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Research Article

Ethnomedicinal Exploration of Medicinal Plants Used in Dholla of Tinsukia District

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Abstract

The present study documents the ethnomedicinal knowledge of the Nepali (Indian Gorkha) community residing in Dholla village of Tinsukia district, Assam. An ethnomedicinal survey was conducted through personal interviews, group discussions, and field observations involving local healers, elderly community members, and traditional knowledge holders above 40 years of age. Information regarding local plant names, parts used, and therapeutic applications was systematically recorded. The study documented 50 medicinal plant species belonging to 35 families, used for the treatment of ailments such as gastrointestinal disorders, skin diseases, respiratory problems, diabetes, wounds, and fever. Leaves were the most frequently used plant part (54%), followed by fruits and roots. The findings highlight the continued reliance on plant-based traditional healthcare practices within the community, while also revealing a gradual decline in ethnomedicinal knowledge among the younger generation. This documentation contributes to the preservation of indigenous knowledge and provides a valuable baseline for future pharmacological and conservation-oriented research.

Keywords: Ethnomedicinal surveys, Herbal medicine, Indigenous communities, Biodiversity conservation, Traditional medicine.

Introduction

Ethnomedicinal surveys in North East Assam hold paramount significance due to their role in preserving and documenting the rich traditional knowledge of herbal medicine practiced by indigenous communities. These surveys facilitate the discovery of new medicinal plants, contribute to biodiversity conservation, promote cultural preservation, support sustainable livelihoods, and offer potential solutions to public health challenges. By bridging the gap between traditional and modern medicine, these surveys not only respect local traditions but also provide valuable insights for scientific research and healthcare practices, ultimately benefiting both indigenous communities and the broader medical community [1]. While regional ethnobotanical surveys exist, detailed investigations focusing on the Nepali community or specifically in Dholla village was not conducted. Limited data are available on the specific plant species they use, their therapeutic applications, and the cultural context of their practices. This study addresses these gaps by documenting localized, community-specific knowledge, highlighting both commonly known and underreported ethnomedicinal practices. The study aims to document the medicinal plant species used by the Nepali community of Dholla village, including local names, plant parts used, and therapeutic applications. This study was conducted within the Nepali community residing in Dholla village of Tinsukia district. These individuals belong to the Indian Gorkhas, also known as Indian Nepalis. This ethno-cultural group has deep roots in India, and their common language is Nepali. They primarily inhabit regions such as Sikkim, West Bengal, Northeastern states, and Uttarakhand. Additionally, Indian Gorkhas have a significant presence both within India and abroad [2]. “Traditional Remedies Unveiled: Ethnomedicinal Exploration of Medicinal Plants Used in Dholla of Tinsukia District" is a comprehensive study that delves into the rich heritage of ethnomedicinal practices in the Dholla region of Tinsukia District. Through meticulous research, this

exploration unveils the traditional remedies passed down through generations, shedding light on the indigenous knowledge of medicinal plants and their therapeutic uses in the local community. The study endeavors to embark on a comprehensive ethnomedicinal survey within the Dholla region of Tinsukia District, focusing specifically on the Nepali community. By engaging directly with local healers, community elders, and practitioners, this research seeks to unveil the intricate tapestry of traditional healing practices, documenting the indigenous knowledge systems surrounding medicinal plants and their applications [3-7].

Materıals and Method

Description of the Study Site

Assam is one of the smaller Indian states with 2.8% of the total area of the Indian Union and 2.7% of its population. It is located between 90-96°C.Tinsukia is situated in between 27 23' to 27 48'N latitude and 93 22' to 95 38'E longitude. The study was carried out in Dholla village of Tinsukia district. Dholla village is approximately 45km away from Tinsukia town. Dholla Gaon village is located in Doom Dooma subdivision of Tinsukia district in Assam, India. The average ambient temperature remains 23.1°C, varies grom 8.5°C to 36.1°C. The average relative humidity remains around 74.4%, varies from 25.4% to 98.9%.

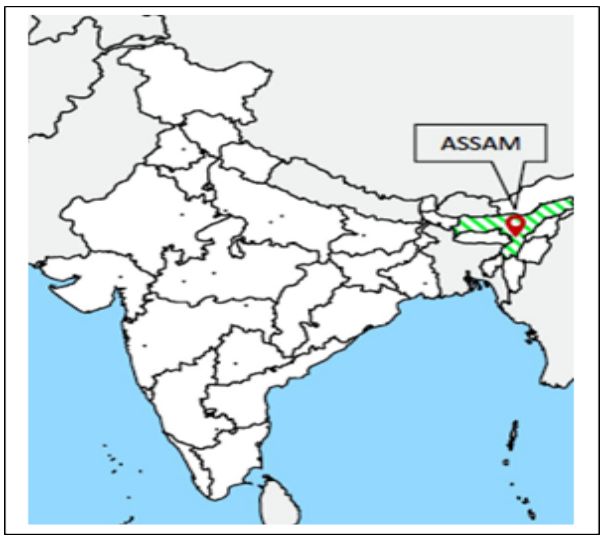

Figure 1. *Map showing Assam in India*

Figure 2. *Map showing Tinsukia district in Assam*

Figure 3. *Map showing Dholla in Tinsukia district*

Ethnobotanical Data Collection and Investigation

The study was conducted through extensive personal interviews, in-depth discussion, participant observations with the traditional medical practitioners and selected knowledge holders of local Nepali folks of Dholla villages in Tinsukia district, Assam. The present study targeted a total of 56 elderly individuals from the community, comprising 42 males and 14 females, all above 40 years of age, who practice traditional health care systems and possess substantial knowledge of various believes. Some of them are folk healers and some are not. They are usually cultivators and most of them are familiar about the traditional uses of medicinal plants in various purposes. Moreover, the housewives who collect different wild plants as vegetables for cooking purposes were also considered for interview. The study was carried out by interviewing traditional healers and village elders. They were interviewed and their treatment details were recorded in the information sheets. Informed verbal consent was obtained from all participants after clearly explaining the objectives of the study and assuring confidentiality of the shared information. First-hand information was collected using standard semi-structured interview schedules and field data sheets commonly employed in ethnobotanical studies covering local plant names, parts used, dosage and therapeutic applications. Interviews were supplemented with participant observation and group discussions to ensure data reliability. The response was very positive from the local healers. The local healers usually collect the plants from the wild as and when there is a need. In some cases, a few of them maintained small herbal gardens for the purpose. Digital photographs of the plants were also taken wherever possible.

The quantitative analysis was performed using three key ethnobotanical indices to determine the relative importance and medicinal value of the plant species cited by the 56 informants (N=56). Use Value (UV), Relative Frequency of Citation (RFC), and Fidelity Level (FL) were calculated to quantitatively assess the ethnomedicinal significance of recorded plant species. UV was calculated as the total number of use reports (ΣUi) for a given species divided by the total number of informants (N = 56). RFC was calculated as the number of informants citing a species (FC) divided by N. Fidelity Level (FL %) was calculated as the percentage of informants who cited a plant species for its major ailment (Np) relative to the total number of informants citing that species [8-10].

$$UV = \frac{\sum Ui}{N}$$

Equation 1

Where,
U_i= Number of use reports for a given species by each informant
N= Total number of informants

$$RFC = \frac{FC}{N}$$

Equation 2

Where,
FC= Number of informants mentioning the species
N= Total number of informants

$$FL\% = \left(\frac{Np}{FC}\right) \times 100$$

Equation 3

Where,
N_p= Number of informants who cited the plant for a particular ailment
FC= Total informants citing that plant

Results

Previous ethnobotanical investigations conducted across Assam and Northeast India have extensively documented the use of medicinal plants by diverse ethnic communities. These studies report species numbers ranging from 40-200, depending on geographical location and community composition [11-14]. Several medicinal plants recorded in the present study such as *Centella asiatica*, *Ocimum sanctum*, *Justicia adhatoda*, *Terminalia arjuna*, *Tinospora sinensis*, *Rauvolfia serpentina* and *Andrographis paniculata* have also been consistently reported in earlier studies from Tinsukia, Dibrugarh, Barak Valley and other districts. These plants are used for treating gastrointestinal disorders, respiratory ailments, skin diseases, diabetes, and cardiovascular conditions. This pattern indicates a shared ethnomedicinal knowledge base across the region [15-17]. However, the present investigation provides a distinct contribution by specifically documenting the ethnomedicinal practices of the Nepali (Indian Gorkha) community of Dholla village. Certain therapeutic applications documented in this study including the use of *Cestrum nocturnum*, *Pachystachys lutea*, and *Lasia spinosa* for specific ailments are less reported or absent in earlier regional literature. The documentation of 50 medicinal plant species belonging to 35 families further emphasizes the importance of localized, community-specific ethnomedicinal knowledge. It also underscores the urgency of systematic documentation before such traditional practices decline due to increasing modernization and changing healthcare preferences [11,14]. The study aimed to explore and document the traditional healing practices of the local healers, focusing on their use of herbal medicine, rituals, ceremonies, and other techniques. Through interviews and direct observations, valuable insights into their methods, beliefs, and challenges were gathered. The following sections summarize the key findings, highlighting the integral role of traditional healing in the community, the specific practices employed, and the various obstacles faced by the healers in preserving and continuing their knowledge and traditions amidst modern influences. The use of medicinal plants and herbs remains a cornerstone of traditional healing practices among the healers. Various plant parts, including roots, leaves, bark, and other components are utilized to create remedies aimed at treating a wide range of ailments. The healers emphasized the importance of plant-based treatments in addressing common health issues and maintaining overall well-being within the community. Different plants and parts of the plant used by the traditional healers of the study area has been summarized in Table 1. Table 2 gives an overview of the plant families and no. of plant species. Fig 6 and 7 comprises pictures of the plants and remedies described by the traditional healers.

Plants Used

The present field survey has recorded a total of 50 ethnomedicinal plants. In Table 1, Information regarding local name(s) (as recorded during the fieldwork), scientific name, family, habit, parts used and

ethnomedicinal uses for each species have also been provided. The plant parts were used including leaves, roots, fruits, seeds, bark, flowers, and underground parts.

Table 1. *List of Traditionally Used Ethnomedicinal Plants in Dholla Village of Tinsukia District*

Scientific name	Common Name	Family	Used for	Part Used
Bryophyllum pinnatum	Pate goja/ Dupor tenga	Crassulaceae	Used in urinary infections, rashes, various skin problems. The crushed leaves are applied to heal abscess.	Leaves
Centella asiatica	Manimuni	Apiaceae	Diuretic, leucorrhea, UTI, wound healing	
Madagascar periwinkle	Nayantara	Apocynaceae	In burns, the leaves are boiled along with water and given with goat milk in case of abdominal gripes, used as antidiabetic, treat high blood pressure	
Azadirachta indica	Moha-neem	Meliaceae	Chewing neem twigs can help prevent issue like gum disease, cavities, used in acne, stomach, worms, diabetes, chicken pox, cholera	
Cestrum nocturnum	Hewali	Oleaceae	Worms, in high Blood pressure, antidiabetic	
Terminalia arjuna	Arjun gas	Combretaceae	Few drops of juice of arjuna can be useful in ear pain, asthma,	
Ocimum sanctum	Tulosi	Lamiaceae	In cough, cold, fever, chewing Tulsi leaves reduces gum problem and prevent bad breath	
Tinospora sinensis	Hogunilota	Menispermaceae	Antidiabetic, in worms	
Leucas aspera Spreng	Durun-bon	Lamiaceae	The leaves used in lack of appetite, sinus, headache. The leaf extract used in skin problems.	
Cuscuta reflexa Roxb	Akashi lota	Lauraceae	Wound healing, skin ailments, inflammation, indigestion	
Cajanus cajan	Rohor	Papilionaceae	Used to treat mouth sores	
Mikania micrantha	Japanilota	Asteraceae	Anti-inflammatory, wound dressing, sores	
Justicia adhatoda	Boga bahok	Acanthaceae	Cough, colds, asthma, bronchodilator, bronchitis, tuberculosis	
Andrographis paniculata	Kalmegh	Acanthaceae	Helps to boost immunity, cold, sinusitis, allergies	

Calotropis gigantean	Akon	Apocynaceae	Diarrhea, sinus, fistula, skin disease, jaundice	
Oxalis corniculata	Tengesi tenga	Oxalidaceae	Soothes painful insect bites. It also improves memory and strengthens the nervous system	
Lasia spinosa (L.) Thwaites	Sengmora	Araceae	Bleeding cough, intestinal diseases, stomach pain, uterine cancer	
Eclipta prostrata	Kehraaj	Asteraceae	Skin problems, jaundice, gastrointestinal problems, respiratory problems such as asthma fever, hair loss whitening of hair, cuts, wounds.	
Bonnaya brachiata	Horu Kasidoria	Schrophulariaceae	Wound healing	
Eclipta alba (L.) Hassk	Bhringraaj	Asteraceae	Diabetes, skin disease, high blood pressure, a hair grower and dye	
Bacopa monnieri	Brahmi	Scrophularaciae	Memory improvement, insomnia, epilepsy	
Houttuynia cordata Thuumb	Mousundori	Saururaceae	Remove black heads, soothe irritated skin	
Vitex negunda	Posotia	Lamiaceae	Bone fractures, infertility, menopause symptoms.	
Clerodendrum colebrookianum	Nephaphu	Lamiaceae	Hypertension	
Paederia foetida	Bhebeli lota, Bhedai lota	Rubiaceae	Asthma, diarrhea, dysentery, piles, diabetes	
Ipomoea aquatica	Kolmou	Convolvulaceae	Diabetes	
Malastoma malabathricum	Phutuki	Melastomataceae	Wound healing	
Emblica officinalis	Amlokhi	Phyllanthaceae	Hair growth, used to aid digestion, asantiemetic, used in Gastritis	Fruits
Piper nigrum	Jaluk	Piperaceae	Indigestion, body ache, in post labor Ailment, bone fracture, pneumonia	
Capsicum chinense Jacquin	Bhoot jolokia	Solanaceae	Gastritis, heart related disease, skin related diseases, lowers blood sugar levels	
Cissus quadrangularis	Harjora	Vitaceae	Pain, regulate menstruation, bone fractures	
Cajanus cajan	Rohor	Papilionaceae	Used to treat mouth sores	
Mikania micrantha	Japanilota	Asteraceae	Anti-inflammatory, wound dressing, sores	
Shorea robusta	Saal mugra	Dipterocarpaceae	Leprosy, wounds, ulcers, cough, gonorrhea, headache, diarrhea, vaginal discharges.	
Piper longum	Pipoli	Piperaceae	Asthma, constipation, Cough.	

Myristica fragrans	Jaaifol	Myristicaceae	Stomach ulcers, indigestion, liver disorders, diuretic	
Citrus jambhiri	Gul nemu	Rutaceae	Urinary ailments, renal stones	
Solanum violaceum	Bhekuritita	Solanaceae	Asthma, dry cough, worms and fever.	
Garcinia cowa	Kuji thekera	Clusiaceae	Diarrhea, dysentery	
Acorus calamus	Bosh, Bosa	Acoraceae	Gastritis, bronchitis, asthma, tuberculosis, dysentery, malaria	Roots
Leucas aspera Spreng	Durun-bon	Lamiaceae	Root is used to treat pneumonia	
Asparagus racemosus	Sotmul	Asparagaceae	Kidney stone	
Caryota urens	Sewa	Arecaceae	Increases milk output in lactating mother	
Abrus precatorius	Latumoni	Fabaceae	Urniary disorders	
Cissus quadrangularis	Harjora	Vitaceae	Pain, regulate menstruation, bone fractures	Stem
Costus speciosus	Jom lukhuti	Zingiberaceae	Jaundice	Rhizomes
Curcuma amada	Aamada	Zingiberaceae	Diarrhea, dysentery	
Terminalia arjuna	Arjun gas	Combretaceae	Few drops of juice of arjuna can be useful in ear pain, asthma, bark is used in heart related problem, improve Muscle strength	Bark
Shorea robusta	Saal mugra	Dipterocarpaceae	Leprosy, wounds, ulcers, cough, gonorrhea, headache, diarrhea, vaginal discharges.	
Drymaria cordata	Laijabori	Caryophyllaceae	Fever, stomach ache	Aerial Part
Alternanther sessilis	Mati kanduri	Amaranthaceae	Dysentery, stomach trouble	
Mussaenda roxburghii	Hukloti	Rubiaceae	Stomach problems	
Chenopodium album	Bathuasak, Jilmilsak	Amaranthaceae	Against round and hookworms	Seeds
Pachystachys lutea	Hunboronia	Acanthaceae	Heart diseases	Flowers
Rauvolfia serpentina	Sarpa gandha	Solanaceae	Treatment of high blood pressure, insomnia, asthma, acute stomach ache	

Diversity of the Plants Used

A total of 50 medicinal plants were recorded from 35 different plant families (Table 2). This shows a diversity among the plants they used. Among the different plant parts used to cure various diseases, leaves contributed the most (54.0%), followed by fruits (22.0%), seeds (17%), roots (12.0%) (Table3). Figure 4 and 5 shows diverse plant families and parts used by the people of Dholla village of Tinsukia District.

Table 2. *Diversity of medicinal plants of different families used by the people of Dolla, Tinsukia*

Plant families	**No. of Plant Species**
Crassulaceae	1
Apiaceae	1
Apocynaceae	2
Meliaceae	1
Oleaceae	1
Phyllanthaceae	1
Combretaceae	1
Lamiaceae	4
Fabaceae	2
Piperaceae	2
Solanaceae	3
Menispermaceae	1
Acoraceae	1
Lauraceae	1
Vitaceae	1
Papilionaceae	1
Asteraceae	3
Zingiberaceae	2
Acanthaceae	3
Oxalidaceae	1
Dipterocarpaceae	1
Amaranthaceae	2
Araceae	1
Schrophulariaceae	1
Saururaceae	1
Myristicaceae	1
Rutaceae	1
Rubiaceae	2
Asparagaceae	1
Caryophyllaceae	1
Arecaceae	1
Convolvulaceae	1
Clusiaceae	1
Melastomataceae	1

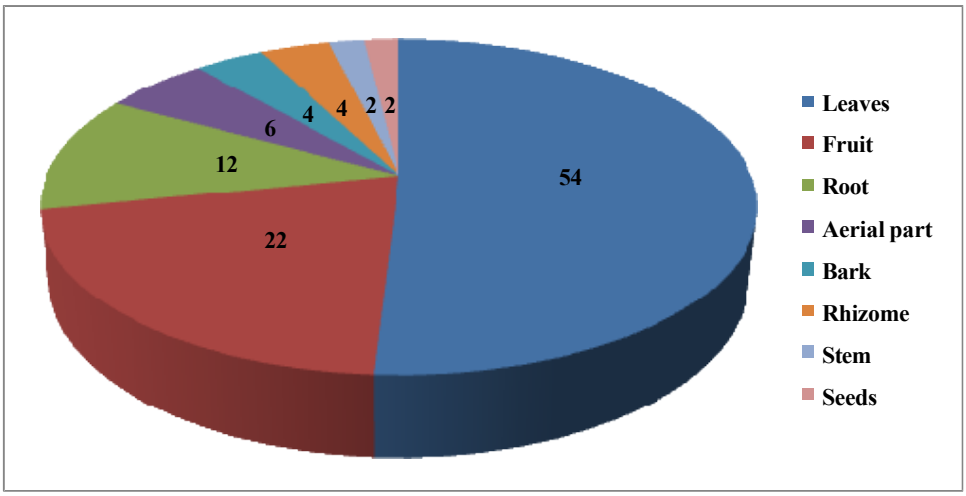

Figure 4. *Parts of plant use with percentage*

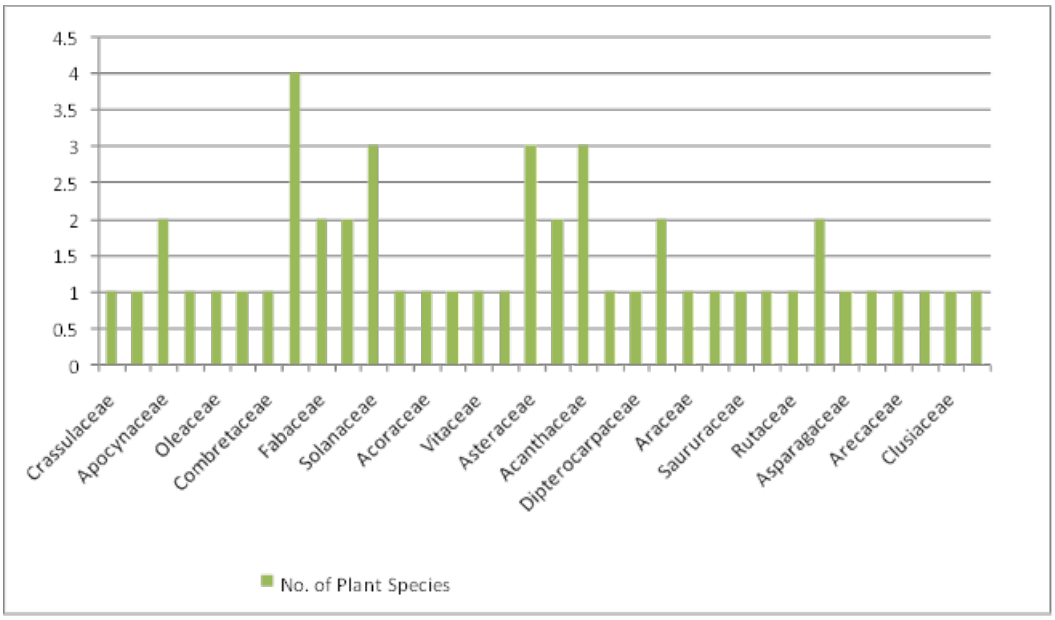

Figure 5. *A graph showing no of plants and name of families*

Table 3. *Percentage and frequency of plant parts used by the people of Dolla, Tinsukia District:*

Serial no.	Plant part used	Frequency	Percentage (%)
1	Leaves	27	54.0
2	Fruit	11	22.0
3	Root	6	12.0
4	Aerial part	3	6.0
5	Bark	2	4.0
6	Rhizome	2	4.0
7	Stem	1	2.0
8	Seeds	1	2.0

Quantitative Ethnobotanical Indices

The quantitative analysis showed high variation in the ethnomedicinal importance of the documented plant species. Many plant species showed high RFC values, which indicate their widespread utilization and recognition within the Nepali community of Dholla village. High Use Values (UV) were associated with plant species reported to have multiple therapeutic applications, suggesting their versatility and repeated use across different ailment categories. Besides that, various plant species showed very high Fidelity Level (FL) values, which indicates that strong informant consensus regarding their specific medicinal uses. Table 4 shows three different indices calculated from the information received.

Table 4. *Calculation of Quantitative Ethnobotanical Indices*

Sl. No.	Calculation	Range (Highest-Lowest)	Lowest Rated Species	Top Rated Species
1	Use Value (U.V.)	0.018-0.161	*Costus speciosus, Chenopodium album, Ipomoea aquatica, Garcinia cowa, Abrus precatorius*	*Eclipta prostrata, Azadirachta indica, Justicia adhatoda, Acorus calamus*
2	Fidelity Level (F.L.)	25%-100%	*Justicia adhatoda, Solanum violaceum, Mikania micrantha, Capsicum chinense*	*Costus speciosus, Chenopodium album, Clerodendrum colebrookianum, Abrus precatorius and others*

3	Relative Frequency of Citation (R.F.C.)	0.018-0.411	*Bonnaya brachiata, Pachystachys lutea, Asparagus racemosus, Caryota urens, Malastoma malabathricum*	*Emblica officinalis, Ocimum sanctum, Piper nigrum, Azadirachta indica, Bacopa monnieri*

The UV ranged from 0.018 to 0.161. The species *Eclipta prostrata* (0.161) and *Azadirachta indica* (0.143) were top-rated, indicating they have the highest number of separate medicinal uses in the community. The FL ranged from a low of 25.00% (*Justicia adhatoda*) to a high of 100%. Species like *Costus speciosus* and *Chenopodium album* reached 100%, showing absolute consensus for treating specific ailments like Jaundice and Worms. The RFC ranged from 0.018 to 0.411. *Emblica officinalis* (0.411) was the most frequently cited plant, proving it is the most well-known species among the 56 informants.

(i)

(ii)

(iii)

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Figure 6. *Pictures of the plants used by the community in Dolla, Tinsukia District. (i) Bryophyllum pinnatum; (ii) Centella asiatica; (iii) Madagascar periwinkle; (iv) Azadirachta indica; (v) Cestrum nocturnum; (vi) Emblica officinalis; (vii) Terminalia arjuna; (viii) Ocimum sanctum; (ix) Mimosa pudica; (x) Piper nigrum; (xi) Capsicum chinense Jacquin; (xii) Tinospora sinensis; (xiii) Acorus calamus; (xiv) Leucas aspera Spreng; (xv) Cuscuta reflexa roxb; (xvi) Cissus quadrangularis; (xvii) Cajanus cajan; (xviii) Mikania micrantha; (xix) Costus speciosus; (xx) Justicia adhatoda (xxi) Andrographis paniculata; (xxii) Calotropis gigantean; (xxiii) Oxalis corniculata; (xxiv) Shorea robusta; (xxv) Chenopodium album; (xxvi) Lasia spinosa (L.) Thwaites; (xxvii) Eclipta prostrata; (xxviii) Bonnaya brachiata; (xxix) Eclipta alba (L.) Hassk; (xxx) Piper longum; (xxxi) Bacopa monnieri; (xxxii) Houttuynia cordata Thuumb; (xxxiii) Vitex negunda; (xxxiv) Myristica fragrans; (xxxv) Pachystachys lutea; (xxxvi) Rauvolfia Serpentine; (xxxvii) Clerodendron colebrookianum; (xxxviii), Citrus jambhiri; (xxxix) Paederia foetida; (xl) Solanum violaceum; (xli) Asparagus racemosus; (xlii) Drymaria cordata; (xliii) Alternanthera sessilis; (xliv) Caryota urens; (xlv) Ipomoea aquatica; (xlvi) Curcuma amada; (xlvii) Garcinia cowa; (xlviii), Melastoma malabathricum; (xlix) Mussaenda roxburghii; (l) Abrus precatorius*

Figure 7. *Pictures of local healers of Dholla village, Tinsukia District*

Discussion

The results show a close connection between the local plant resources and the Nepali community in Dholla village, suggesting that ethnomedicinal practices are still a useful and affordable primary healthcare system. The ongoing use of medicinal plants is a reflection of both accessibility and accumulated empirical knowledge that has been honed over time. For modern drug discovery, this traditional knowledge system is a valuable resource, especially when it comes to finding plant species with proven therapeutic potential. A regionally shared knowledge base shaped by similar ecological conditions is suggested by the significant overlap between the medicinal plant repertoire recorded in this study and previous ethnobotanical investigations from Assam and other parts of Northeast India. Similar usage patterns have also been documented from Nepal, where species like Centella asiatica, Bacopa monnieri, Rauvolfia serpentina, Asparagus racemosus, and Cuscuta reflexa are frequently used for inflammatory conditions, neurological disorders, hypertension, and renal illnesses [18,19].

This regional consistency demonstrates the continuity of traditional medical knowledge among Nepali communities across political boundaries and supports the validity of the reported uses.

There are significant ecological and practical ramifications to the fact that leaves are the most commonly used plant part (54%). Harvesting leaves promotes sustainable resource use because it is typically less damaging than collecting roots or bark. Additionally, leaves are preferred in traditional remedies because they are known to accumulate higher levels of secondary metabolites that have therapeutic activity [16,18].

The interpretation of ethnomedicinal significance was further reinforced by quantitative indices. Pharmacological evidence is in good agreement with species that have high UV, RFC, and FL values. Azadirachta indica has been extensively used for skin and metabolic disorders due to its widely validated antimicrobial, antidiabetic, and anti-inflammatory properties [19,20]. According to scientific research,

Eclipta prostrata, which had the highest UV, has hepatoprotective, wound-healing, and hair-growth-promoting qualities [16,21].

Similar to this, bronchodilatory alkaloids like vasicine and vasicinone support the use of Justicia adhatoda for respiratory conditions [22], while Terminalia arjuna's cardioprotective use is well-established due to its antioxidant and lipid-lowering properties [23]. Pharmacological studies support the high Fidelity Levels found for Costus speciosus and Chenopodium album, which also show strong informant consensus and therapeutic specificity [24,25]. The high consensus among informants for these species indicates strong therapeutic reliability within the community.

However, this study also highlights challenges, such as the potential loss of traditional knowledge due to modernization and lack of documentation. There is a critical need for initiatives to preserve this knowledge, possibly through digital documentation and collaboration with ethnobotanists and pharmacologists. Furthermore, integrating ethnomedicinal knowledge with modern healthcare systems could enhance primary healthcare services in rural areas. This integration requires respectful and ethical collaboration, ensuring that the cultural integrity and intellectual property rights of the Nepali community are upheld.

CONCLUSION

This study presents a comprehensive account of ethnomedicinal plant use among the Nepali (Indian Gorkha) community in Dholla village, Tinsukia district, Assam. The documentation of 50 medicinal plant species from 35 families underscores the community's ongoing reliance on plant-based traditional healthcare systems for treating common ailments, including gastrointestinal disorders, respiratory problems, skin diseases, diabetes, wounds, and fever. The predominance of leaf usage indicates both accessibility and a sustainable approach to resource management.

Application of quantitative ethnobotanical indices, including Use Value, Relative Frequency of Citation, and Fidelity Level, facilitated the identification of culturally significant and frequently utilized medicinal species. *Eclipta prostrata*, *Azadirachta indica*, *Justicia adhatoda*, *Acorus calamus*, and *Emblica officinalis* exhibited high values across these indices, reflecting strong informant consensus and consistent therapeutic application. These species constitute essential elements of the local ethnomedicinal system and warrant further pharmacological research.

The findings also indicate a significant decline in the transmission of traditional knowledge, especially among younger community members who are increasingly dependent on modern healthcare practices. Ethnomedicinal knowledge remains primarily with elderly individuals, rendering it susceptible to gradual erosion. As the study is confined to a single village, broader regional investigations are required to capture both variations and commonalities among Nepali communities in Assam and Northeast India. Future research should prioritize phytochemical and pharmacological validation of the most frequently cited plant species, as well as toxicity and dosage assessments.

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