

A Check List of Ethnomedicinal Plants Used by Ethnic Communities of Jorhat District of Assam, India

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ABSTRACT

This study aims to document the ethnomedicinal plants used by ethnic communities in the Jorhat district of Assam, India. Indigenous knowledge about medicinal plants is a crucial part of traditional healthcare practices, yet much of this knowledge remains undocumented. The objective is to create a checklist of plants, detailing their local uses, to provide a resource for future phytochemical studies and promote the conservation of both the plants and the cultural knowledge associated with them. Field surveys were conducted in various regions of Jorhat from 2022 to 2023, focusing on areas populated by ethnic groups. Information on medicinal plants was collected through interviews with knowledgeable community members, such as elders and herbal practitioners. Plant specimens were identified with the help of local floras and the information was cross-verified across multiple informants and existing literature. A total of 125 plant species with 60 genera were documented, each classified by family, local name, plant part used and traditional medicinal application. The plants are employed to treat various ailments ranging from digestive issues and respiratory diseases to skin disorders and infections. The ethnomedicinal knowledge of Jorhat's ethnic communities holds great potential for contributing to modern healthcare, particularly in drug discovery. The catalogued plant species could serve as a valuable resource for researchers seeking bioactive compounds, while the study underscores the need for conservation efforts to protect both biodiversity and indigenous knowledge.

Keywords: Ethnomedicine, Traditional Knowledge, Tribe, Treatments.

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INTRODUCTION

From the prehistoric era, plants have played a pivotal role in the improvement of modern medicine. They have evolved into various forms, including the complementary therapies of Ayurveda, Unani and Siddha, used to treat a range of illnesses.^[1] Medicinal plants are valued for their phyto-constituents, which have specific physiological and biochemical effects on humans and animals. These bioactive substances, known as phytochemicals or secondary metabolites, include glycosides, terpenes,

alkaloids, flavonoids, tannins, phenolics, saponins and steroids.^[2] Indigenous people have long used plants as remedies but typically transmit this knowledge orally, without formal documentation.^[3] The World Health Organisation (WHO) has shown significant interest in documenting therapeutic herbs used by various global tribes.^[4] Assam, a state in India, is a biodiversity hotspot located between latitudes 24.2°-27.6° N and longitudes 88.8°-96° E, covering an area of 78,438 sq. km.^[5] The state, with a population of 3.12 crore as per the 2011 census, experiences high rainfall and a humid tropical to subtropical climate. Its landscape features dense evergreen and semi-evergreen tropical forests, including bamboo. Assam is home to several ethnic tribes of the Indo-Mongoloid race, such as the Bodo, Mishing, Karbi, Dimasha, Rabha, Tiwa, Deori, Chutiya, Koch, Motok, Moran, Sonowal Kachari and Ahom.^[6] However, habitat

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loss and deforestation are rapidly eroding an untapped source of phytochemical knowledge. Herbal medicine, a critical component of primary healthcare in developing nations like India, is seen as affordable, efficient and safe. There is a global trend toward reviving traditional herbal therapies and examining medicinal plants used by various ethnic groups is increasingly considered a valuable source for isolating bioactive substances. Plants play a central role in Indigenous cultures through their marital systems, eating habits, customs and home activities.^[7] Despite the rich ethnomedical history in Assam, published works on the medicinal plants of the Jorhat district are limited and disease-specific ethnomedical studies are still lacking. This study aims to catalog the ethnobotanical plants used medicinally by ethnic populations in Jorhat, providing baseline information for future phytochemical research.

MATERIALS AND METHODS

Study Area

The study was conducted in Jorhat district as shown in Figure 1, situated in the upper part of Assam, India,

at 26.75°N latitude and 94.22°E longitude. As per the 2011 Census, the district had a population of 1,26,736. Recognized as the cultural capital of Assam, Jorhat is home to various ethnic communities including the Ahom, Koch, Mising, Bodo, Chutiya, Tea Tribes, Sonowal Kachari and Deori, who have traditionally utilized indigenous plants for treating common ailments.^[8]

Methodology

Field surveys were conducted from 2022 to 2023 across different regions of Jorhat district, particularly focusing on areas densely populated by local ethnic communities. During each survey, rapport was established with key community figures such as village heads, elderly individuals and herbal practitioners. Information regarding the use of indigenous plants was collected through interviews and discussions with community members, including both men and women. To ensure the reliability of the data, information obtained from the informants was cross-verified at multiple locations. Only data corroborated by several informants was considered reliable and further validation was done

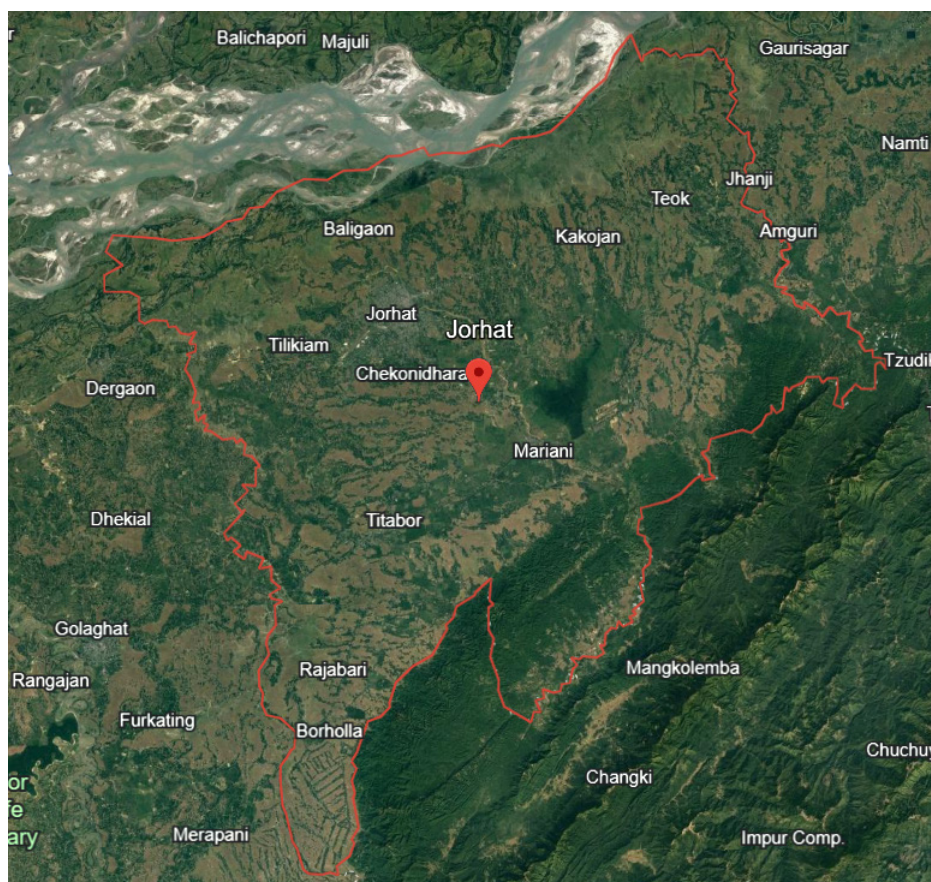


Figure 1: Figure showing map of Jorhat Districts of Assam.

using available local literature.^[9] Plant species collected during the surveys were identified using local floras.^[10,11]

RESULTS

The present study documented 125 ethnomedicinal plant species across various genera and families used by the ethnic communities of Jorhat district in Assam. These plants, belonging to over 60 genera and spanning across different botanical families, are utilized for a diverse range of medicinal purposes. The plants were categorized based on their local names, families, the part of the plant used and their medicinal applications.

The recorded genera include *Terminalia*, *Justicia*, *Piper*, *Abroma* and *Abrus*, among others. Each genus contains species with specific traditional medicinal uses. For instance, *Terminalia arjuna* (local name: Arjun, family: *Combretaceae*) is used for treating teeth and heart problems, while *Justicia adhatoda* (local name: Bahak, family: *Acanthaceae*) is commonly employed to relieve cough, bronchitis and asthma. Similarly, species like *Piper longum* (local name: Pipoli, family: *Piperaceae*) is utilized for treating influenza and *Abroma augusta* (local name: Gorokhia lota, family: *Steculiaceae*) is known for its use as a uterine tonic.

In terms of medicinal applications, species like *Abrus precatorius* (local name: Latumoni, family: *Fabaceae*) are recognized for their diuretic properties, while *Acacia farnesiana* (local name: Kadam, family: *Mimosaceae*) is used in the treatment of malaria through a decoction of its bark. Other species, such as *Ageratum conyzoides* (local name: Gendhela bon, family: *Asteraceae*), are applied as

antiseptics for wounds, while *Alpinia nigra* (local name: Tora, family: *Zingiberaceae*) is traditionally used for treating bronchitis.

Moreover, plants like *Aquilaria malaccensis* (local name: Sachi goch, family: *Thymeliaceae*) and *Chenopodium album* (local name: Jilmil sak, Bholuka-bath family: *Chenopodiaceae*) are employed in treating gastrointestinal disorders. These species, along with others like *Bambusa balcooa* (local name: Bholuka-baah, family: *Poaceae*), highlight the diversity in medicinal use, covering ailments such as abdominal pain, constipation, cough, wound healing and respiratory conditions. Ethnic women also used plants for menstrual cramps. Different plant parts were used for medicinal purposes as shown in Figure 2. The survey showed that most plant specimens belonged to the *Euphorbiaceae* family, followed by *Fabaceae* and *Asteraceae*. The study found that paste; decoction and juice were the most common administration methods, with vegetables also used to relieve several illnesses, enhance memory and vision and act as a galactagogue and blood purifier. While some plants were used raw, most treatments were administered orally. Ethnic groups held superstitious beliefs, feeling that sharing their knowledge would diminish its potency and refusing payment for their services. These beliefs hindered their financial and social progress. An awareness program was initiated to address these superstitions and improve their standard of living through the therapeutic properties of indigenous plants. This study documents the traditional knowledge of local practitioners in Jorhat and highlights the potential for their socioeconomic advancement through improved medical practices. This ethnobotanical survey

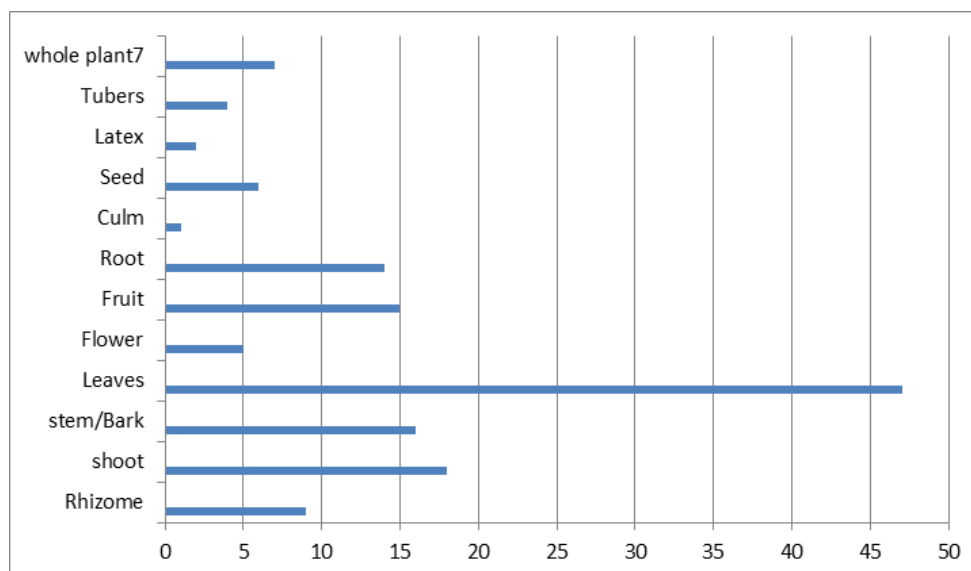


Figure 2: Number of different plant parts of medicinal plants used by the ethnic communities of Jorhat district of Assam.

showcases the rich traditional knowledge of the local communities, who utilize various plant parts, including roots, leaves, bark and seeds, in managing conditions such as malaria, dysentery, respiratory disorders, wounds, digestive issues and more. The data provides valuable insight into the relationship between species diversity and their ethnomedicinal applications.

Detailed overview of the name of the plant specimen along with their local name, family, parts used and medicinal uses were enlisted in Table 1. This checklist was compiled based on a survey conducted among the ethnic communities of the district

DISCUSSION

The results of this study highlight the rich ethnomedicinal knowledge among the ethnic communities of Jorhat district, Assam, where 125 plant species were identified for their medicinal uses. This finding aligns with previous ethnobotanical research conducted in various districts of Assam, further reinforcing the vast biodiversity and cultural reliance on medicinal plants for traditional healthcare. In particular, ethnomedicinal plant studies in Assam have documented a rich diversity of species used for traditional medicine.^[12]

In comparison to similar studies, the number of species recorded in this study is slightly lower than the 174 species documented in Dibrugarh district^[13] and the 175 species recorded in Tinsukia district.^[14] However, it is noteworthy that each study reveals a unique set of species adapted to the specific health needs of the communities. For instance, while our study found extensive use of plants like *Terminalia arjuna* for heart problems and *Justicia adhatoda* for respiratory issues, the studies in Dibrugarh and Tinsukia districts reported the prominence of *Leucas aspera* and *Paederia scandens* in treating stomach ailments and gynecological problems.^[13,14]

The use of *Aquilaria malaccensis* in this study is consistent with its recognized value in other parts of Assam and the northeastern region, where it is a highly valued medicinal species.^[15] Such similarities underscore the shared cultural and medicinal knowledge across Assam's ethnic groups. Other key plants recorded in our study, such as *Terminalia arjuna* and *Piper longum*, are also documented in Manas National Park, Assam, where 57 medicinal species have been recorded.^[16] This not only validates the importance of these species but also highlights the need for their conservation to ensure sustainable use.

A key finding of this study is the widespread use of plant parts such as leaves, bark and roots, which mirrors the

trends observed in previous research across Assam.^[17] This consistent use of plant parts for treating ailments like respiratory problems, gastrointestinal issues and wound healing underscores the deep reliance of local communities on plant-based remedies. Moreover, the preference for decoctions as a mode of administration was also noted in earlier studies,^[14] supporting the cultural importance of this method in traditional healing practices.

One strength of this study is its focus on documenting a wide range of plant species across different ethnic groups in Jorhat district. The data provides valuable insight into the region's rich plant diversity and its uses in traditional medicine. However, a limitation of this research lies in its reliance on verbal reports from community members, which may introduce recall bias or variation in the accuracy of the information provided. Future studies could benefit from more rigorous scientific analysis of the medicinal properties of the documented plants, along with an assessment of their conservation status.

The findings of this study hold significant implications for the conservation and sustainable management of ethnomedicinal plants in Assam. As seen in other studies, plants like *Aquilaria malaccensis* and *Acorus calamus* are not only important for traditional medicine but also have significant commercial value, offering economic opportunities for local communities.^[15] Ensuring the conservation of these species is essential for maintaining their availability for both medicinal and commercial uses. Additionally, integrating this knowledge into healthcare practices or local policies could enhance the recognition and preservation of traditional medicinal knowledge while also promoting biodiversity conservation. In conclusion, the rich diversity of ethnomedicinal plants documented in Jorhat district reflects the extensive traditional knowledge of local communities. This study contributes to the growing body of research on Assam's ethnomedicinal flora and emphasizes the need for further exploration of the medicinal potential of these plants. The integration of traditional practices with modern conservation efforts could ensure the sustainability of these species and the preservation of cultural heritage in the region.

CONCLUSION

The study concludes that villagers rely on medicinal plants and possess valuable traditional herbal knowledge. However, traditional medicine is limited to a few rural areas. It is crucial to document, protect and pass on this knowledge for future generations to harness its

Table 1: Checklist of ethnomedicinal plants used by ethnic communities of Jorhat district of Assam.

Sl. No.	Name of the plant	Family	Local name	Applications
1.	<i>Terminalia arjuna</i> (Roxb.) Wight and Arn	Combretaceae	Arjun	Used in teeth problems, heart problems.
2	<i>Justicia adhatoda</i> L.	Acanthaceae	Bahak	It is used in cough, bronchitis, asthma.
3.	<i>Piper longum</i> L.	Piperaceae	Pipoli	It is used in Influenza.
4	<i>Abroma augusta</i> L.	Steculiaceae	Gorokhia lota	Used as uterine tonic.
5	<i>Abrus precatorius</i> L.	Fabaceae	Latumoni	It have diuretic use.
6	<i>Acacia farnesiana</i> (L.) Willd.	Mimosaceae	Kadam	Decoction of bark is used in malaria.
7	<i>Ageratum conyzoides</i> L.	Asteraceae	Gendhela bon	Leaves are used as antiseptic agent in wounds or cuts.
8	<i>Alpinia nigra</i> (Gaertn.) Burt	Zingiberaceae	Tora	Bronchitis
9	<i>Alstonia scholaris</i> (L.) R. Br.	Apocynaceae	Chatiana	Latex is applied on some skin diseases, bark is used in dysentery and malaria fever.
10	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Amaranthaceae	Mati -kanduri	Boiled shoot is used in dysentery.
11	<i>Amaranthus tricolor</i> L.	Amaranthaceae	Bishalya karani	Leaf is used in cuts and Wounds
12	<i>Amaranthus viridis</i> L.	Amaranthaceae	Khutura	Improve eye-sight.
13	<i>Aquilaria malaccensis</i> Lam.	Thymeliaceae	Sachi goch	In abdominal pain root decoction is used.
14	<i>Bambusa balcooa</i> Roxb.	Poaceae	Bholuka-baah	Wound healing
15	<i>Baccaurea ramiflora</i> Lour.	Euphorbiaceae	Lateku	On infected umbilicus of newly born babies the dry powdered bark is applied.
16	<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	Polash	Seed decoction is used in pneumonia.
17	<i>Calotropis procera</i> (Aiton) W.T. Aiton	Asclepiadaceae	Akon	Rheumatic and chest pain.
18	<i>Carica papaya</i> L.	Caricaceae	Amita	Ripe fruits helps in digestion.
19	<i>Cascabela thevetia</i> (L.) Lippold	Apocynaceae	Korobi phul	Bark's latex is used on boils and the seed is used as antifertility agent.
20	<i>Cassia fistula</i> L.	Caesalpiniaceae	Sonaru	Root part is used in common cold and the fruit part is used in fungal infections.
21	<i>Catimbum malaccense</i> (Ridl.) Holttum	Zingiberaceae	Bor tora	Paste of rhizome is used in sore thorat.
22.	<i>Celtis tetrandra</i> Roxb.	Ulmaceae	Sukuta	Used to relive the parturition pain.
23	<i>Chenopodium album</i> L.	Chenopodiaceae	Jilmil sak	Constipation and cough.
24	<i>Cissus repens</i> Lam.	Vitaceae	Nol tenga	Relive in stomach ailments.
25	<i>Citrus aurantifolia</i> (Christm.) Swingle	Rutaceae	Gol nemu	Dysentery
26	<i>Clerodendrum colebrookianum</i> Walp.	Verbenaceae	Nephaphu	Decoction of leaf is used to reduce high blood pressure.
27	<i>Clerodendrum viscosum</i> Vent.	Verbenaceae	Dhopat tita	Leaves infusion cure malaria.
28	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	kunduli	In diabetes, root juice is used.
29	<i>Cucurbita maxima</i> Duchesne	Cucurbitaceae	Ronga lau	Fried seeds are responsible for increasing sexual behaviour.
30	<i>Cuscuta reflexa</i> Roxb.	Cuscutaceae	Akashi lota	Stem decoction is used in jaundice.
31	<i>Cyperus rotundus</i> L.	Cyperaceae	Keya bon	Used in stomach discomfort.
32	<i>Dillenia indica</i> L.	Dilleniaceae	Ouu tenga	Fruit is used in dysentery and constipation and the seed is used to improve the hair quality.
33	<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Gothiya alu	Roasted tuber is used in piles.
34	<i>Dioscorea esculenta</i> (Lour.) Burkill	Dioscoreaceae	Mua alu	Used in sweelings.

35	<i>Drymaria cordata</i> (L.) Willd. ex Schult.	Caryophyllaceae	Lai-jabori	Apply on tongue to reduce fungal infection.
36	<i>Enhydra fluctuans</i> Lour.	Asteraceae	Helonchi sak	Used to treat stomach discomfort
37	<i>Erechtites valerianaefolia</i> (Wolf) DC.	Asteraceae	Bon kopah	Used in cut and wounds.
38	<i>Eryngium foetidum</i> L.	Apiaceae	Man dhonia	Leaf juice is used in stomach discomfort.
39	<i>Erythrina stricta</i> Roxb.	Fabaceae	Ronga modar	Leaf juice is used to kill worms.
40	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Gakhiroti bon	This vegetable helps the lactating mothers.
41	<i>Euphorbia ligularia</i> Roxb.	Euphorbiaceae	Siju	Latex is used to treat boils and warts of finger.
42	<i>Flacourtia jangomas</i> (Lour.) Raeusch.	Flacourtiaceae	Poniol	Decoction is usefull in diarrhoea.
43	<i>Flemingia strobilifera</i> (L.) W.T. Aiton	Fabaceae	Makhioi	Root decoction is used to treat irregular menstruation cycle.
44	<i>Garcinia cowa</i> Roxb. ex Choisy	Clusiaceae	Kuji thekera	Used to treat diarrhoea.
45	<i>Garcinia lancifolia</i> Roxb.	Clusiaceae	Rupohi thekera	Used in stomach disorders.
46	<i>Gmelina arborea</i> Roxb.	Verbenaceae	Gomari	Leaf decoction is used in indigestion.
47	<i>Gomphrena celosioides</i> Mart.	Amaranthaceae	Leheti	Used as blood purifier.
48	<i>Hedyotis diffusa</i> Willd.	Rubiaceae	Bon jaluk	Used in peptic ulcer.
49	<i>Heliotropium indicum</i> L.	Boraginaceae	Hati suriya	Used to cure injury of wrist or ankle.
50	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Joba phul	Leaf paste is used to remove hair dandruff.
51	<i>Hibiscus sabdariffa</i> L.	Malvaceae	Tenga mora	Used in dysentery.
52	<i>Homalomena aromatica</i> (Spreng.) Schott	Araceae	Gondh kochu	Rhizome paste is used in stomach ailments.
53	<i>Ichnocarpus frutescens</i> (L.) R. Br.	Apocynaceae	Dudhkuri lota	Juice of root is used in fever and diabetes.
54	<i>Ipomoea aquatica</i> Forssk.	Convolvulaceae	Kolmou	Used in diabetes.
55	<i>Kaempferia galanga</i> L.	Zingiberaceae	Gathion	Paste of rhizome is used in skin diseases.
56	<i>Lagenaria siceraria</i> (Molina) Standl.	Cucurbitaceae	Jatilau	Flower juice is applied on burn injury.
57	<i>Leonurus japonicus</i> Houtt.	Lamiaceae	Rong -doron	In sore eyes leaf juice is applied.
58	<i>Lepidium sativum</i> L.	Brassicaceae	Halim sak	Use to improve liver health.
59	<i>Litsea salicifolia</i> (Blume) Mabb.	Lauraceae	Dighloti	Leaf decoction is used in dysentery.
60	<i>Ludwigia octovalvis</i> (Jacq.) P.H.Raven	Onagraceae	Pani jolokia	Used to treat the fungal infection of toes by applying it as a paste.
61	<i>Machilus bombyciana</i> (Lour.) Nees	Lauraceae	Som	Used as a anthelmintic agent.
62	<i>Melastoma malabathricum</i> L.	Melastomaceae	phutuka	Apply in cuts and wounds.
63	<i>Malva verticillata</i> L.	Malvaceae	Lofa	It helps to treat various stomach disorders.
64	<i>Melia azedarach</i> L.	Meliaceae	Ghora neem	Leaf is used to treat skin diseases.
65	<i>Mikania micrantha</i> Kunth	Asteraceae	Japani lota	Used to treat stomach disorders.
66	<i>Mimosa pudica</i> L.	Mimosaceae	Lajuki bon	In jaundice root paste is applied.
67	<i>Morus australis</i> Poir.	Moraceae	Nuni	Flower paste is used in constipation
68	<i>Musa bulbiciana</i> Colla	Musaceae	Athiya kol	Used to treat dysentery, dysmenorrhea.
69	<i>Musa sapientum</i> L.	Musaceae	Kach kol	In diarrhoea, unripe fruit is used.
70	<i>Myrica nagi</i> (Thunb.) Siebold and Zucc.	Myricaceae	Noga tenga	In asthma, decoction of stem is used.
71	<i>Oxalis corniculata</i> L.	Oxalidaceae	Tengeshi	Used in gastrointestinal tract disorders.
72	<i>Peperomia pellucida</i> (L.) Kunth	Peperomiaceae	Ponow-nowa	Used to treat renal disorders and rheumatic pain.
73	<i>Phyllanthus fraternus</i> (Webster)	Euphorbiaceae	Pani -amlokhi	In jaundice root juice is used.
74	<i>Physalis minima</i> (L.)	Solanaceae	Kopal phuta	Used as diuretic agent.

75	<i>Piper betle</i> (L.)	<i>Piperaceae</i>	Pan	In cuts and wounds the leaf paste is applied.
76	<i>Persicaria chinense</i> (L.)	<i>Polygonaceae</i>	Modhu suleng	In dysentery infusion of shoot is used.
78	<i>Persicaria hydropiper</i> (L.)	<i>Polygonaceae</i>	Pathorua bihoongoni	Used as anthelmintic agent.
79	<i>Psidium guajava</i> (L.)	<i>Myrtaceae</i>	Modhuri aam	In blood dysentery bark decoction is used. Leaf extract are used in piles.
80	<i>Punica granatum</i> (L.)	<i>Punicaceae</i>	Dalim	In urinary tract disorder root juice is used. To treat low blood pressure the fruit is used.
81	<i>Quisqualis indica</i> (L.)	<i>Combretaceae</i>	Maloti phul	Used as anthelmintic agent.
82	<i>Rhynchostylis retusa</i> (L.)	<i>Orchidaceae</i>	Kopou phul	Paste of flower is used to improve the skin health.
83	<i>Rubus alceifolius</i> (Poir.)	<i>Rubiaceae</i>	Jetuli poka	In dysmenorrhea root extract is used and unripe fruit is used to treat fungal infections.
84	<i>Saraca asoka</i> (Roxb.)	<i>Caesalpinaceae</i>	Ashok goch	In urinary tract infection paste of the seed is used.
85	<i>Sauropus androgynus</i> (L.)	<i>Euphorbiaceae</i>	Bari sundari	Used in weight loss and as anthelmintic agent
86	<i>Sesbania grandiflora</i> (L.)	<i>Fabaceae</i>	Bok phul	Leaf juice is used in sore throat.
87	<i>Smilax perfoliata</i> (L.)	<i>Smilacaceae</i>	Tikoni baruah	It is used as tooth brush to clean the gums.
88	<i>Solanum indicum</i> (L.)	<i>Solanaceae</i>	Tita bhekuri	Used to purify the blood.
89	<i>Spondias pinnata</i> (L.)	<i>Anacardiaceae</i>	Amora	Leaf juice is used in ear pain.
90	<i>Telanthera ficoidea</i> (L.)	<i>Amaranthaceae</i>	Brindabon	Used in cuts and wounds.
91	<i>Urena lobata</i> (L.)	<i>Malvaceae</i>	Bor-sonbrial	Leaf paste is used to treat sore.
92	<i>Vitex negundo</i> (L.)	<i>Verbenaceae</i>	Pochotia	In scabies leaf paste is used.
93	<i>Zanthoxylum oxyphyllum</i> (Wall.)	<i>Rutaceae</i>	Mezenga	Use of tender shoot regularly helps to treat vitiligo.
94	<i>Ajuga bracteosa</i> (Wall.)	<i>Lamiaceae</i>	Nilakantha	Used to treat gout, palsy and rheumatism.
95	<i>Bacopa monnieri</i> (L.)	<i>Scrophulariaceae</i>	Brahmi	It is used as memory booster.
96	<i>Blechnum orientale</i> (L.)	<i>Blechnaceae</i>	Dhekia	The pteridophyte is used to treat various skin diseases and urinary tract infections.
97	<i>Brassica juncea</i> (L.)	<i>Brassicaceae</i>	Lai sak	It is traditionally used as antidiabetic agent.
98	<i>Coriandrum sativum</i> (L.)	<i>Apiaceae</i>	Dhonia	It helps to treat upset stomach conditions, irritable bowel syndrome.
99	<i>Lawsonia inermis</i> (L.)	<i>Lythraceae</i>	Jetuka	The stem bark is used to treat jaundice and skin diseases.
100	<i>Moringa oleifera</i> (Lam.)	<i>Moringaceae</i>	Sajina	It is thought that use of it as vegetable helps to cure small pox.
101	<i>Dioscorea alata</i> (L.)	<i>Dioscoreaceae</i>	Kath aalu	It is used to cure cough, cold, burns and stomach disorders.
102	<i>Saccharum officinarum</i> (L.)	<i>Poaceae</i>	Kuhiaar	Juice of this plant is used in urinary tract problems or jaundice.
103	<i>Ziziphus mauritiana</i> (Lam.)	<i>Rhamnaceae</i>	Bogori	It is used for constipation and to treat insomnia.
104	<i>Commelina benghalensis</i> (L.)	<i>Commelinaceae</i>	Kana simolu	It is used in eye infections
105	<i>Tagetes erecta</i> (L.)	<i>Asteraceae</i>	Narji phool	Used in epistaxis.
106	<i>Ricinus communis</i> (L.)	<i>Euphorbiaceae</i>	Era	Used in mumps.
107	<i>Curcuma longa</i> (L.)	<i>Zingiberaceae</i>	Halodhi	Bone fracture
108	<i>Ocimum gratissimum</i> (L.)	<i>Lamiaceae</i>	Ram tulokhi	Asthma
109	<i>Leucas aspera</i> (Willd.)	<i>Lamiaceae</i>	Durun bon	Used to treat loss of appetite, sinusitis.
110	<i>Centella asiatica</i> (L.)	<i>Apiaceae</i>	Bormanimuni	It is used as memory booster, stomach disorders.
111	<i>Enhydra fluctuans</i> (L.)	<i>Asteraceae</i>	Helechi	Used to treat ring worms.
112	<i>Colocasia esculenta</i> (L.)	<i>Araceae</i>	Kola kachu	Used to treat pharyngitis.
113	<i>Eclipta prostrata</i> (L.)	<i>Compositae</i>	Keheraj	Hair tonic, drowsy.
114	<i>Aloe vera</i> (L.)	<i>Liliaceae</i>	Salkuwori	Latex is used in skin infections, hair problems.
115	<i>Spilanthes paniculata</i> (L.)	<i>Asteraceae</i>	Suhoni bon	Used to treat wound healing.
116	<i>Vitex negundo</i> (L.)	<i>Verbenaceae</i>	Pasatia	Leaves are used in fever, itching, rheumatoid arthritis.

117	<i>Spondias mombin</i> (L.)	<i>Sapindaceae</i>	Monisal	Seed is used to tonsillitis.
118	<i>Paederia foetida</i> (L.)	<i>Rubiaceae</i>	Vedailota	Leaves are used in stomach disorders.
119	<i>Cynodon dactylon</i> (L.)	<i>Poaceae</i>	Dubori bon	Used to treat eye infections.
120	<i>Murraya koenigii</i> (L.)	<i>Rutaceae</i>	Narashingha	Used to stomach disorders.
121	<i>Andrographis paniculata</i> (Burm.f.)	<i>Acantaceae</i>	Kalmegh	Used to treat diabetes, dysentery and malaria.
122	<i>Rauvolfia serpentina</i> (L.)	<i>Apocynaceae</i>	Sarpaghandha	Used to treat snake bite, hypertension.
123	<i>Lasia spinosa</i> (L.)	<i>Araceae</i>	Chengmora	Used to treat stomach aches, piles, insect bites.
124	<i>Tinospora cordifolia</i> (Willd.)	<i>Menispermaceae</i>	Xoguni lota	Stem and barks are used in diarrhoea, dysentery.
125	<i>Costus speciosus</i> (J. König)	<i>Costaceae</i>	Jom lakhuti	Used to treat jaundice.

benefits sustainably. The study also aims to increase awareness among ethnic communities about bio-development opportunities and encourages further research in phytochemistry and pharmacology to discover new, safe medicinal applications.

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COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

CONFLICT OF INTERESTS

All authors have equally contributed to the preparation of the manuscript.

SUMMARY

The study emphasizes the integral role of medicinal plants in traditional healthcare practices, particularly in Assam, India, where a rich biodiversity and a diverse array of ethnic communities coexist. The introduction highlights the historical significance of plants in medicine, tracing their evolution into various complementary therapies like Ayurveda and Siddha. Medicinal plants are noted for their bioactive compounds, which have significant physiological and biochemical effects.

In Assam, a biodiversity hotspot with numerous indigenous tribes, the knowledge of medicinal plants is predominantly transmitted orally, leading to a loss of documented information due to habitat destruction and deforestation. The study aims to document the ethnobotanical plants used by the ethnic populations of Jorhat district, where various communities have

historically relied on these plants for treating ailments. The methodology involved field surveys conducted from 2022 to 2023, focusing on areas populated by local ethnic groups. Key community figures were consulted to gather reliable data on the medicinal use of indigenous plants, which was corroborated through multiple sources and local literature. The results are presented in a checklist format, detailing various plants, their local names, families, parts used and medicinal applications. The study provides essential baseline information that can facilitate future phytochemical research and preserve the indigenous knowledge of medicinal plants in the region.

REFERENCES

1. Rawat, M. S., and Shankar, R. Distribution status of medicinal plants conservation in Arunachal Pradesh with special reference to national medicinal plants board. *BMEBR*. 2003;24(1-4):1-11.
2. Ujuwundu CO, Okafor OE, Agha NC, Nwogu LA, Igwe KO, Igwe CU. Phytochemical and chemical composition of *Combretum zenterii* leaves. *J Med Plant Res*. 2010;4(10):965-8.
3. Puspagadan P, Atal CK. Ethnomedico-botanical investigation in Kerala I. Some primitive tribals of Western Ghats and their herbal medicine. *J Ethnopharmacol*. 1984;11:59-77.
4. Dev S. Ethnotherapeutics and modern drug development: The potential of Ayurveda. *Curr Sci*. 1997;73:909-28.
5. Baruah HK. The COVID-19 spread in the state of Assam, India. medRxiv (Cold Spring Harbor Laboratory). 2020.
6. Buragohain J. Folk medicinal plants used in gynecological disorders in Tinsukia District, Assam, India. *Fitoterapia*. 2008;79:388-92.
7. Asati BS, Yadav DS. Diversity of horticultural crops in North Eastern regions. *ENVIS Bull Himalayan Ecol*. 2004;12:1-11.
8. Buragohain J, Konwar BK. Ethnomedicinal plants used in skin diseases by some Indo-Mongoloid communities of Assam. *Asian J Exp Sci*. 2007;21(2):281-8.
9. Khanikar G. Sahaj labhya bon-darabar goon. Golaghat: Khanikar Publication; 2002.
10. Dutta AC. Some common weeds of the tea states in North-East India. Jorhat: Tea Research Association, Tocklai Experimental Station; 1983.
11. Bora PJ, Kumar Y. Floristic diversity of Assam. New Delhi: Daya Publishing House; 2003.
12. Gam, N. K. Ethno medicinal claims existing among Mising tribes of Assam. *International Journal of Science Inventions Today*. 2013;2(4):284-91.
13. Gogoi, P., and Nath, N. Indigenous knowledge of ethnomedicinal plants by the Assamese community in Dibrugarh District, Assam, India. *Journal of Threatened Taxa*. 2021;13(5):18297-312. <https://doi.org/10.11609/jot.6772.13.5.18297-18312>

14. Buragohain, J. Ethnomedicinal plants used by the ethnic communities of Tinsukia District of Assam, India. *Recent Research in Science and Technology*. 2011;3(9):31-42.
15. Shankar, R., and Rawat, M. S. Conservation and cultivation of threatened and high valued medicinal plants in North East India. *International Journal of Biodiversity and Conservation*. 2013;5(9):584-91.
16. Das, S., Khan, M. L., Rabha, A., and Bhattacharjya, D. K. Ethnomedicinal plants of Manas National Park, Assam, Northeast India. *Indian Journal of Traditional Knowledge*. 2009;8(4):514-7.
17. Barukial, J., and Sarmah, J. N. Ethnomedicinal plants used by the people of Golaghat District, Assam, India. *International Journal of Medicinal and Aromatic Plants*. 2011;1(3):31-42.

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