of diabetes. *Phyllanthus emblica* plant use for the treatment of diarrhoea and inflammation. *Tamarindus indica* plant used in abnormal pain. *Bahunia variegata* plant is used in the treatment of ulcer and skin treatment. So that final conclusion is ethnobotany plants helps to correlate the relationship between plant and people and sacred groves plant protects the environment and human health also. Phytosociological study is described the vegetative environment in the area of Sursam Balaji.

Conservation of natural resources has long been a priority for many indigenous communities worldwide, particularly in India. According to the survey, medicinal plants are abundant in the Jhalawar district's vegetation. In Rajasthan, the region is a significant source of plant resources for healthcare. Because of the amount and chemical make-up of their active ingredients, medicinal plants add value. Due to the growing recognition that plant-based therapeutics are natural products that are non-narcotic, free of side effects, and easily accessible at reasonable prices, demand for them has grown exponentially in both developing and developed nations.

Based on the ethnotherapeutic practices of ethnic groups, the current study reveals that ethnomedicinal plants must be investigated for pharmacological activity in order to ensure their safe use following clinical trials. This will definitely be very helpful in developing new herbal drug sources for the pharmaceutical industry. In order to boost the region's economy, such an effort will create employment. Due to a lack of or limited availability of modern health services, traditional medicines today play an important role in developing nations. Plants have long been a rich source of safe and effective medicines. In India, indigenous remedies are well-liked by people in both urban and rural areas due to their low cost, effectiveness, and safety. The region's medicinal plant resources are declining as a result of over-exploitation of some species, illegal trading, road construction, and other development projects (that destroy their habitats). The current research demonstrates the significance of scientific validation of herbal remedies. This will not only acknowledge this undocumented knowledge, but it will also aid in the preservation of such precious, endangered medicinal plants. In addition to functional and molecular validation

of the effectiveness of the various medicinal plants, these highly valuable findings require additional research. The use of plant products by a population in a little-known region of India was also documented in this study.

References

- [1].Devi, N. (2017). Indian Tribe's And Villager's Health And Habits: Popularity Of Apocynaceae Plants As Medicine. *International Journal Of Green Pharmacy (Ijgp)*, 11(02).
- [2].Harshberger, J. W. (1895). Some New Ideas: The Plants Cultivated By Aboriginal People And Used In Primitive Commerce. *The Evening Telegraph,(Daily) Philadelphia*, 64(134), 2.
- [3].Jain, V. Occurrence Of Bombax Ceiba L.(Semal) In Indian States-A Plant Of Immense Commercial Significance.
- [4].Jhalawar District Map, https://www.mapsofindia.com/maps/rajasthan/districts/_jhalwar-districtmap.jp
- [5].Patale, C. K., Awaley, M. G., & Nakade, J. G. Indian Traditional Knowledge For The Treatment Of Kidney Stone: A Review Jain, V. Occurrence Of Bombax Ceiba L.(Semal) In Indian States-A Plant Of Immense Commercial Significance.
- [6].Patale, C. K., Awaley, M. G., & Nakade, J. G. Indian Traditional Knowledge For The Treatment Of Kidney Stone: A Review.
- [7].Pullaiah, T., Krishnamurthy, K. V., & Bahadur, B. (2017). *Ethnobotany Of India, Volume 3: North-East India And The Andaman And Nicobar Islands*. Apple Academic Press.s
- [8].Purohit, C. S. (2020). *Ipomoea Sagittifolia* Burm. F.–New Record For Rajasthan And Note On Family Convolvulaceae Of Todgarh-Raoli Wildlife Sanctuary, Rajasthan. *International Journal Of Scientific Research In Science And Technology*, 7(3), 49-65
- [9].Pullaiah, T., Krishnamurthy, K. V., & Bahadur, B. (2017). *Ethnobotany Of India, Volume 3: North-East India And The Andaman And Nicobar Islands*. Apple Academic Press.s
- [10]. Savithramma, N., Linga Rao, M., Yugandhar, P., & Suvarnalatha Devi, P. (2013). Ethnomedicinal Studies Of Tumburu Theertham: A Sacred Grove Of Tirumala Hills, Andhra Pradesh, India. *J Ethnobiol Traditional Med*, 120, 547-56.
- [11]. Sharma, N.K.(2004). Ethno-Medical-Religious Plants Of Haduti Plateau (Se Rajasthan). *Ethnomedicinal Plants*.