

# AN ETHNOBOTANICAL STUDY OF TRADITIONAL KNOWLEDGE AND USES OF MEDICINAL PLANTS

#### N Bindushree

## **Plant Science (Botany)**

#### **ABSTRACT**

Ethnobiology is the medical observe of the plant life and animals as handled or used by exceptional traditional communities. Early man searched for the satisfactory nutritious meals to have a healthy and ailment free long lifestyles from the surrounding environment. This attempt has resulted in choosing a massive range of meals gadgets by way of human communities who lived in specific elements of the world. The early humans perhaps combined intuition with indulgence to pick his food gadgets. Data have been accumulated via interviews with seven traditional questionnaires for nearby community members. Traditional names of the plant life by using conventional healers and nearby community participants had been prepared as a checklist. Loss of conventional medicinal names of plant life changed into ascertained with up to 60% overlapping in their nomenclature. Most of the courses have been worried with ethnobotany or agricultural operations inclusive of shifting cultivation and fairs of the vicinity. Ethnobotanical reviews have been in particular on ethnomedicinal plants with some courses on meals and liquids. The ethnomedicinal publications in maximum instances cited best the names of flowers, used without going into the details of the approach of use, the quantum of use and other related factors.

**Keywords**: ethnobotanical, traditional, knowledge, uses of medicinal plants

#### INTRODUCTION

The record of human culture and civilization is all approximately the management and utilization of the resources round him. People started their life within the woodland as an indispensable a part of the wooded area environment. Residing near nature he has obtained unique knowledge approximately the ambient biodiversity by intuition, trial or mistakes and experimentation and used a diffusion of flora and animals to meet his vital necessities like meals, medication, fuel, fibre, and so on. Being an intelligent and revolutionary organism he very quickly constructed a fabric civilization of his very own and carved out a separate habitat for himself, using the resources round him. Many human groups later established civilizations and commenced to live in villages, towns and cities built via them. However, a precise majority of the human communities nevertheless retain to stay in and around the forest ecosystems. The communities who left the forest and started to stay in modern towns and towns, progressively lost close touch with nature and woodland and misplaced the valuable information approximately most of the wild plant life which their forefathers had. By way of the



turn of the twentieth century, the peaceful life of the conventional groups used to stay in and across the forest became additionally disturbed and disrupted and that led to the decline and destabilization of those people, inflicting coming near threat of extinction of the valuable/abnormal existence fashion, culture and information system.

Ethnobiology is the study of the complicated relationships between plant life and animals over centuries. The focal point of ethnobiology is on how plants and animals are used or, controlled and perceived in human societies and consists of plant and animal merchandise used for meals, medicine, divination, cosmetics, dyeing, textiles, refuge, equipment, currency, garb, rituals, social life and music and so forth. Ethnobiology is a multidisciplinary technological know-how defined as the interplay among plant, animals and people. The connection between flowers and animals with human cultures is not limited to the usage of plant for meals, clothing and refuge but also includes their use for religious ceremonies, ornamentation and fitness care.

Quantitative and experimental ethnobiology includes simple documentation, quantitative assessment of use and control and experimental evaluation. These days, ethnobiological surveys encompass implemented tasks that have the ability to ameliorate poverty tiers of the human beings, allowing them to make greater educated decisions about their destiny directions. These new processes beautify the nice of the technology, provide compensation for the cultural companies and keep in mind environmental concerns.

#### **Medicinal Plants**

Sarpagandha, a plant widely known as "Indian snake root" is used by the local people to heal snakebites and to help relax people who are in distress ("the medicine of the crazy"). The drug was first obtained in Ayurveda, and thusly in Unani medicine. Reserpine, an alkaloid found in the root of the herb, was associated with antipsychotic and hypertensive effects, and it became commonly remembered in pharmacy for its discovery in the mid 1950s. As of late, an analysis found that the Kani tribe of Kerala in India uses the Trichopus zeylanicus ssp. arogyapacha (Trichopodaceae), locally known as travancoricus. It is known as a health food used to develop immunity against different diseases, and as an immunomodulator to protect the body. The initial concentrate of the leaves came from a cocaine organisation, which was then shipped to Japan, Germany, Malaysia, and Indonesia. After receiving a 3% profit from the selling of the land, 2% of the net profit was shared with the Kani tribes of the area. It was the primary model for recognizing a registered (IPR) intellectual property right relating to ethnobotanical and medicinal plant knowledge.

### ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED

Plant riches have been from the beginning a critical part of human society. In order to meet the basic needs, such as food and sanctuary, people have been looking for a suitable treatment for various diseases among



plants. Traditional medicine stands for indigenous medicine which, in contrast to allopathic medicine based on ideas, values and perceptions, is used to protect wellbeing and to prevent, analyse and control physical and unhealthy behaviour. Traditional medicine is a well-known healthcare method that has been in existence for thousands of years and still enjoys popularity. Practitioners have made efforts to further improve public health. As Sofowora says, at least 60% of a country's population is expected to rely on traditional medicine. In countries such as China, India, Japan, Pakistan, Sri Lanka, Thailand and Korea, indigenous folk medicine practises are prevalent. The Chinese traditional medicine has a wide variety of therapies and is used to treat more than 200 million patients per year. In ancient Ethiopia, plants were used as medicine, and traditional medicine has become important throughout the modern world. The conventional medical methods and the cures are documented in oral speech and traditional pharmacopoeia.

These types of vascular plants, as shown by estimates by some scholars, are from about 6,000 A.D. Approximately 80% of the human population and 90% of animal life in this nation rely on traditional medicine. Usually, Ethiopian herbal medicine is used in the care of numerous human and animal diseases. The key elements of remedial aspect of herbal medicine practise are traditional healers known by different names in different areas of the country.

#### **Traditional Medicinal Plants Used**

Traditional medicine is used worldwide since it is subject, through the traditional intelligence archive of information, to locally available plant that are easily accessible and inexpensive, in addition to modern western medicines. Traditional medical systems are well-known in developing countries and up to 80% of the people rely on their vital healthcare needs from indigenous practising people on traditional medicines or on folk solutions. The vast majority of people depend on conventional medicinal plants for vital health services or for the treatment of human diseases. The bulk of research involved inquiries into using medicinal plants as proposed by conventional healers/practitioners to cure multiple diseases in different parts. Various varieties of plants are known to be used to cure complications with the liver. Liver is the body's main organ. Liver disorders remain real health issues which, among other factors, are caused by pharmaceutical products, additives and liquors.





Although liver disorders are stereotypically attributed to narcotics or narcotics or substances, today there is a range of causes that impact anyone from children to more mature adults across the globe. While more than 100 recognised types of liver disease are known. Chronic liver disease is a big source of worldwide bleakness and death. Conventional drug care has decreased the potency and possibly life-threating effects of certain chronic liver problems. The dependency on complementary and alternative care (CAM) in particular on natural therapies has increased. Different medicinal plants are used for the effects of herbal medicine on liver and different home-grown preparations are traditionally available since old times. Botanists or doctors with earlier medical history, physical examination and laboratory testing may examine the serious issues of the liver, among others.

From now on, we thought that it was useful to acquire and order current information as a premise for further study of these plants from ethnobotanical information on traditional hepatoprotective procedures used to treat human liver problems from different ethnic groups. Therefore, the main aim of this research was to document ethnobotanical knowledge about the use of medicinal plants as treatment for liver problems among the ethnic groups in Zambia.



#### **Methods**

Ethnobotanical information has been accrued the fashionable information series strategies had been observed to document indigenous knowledge of the local community on health, use, conservation, and threats of medicinal plants. The strategies hired for facts collection were semi structured interviews, institution discussion, guided area walks, and observations with members. Information has been accumulated through Traditional healers' survey interviews and local network questionnaires. Information on identity and use of nearby plant species was performed through a census with seven traditional healers who had been present in the course of the time of study. Interviews have been facilitated by translators who have been properly-conversant of the neighborhood language. Local medicinal understanding of flowers use was received from questionnaires administered to the nearby network members questionnaires had been designed to answer the subsequent studies flowers known with the aid of the traditional healers and local community participants had been mentioned in a tick list containing the vernacular and commonplace names and submitted.

#### **RESULTS AND DISCUSSION**

A debate about the existence of humans on this planet will not be achieved without the functioning of plants, as plants were an important part of human society since the dawn of humanity. Ethnobotany is the learning of different methods by which native plants are used to their everyday routine, diet, supplies, medications, and other practises through networks within a given province. Documentation is essential to preserve and consume natural resources. Several ethnobotanical studies were performed to capture the plants used in the complex sector for health care by neighbouring inhabitants. There are currently unrevealed plant species in the rainforests and their unexposed ability and biological activities need to be recognised and studied. Local therapeutically essential plants and minerals are practical application of western health medicine. The great medical knowledge base of the society moves on with and expert who bites the dust without an apprentice. Documenting this undisclosed and conventional knowledge is a significant measure of understanding nature, planning steps for the protection of medicinal plants and enhancing science. Present research results are summarised for registered medicinal plants and other related data. A total of 100 medicinal plants belonging to 43 families and 82 genera have been archived. The dominant families were Fabaceae (11%), Cucurbitaceae (8%), Caesalpiniaceae and Poaceae (6%), and Malvaceae and Solanaceae (5%). The genera were Cassia (6 spp.), Calotropis, Desmodium and Eclipta (2 spp. each), Terminalia, Solanum, Sida and Luffa (3 spp. each), and Calotropis (2 spp. each). Chaudhary recently revealed the medicinal importance of plants from the Vindhya family of the Fabaceae. 33 percent of the 100 plants that have been perceived are trees. Tiny herbs (28%), shrub trailed (17%), wine/glaze (16%) and grass belong to other kinds included (6 percent). Any plants can



be found in suburban areas, property, roadsides, river banks and tropical forests. Forest access is popular for trees and herbs. It is therefore convenient to use these plants for the local healers.

Bronchitis, constipation diarrhoea, dysentery, gastric problems, cuttings, bruises, urinarian problems, jaundice etc. are the typical diseases for people living in tribes in the study field. The most common components were fruit, roots and whole plants (17%) that were trailed with leaves (16%) and barks (15%). According to their request this material is not provided by the present paper, the precise aspect and length of treatment are regarded as intellectual property of informant individuals. Most informants detailed that decoction (64%), as it appears to be provided with sugar, is the best choice for administration. Another traditional approach to preparing was crude (17%) with powder (7%), pasta (5%), juice (4%) and gasoline (1 percent). The decoction was obtained when the plant content was boiled with water, and reduced to a tenth. Many of the medications are delivered orally (91 percent). For skin disorders and wounds it is usually performed direct application of pâte (with oil) or medicated oil (7%). Most of the drugs were taken orally and were conducted elsewhere in conjunction with certain other research. Around 13 animals have been found to be in red rundown, but only one out of 13 is in the endangered group and the others are less of a concern.

In the current study, a complete of medicinal plant species in 27 families has been utilized by conventional healers within the Marakwet ethnic community of Kenya. A previous have a look at inside the identical location yielded a complete of medicinal plant utilized by the neighborhood network. Knowledge of the quantity of medicinal plant inside the cutting-edge study became better than that during primarily based at the documented medicinal plant used, it's miles suggested that there may be more medicinal plants utilized by the Marakwet or the expertise of the traditional plant being used for medicinal motive is a great deal higher than in other regions or both. But, for the duration of the study, there has been additionally evidence of feasible lack of traditional medicinal information as attested through the traditional healers who expressed numerous knowledge on naming of medicinal plant. Indeed, the observe installed an overlap in naming of up to 60% of the medicinal plant life by traditional healers, wherein 1.7% of the diagnosed species had as much as 4-5 names that overlapped of their nearby nomenclature while as much as 45.3% overlapped in their names and 12.2% overlapped with up to three conventional names. Only 40% of the species had a unmarried and consensus call a number of the conventional healers. Overlapping of traditional names of bushes is one manner that has been established to bring about the loss of traditional medicinal know-how. It's far feasible that loss of traditional medicinal know-how may be attributed to the character of transmission of traditional medicinal understanding from one technology to the alternative, which has regularly been orally completed. During the examiner, the computed medicinal plant identity index become 37% indicating that out of every one hundred plant species,



the locals managed to become aware of definitely most effective. It turned into even more sudden that only 2.6% of the nearby community individuals managed to pick out all of the medicinal plant life, even as up to 13% of the local community participants ought to simplest discover less than 20% of the plant species.

Outcomes recommend an erosion of traditional medicinal expertise, which consents with different studies some other place. Belly ache, malaria, diarrhea, chest troubles, and typhoid have been extra normal illnesses identified through the local community members. Other sicknesses consisting of malaria, diabetes, and pneumonia had been identified with the aid of 61.2%, 54.3%, and 51.2% of the local community contributors, respectively information index of medicinal plant species for treating various sicknesses become low among the local.

The knowledge of medicine plants use become in large part related to commonplace sicknesses within the vicinity. However, the vegetation for the remedy of arteriosclerosis, meningitis, arthritis, trachoma, smallpox, rheumatic fever, and gout which can be rare in the location have been known most effective via the traditional healers and few local community participants.

The study also hooked up low ranges of traditional knowledge of medicinal plant parts used. at the same time as information of using root become extensive among the local community contributors, the knowledge of the use of stem, branches, and leaf in management of ailment turned into low some of the nearby community individuals as well as the expertise of the usage of culmination, bark, bulb, and plant discrepancies among knowledge and use imply a possible erosion of local know-how.

#### **Conclusions**

This is study established that the traditional medicinal expertise of medicinal plant use among low or going through erosion. There is, consequently, a pressing want to record this information, as it's far hastily disappearing due to have an effect on of western remedy and different motives which includes sociocultural problems and overexploitation coupled with rapid deforestation. It's far critical to gather this fact and increase a database of medicinal plants for future studies and capability development of recent pills.

#### REFERENCES

- 1. OM PRAKASH ET AL (2017) Medicinal Plant Resources of Western Uttar Pradesh State of India, Volume 11, Issue 11, pp 1-12, ISSN: 2319-2399.
- 2. PADMAA M PAARAKH (2010) Terminalia Arjuna (Roxb.) Wt. and Arn. : A Review, Volume 6, No 5, pp 515-534.



- 3. RAKESH SAMAR ET AL (2015) Ethnobotanical Study of Traditional Medicinal Plants Used By Tribe of Guna District, Madhya Pradesh, India, Volume 4 Number 7, pp. 466-471, ISSN: 2319-7706.
- 4. RANJEET KUMAR YADAV AND ANAND PRAKASH (2014) Aromatic Medicinal Plant Resources in Uttar Pradesh, India, Volume 3, Issue 3, ISSN: 2167-0412.
- 5. REGINALDO VICENTE RIBEIROA ET AL (2017) Ethnobotanical study of medicinal plants used by Ribeirinhos in the North Araguaia microregion, Mato Grosso, Brazil, pp 69-102.
- 6. RONZU AHMMED ET AL (2017) A study on diversity of medicinal plant usage by folk medicinal practitioners in different villages of Dhunat Upazila, Bogra district, Bangladesh, Volume 6, No 1, pp177-186, ISSN: 2278-4136.
- 7. SHALU CHAUDHARY (2011) Medicinal plants of district Bijnor (U.P.) India with special reference to their folk medicinal uses, Volume 2, Issue 4, Pages 19-23, ISSN: 2218-1768.
- 8. SHREYA MANDAL ET AL (2013) Analysis of phytochemical profile of Terminalia Arjuna bark extract with antioxidative and antimicrobial properties, Volume 3, issue 12, pp 960-966.
- 9. SIMMY GUPTA ET AL (2018) Terminalia Arjuna (Roxb.) Wight &Arn.: Competent source of bioactive components in functional food and drugs, Volume 7, issue 3, pp 223-231, ISSN: 2349-8242.
- 10. TESFAYE HAILEMARIAM BEKALO ET AL (2009) An ethnobotanical study of medicinal plants used by local people in the lowlands of Konta Special Woreda, southern nations, nationalities and peoples regional state, Ethiopia, pp 1-15.
- 11. Joshi, M. A. D. Bibliometric Survey on Deep Learning Based Recommendation System. (2024), myresearchgo <a href="https://assets.zyrosite.com/AE0aDPpwPGCpQx09/bibliometric-survey-on-deep-learning-base recommendation-system-m6LZ3KM0NaIDGQMg.pdf">https://assets.zyrosite.com/AE0aDPpwPGCpQx09/bibliometric-survey-on-deep-learning-base recommendation-system-m6LZ3KM0NaIDGQMg.pdf</a>, Volume 1, issue 1, ISSN: 3107-3816