

Ethnomedicinal Plants Used in Traditional Healthcare By The Bodo Community of The Bodoland Territorial Council, Assam: A Review

Danswring Basumatary¹, Beauty Narzary², Puspanjali Brahma³ and Bichitra Narzary^{4*}

^{1,3,4}Department of Zoology, Kokrajhar University, Kokrajhar Assam-783370

²Department of Zoology, Bodoland University, Rangalikata, Kokrajhar, Assam-783370

*Corresponding author email: bichitranarzary101@gmail.com

Abstract

Medicinal plants play an important role in traditional healthcare systems and remain a vital source of primary healthcare for indigenous communities worldwide. The Bodo community of the Bodoland Territorial Council (BTC) region of Assam, Northeast India, possesses extensive ethnomedicinal knowledge associated with the use of local plant resources for treating various human ailments. However, this knowledge is increasingly threatened by modernization, habitat degradation, and the gradual erosion of traditional practices. Therefore, the present review aimed to systematically document and analyze the ethnomedicinal plants utilized by the Bodo community and assess their therapeutic significance. A comprehensive literature survey of peer-reviewed studies published between 2019 and 2025 was conducted using PubMed, Google Scholar, and NCBI databases. Information on plant diversity, taxonomy, plant parts used, and therapeutic applications was extracted and synthesized. A total of 225 medicinal plant species belonging to 178 genera and 82 families were documented. Asteraceae, Fabaceae, and Lamiaceae were the dominant families. Leaves were the most frequently utilized plant part (40.89%), followed by fruits (15.99%), roots (9.67%), and flowers (5.58%). The recorded species were used in the treatment of 93 ailments categorized into 14 disease groups. Gastrointestinal disorders constituted the most extensively treated category, followed by dermatological disorders, parasitic infections, wounds and injuries, and skeletal disorders. Several species, including *Carica papaya*, *Andrographis paniculata*, *Cynodon dactylon*, and *Nyctanthes arbor-tristis*, exhibited broad-spectrum therapeutic applications. The findings highlight the rich ethnomedicinal heritage of the Bodo community and provide a foundation for future phytochemical, pharmacological, conservation, and drug-discovery research.

Keywords: Bodo community, medicinal plants, healthcare, traditional knowledge.

Introduction

Historically the medicinal plants have been used as an integral component of traditional healthcare systems and continued to have a significant importance in primary healthcare worldwide. Recently, there has been a growing global interest in natural and plant-based medicines due to the increasing awareness of their therapeutic potential, comparatively lower side effects, accessibility, and affordability (Boro et al. 2023). Medicinal plants have abundant sources of bioactive phytochemicals and have contributed significantly towards the discovery and advancement of several modern therapeutic agents (Heinrich and Gibbons, 2001; Mahmud et al. 2010). Despite remarkable advances in synthetic pharmaceuticals, apprehensions regarding adverse medications, antimicrobial resistance, and the high cost of modern healthcare have renewed scientific attention towards ethnomedicinal practices and herbal formulations (Cox and Balick 1994). Consequently, ethnobotanical investigations have gained prominence for documenting indigenous knowledge systems and identifying novel medicinal resources for pharmacological research and sustainable healthcare development.

Ethnomedicinal knowledge represents the cumulative experience, beliefs, and practices of indigenous peoples regarding the utilization of plant resources for the ailment treatment and management. Such traditional knowledge, transmitted orally through generations, constitutes an invaluable repository for biodiversity

conservation and drug discovery (Manna and Mishra 2018). In developing countries, based on the records of World Health Organization, about 80% of the population are still depending primarily on traditional plant-based product remedies for their fundamental healthcare needs (Hussain et al. 2011). In India, ethnomedicine remains deeply embedded within the socio-cultural and religious practices of numerous ethnic communities, particularly in rural and forest-dwelling populations (Arora 1987; Parasuraman et al. 2014). Although India is estimated to possess approximately 15,000 medicinal plant species, only about 7,000-7,500 species are extensively utilized in indigenous healthcare systems (Parasuraman et al. 2014), indicating the vast unexplored potential of the country's floristic diversity.

Northeast India being recognized as one of the major biodiversity hotspots and harbours immense floral wealth along with diverse indigenous communities possessing rich ethnobotanical knowledge (Sharma et al. 2014). The Bodoland Territorial Area Districts (BTAD) of Assam, situated along the northern bank of the Brahmaputra River at the foothills of Bhutan and Arunachal Pradesh, is ecologically rich and culturally diverse (BTC Accord 2003). The region is predominantly inhabited by the Bodo community, one of the major indigenous ethnolinguistic groups belonging to the Tibeto-Burman linguistic family (Endle 1911; CDPS 2004). Traditionally, the Bodo people maintain a close association with the surrounding forest ecosystems and possess extensive knowledge regarding the therapeutic applications of medicinal plants (Kotoky and Das, 2008; Shankar et al. 2012; Singh and Narzary, 2020; Basumatary et al. 2024a).

Traditional healthcare practice methods among the Bodo community largely depend upon herbal remedies prepared from various

plant parts such as leaves, roots, stems, bark, fruits, and flowers. These formulations are prescribed commonly by traditional healers referred to as “Ojas” for the treatment of various ailments including fever, cough, cold, jaundice, gastrointestinal disorders, intestinal worms, skin diseases, and headaches (Nath 2016; Basumatary et al. 2024a). However, rapid urbanization, habitat degradation, and the steady decline of traditional knowledge among present younger generations pose serious threats to the preservation of ethnomedicinal heritage in the region. Therefore, rigorous documentation and scientific validation of indigenous medicinal knowledge are crucial for conserving the cultural heritage and also for facilitating future pharmacological and phytochemical investigation and research.

In this context, the present review aims to comprehensively document and critically analyze the ethnomedicinal plants traditionally utilized by the Bodo community inhabiting the Bodoland Territorial Council region of Assam, India. The particular attention has been given to the vernacular names, utilized plant parts, methods of traditional application, and therapeutic values of these medicinal species in the management and treatment of diverse human ailments. Furthermore, the review seeks to highlight the rich indigenous knowledge system of the Bodo community and underscore the importance of conserving traditional ethnobotanical practices and associated plant biodiversity for future pharmacological research, sustainable healthcare development, and cultural preservation.

Material and Methods

A systematic study of literature review was conducted to document ethnomedicinal plants traditionally used by the Bodo community of the Bodoland Territorial Council (BTC), Assam. Literatures relevant to the years 2019 to 2025 was retrieved from online data source including PubMed, Google Scholar, and NCBI using keywords such as “medicinal plants”, “ethnomedicinal plants”, “traditional knowledge of Bodo community”, and “ethnobotany”. A total of ten peer-reviewed research articles related to ethnomedicinal practices in different districts of BTC were selected based on relevance and availability of ethnobotanical information.

Data including scientific name, vernacular name (Bodo), family, plant parts used, study area, and therapeutic applications were extracted and systematically analysed. The reviewed studies and district-wise medicinal plant diversity are presented in Table 1, while Table 2 summarizes the documented medicinal plants and their ethnomedicinal uses. Table 3 presents the phylogenetic distribution of the documented plant species across different families.

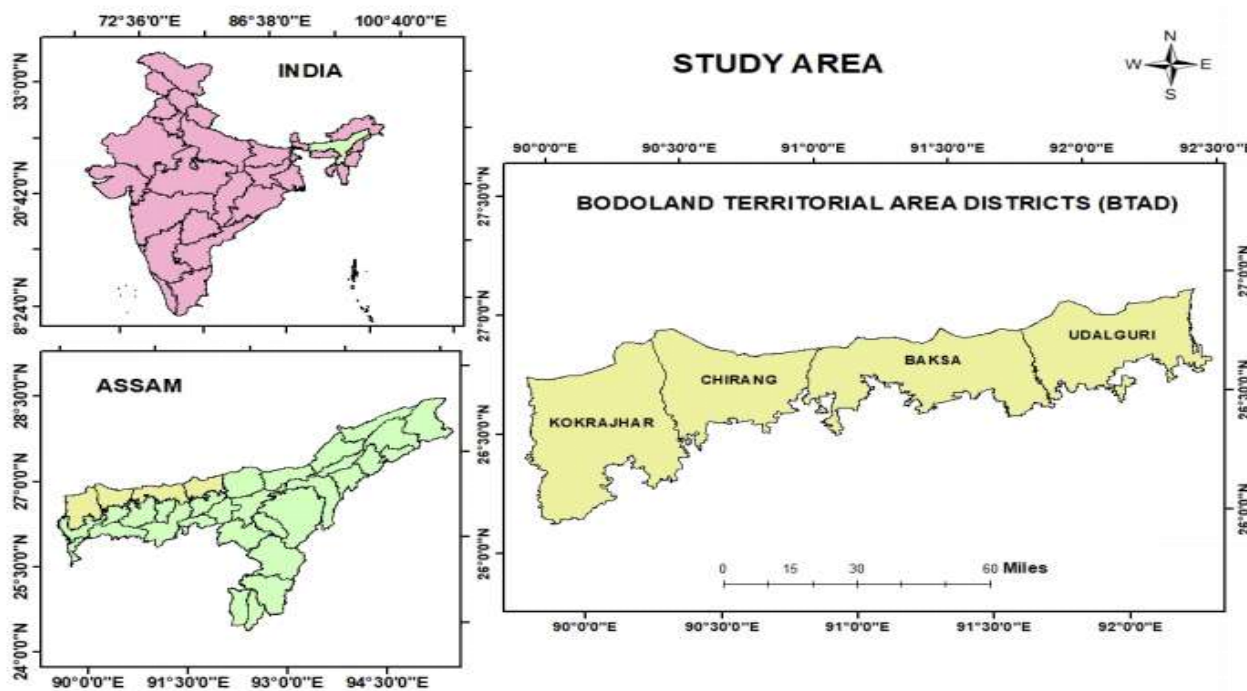


Figure 1: Map showing the four study area districts of BTC (Bodoland Territorial Council), Assam.

Results

1. Demographic variation in ethnomedicinal knowledge across BTAD region

The utilization of herbal plants in traditional healthcare practices exhibited considerable variation across the four districts of the Bodoland Territorial Council (BTC) region (Table 1). Among the districts, the highest number of therapeutic plant species was recorded in Baksa district (128 species), followed closely by Kokrajhar (123 species). A comparatively moderate number of medicinal plants were reported from Udalguri district (86 species), whereas Chirang district documented the lowest number (35 species), primarily associated with the treatment of helminthic infections.

The comparatively lower number of documented medicinal plants and therapeutic applications in Chirang and Udalguri districts may not necessarily reflect a deficiency in indigenous ethnomedicinal knowledge among the local communities. Rather, this disparity could be attributed to limited ethnobotanical surveys and inadequate scientific documentation conducted within these regions. Therefore, further systematic ethnobotanical investigations are necessary to comprehensively explore and record the traditional medicinal knowledge prevailing in these districts.

Notably, various medicinal plants, including *Clerodendrum infortunatum* L., *Houttuynia cordata* Thunb., *Leucas aspera* (Willd.) Link, *Nyctanthes arbor-tristis* L., *Paederia foetida* L., and *Piper nigrum* L. were consistently reported from all four districts of BTAD, namely Baksa, Kokrajhar, Udalguri, and Chirang. The widespread occurrence and repeated ethnomedicinal usage of these species indicate their high therapeutic importance and cultural acceptance among the Bodo community. Their extensive utilization may be associated with factors such as easy accessibility, local abundance, traditional familiarity, and the perceived effectiveness of these medicinal plants in treating common ailments within the region.

2. Taxonomic diversity of medicinal plant species

This review documented a total of 225 medicinal plant species from 178 genera, and 82 families (Table 2) were documented to be traditionally utilized by the Bodo community for healthcare practices. The recorded plant species demonstrated considerable taxonomic diversity, reflecting the extensive ethnomedicinal knowledge and rich floral resources of the Bodoland Territorial Council (BTC) Region. Among the documented families, Asteraceae, Fabaceae, and Lamiaceae represented the dominant families, each contributing 5.78% of the total medicinal plant species, followed by Solanaceae (4.00%), Zingiberaceae (3.56%), and Rutaceae (3.56%). Furthermore, Amaranthaceae, Apocynaceae, Araceae, and Moraceae each contributed 3.11% of the documented species. Families such as Acanthaceae accounted for 2.67% of the medicinal plants, whereas Malvaceae, and Menispermaceae contributed 2.22% each (Table 3).

In addition, Amaryllidaceae, Combretaceae, Piperaceae, and Myrtaceae each represented 1.78% of the recorded species. Apiaceae, Cucurbitaceae, Euphorbiaceae, Lauraceae, Urticaceae, Rubiaceae, Polygonaceae, Oxalidaceae, Musaceae, and Meliaceae each contributed 1.33% of the medicinal flora. Similarly, Araliaceae, Aristolochiaceae, Asparagaceae, Aspleniaceae, Caryophyllaceae, Convolvulaceae, Crassulaceae, Lythraceae, Phyllanthaceae, Plantaginaceae, Rhamnaceae, and Vitaceae each accounted for 0.89% of the total documented species. The remaining 40 families were represented by a single medicinal plant species each (Fig. 2). The dominance of families such as Asteraceae, Fabaceae, and Lamiaceae in the present review may be attributed to their wider distribution, ecological adaptability, and abundance of bioactive phytochemicals possessing therapeutic properties. These families are often documented in ethnobotanical studies due to their extensive use in traditional medicine systems throughout various regions of India and globally.

3. Plant part used for therapeutic application

Analysis of plant part utilization revealed that leaves were the most used plant part (40.89%), followed by fruits (15.99%), roots (9.67%), and flowers (5.58%). Other plant parts such as rhizomes, stems, twigs, bark, seeds, tubers, and fruit peels were comparatively less utilized (Fig. 3). The predominance of leaves may be associated with their easy availability, sustainable harvesting, and rich phytochemical content. Several medicinal plants exhibited multipurpose utilization patterns involving different plant parts. *Andrographis paniculata* (Burm.f.) Nees utilized leaves, flowers, and rhizomes, whereas *Carica papaya* L. and *Cissampelos pareira* L. involved the use of leaves, rhizomes, flowers, and fruits. Similarly, *Citrus aurantiifolia* (Christm.) Swingle, *Musa balbisiana* Colla, and *Psidium guajava* L. were reported with multiple plant-part usage for different therapeutic purposes (Table 2), indicating their broad ethnopharmacological significance among the Bodo community.

4. Ethnomedicinal application for different disease categories

225 numbers of medicinal plant species were identified to possess therapeutic potential for the treatment of 93 different human ailments, which were categorised broadly into 14 disease categories (Table 5). The wide range of therapeutic applications highlights the extensive ethnomedicinal knowledge of the Bodo community and demonstrates the importance of plant-based remedies in traditional healthcare systems. Several medicinal plants were repeatedly reported for the treatment of multiple ailments, indicating their broad-spectrum therapeutic significance among the documented species. Notably, *Carica papaya* L., *Cynodon dactylon* (L.) Pers., *Andrographis paniculata* (Burm.f.) Nees, *Ocimum basilicum* L., and *Nyctanthes arbor-tristis* L. were identified as multipurpose medicinal species with diverse ethnotherapeutic applications.

For instance, *Carica papaya* L. was traditionally used to treat gastric disorders, hypogalactia, intestinal worm infections, stomachache, dengue, dysentery, diabetes, cough, and helminthic infections. Similarly, *Cynodon dactylon* (L.) Pers. was reported to possess therapeutic potential against ailments such as jaundice, vitiligo, azoospermia, dizziness, cuts, and wounds. The repeated application of these plant species for various disease conditions may correlate with the presence of diverse bioactive phytochemicals exhibiting antimicrobial, anti-inflammatory, antioxidant, antiparasitic, and immunomodulatory properties. The multipurpose therapeutic applications of these medicinal plants suggest their high ethnopharmacological relevance and highlight their potential for future phytochemical and pharmacological investigations focussed on developing new plant-derived therapeutic agents.

5. Gastrointestinal disease

Gastrointestinal disorders represented one of the major disease categories treated using traditional herbal medicine among the Bodo community. A total of 78 medicinal plant species were recorded for various health conditions including stomachache, stomach disorders, diarrhoea, dysentery, gastric problems, loose motion, baby indigestion, colic, lower abdominal pain, and vomiting, accounting for 17.81% of the 438 use reports and 34.67% of the 225 recorded medicinal plant species. The treatment

of Stomachache involved the highest number of species (25), followed by stomach disorders (15 species) and gastric problems and diarrhoea (11 species each).

Certain species exhibited ailment-specific applications. *Aristolochia assamica* D. Borah & T.V. Do, *Bixa orellana* L., *Garcinia pedunculata* Roxb. ex-Buch. -Ham., and *Spinacia oleracea* L. were exclusively reported for stomachache, whereas *Alocasia macrorrhizos* (L.) G. Don and *Terminalia bellirica* (Gaertn.) Roxb. were specifically used for gastric disorders. *Areca catechu* L. was uniquely documented for dysentery treatment. Most of the remaining species demonstrated multiple therapeutic applications, indicating their broad ethnopharmacological significance among the Bodo community.

6. Dermatological disorders (Skin problems)

A total of 46 medicinal plant species were recorded for the treatment of dermatological disorders, representing 10.50% of the 438 use reports and 20.44% of the total 225 medicinal plant species. The documented dermatological ailments included boils, allergies, skin diseases, hair fall, smallpox, vitiligo, wounds, burning sensation, ringworm, chickenpox, cold sores, dandruff, pimples, and skin rejuvenation. Among these, the highest number of species were used for treatment of boils (13 species), followed by allergies (6 species) and skin diseases (4 species). Hair fall, smallpox, vitiligo, and wound-related conditions were treated using three species each, whereas burning sensation and ringworm were managed with two species each. *Eclipta prostrata* (L.) L. was reported for the treatment of both boils and hair fall, while *Euphorbia nerifolia* L. was used against boils and ringworm and also reported for respiratory disorders. The repeated use of certain species for multiple dermatological conditions indicates their significant ethnomedicinal and therapeutic value among the Bodo community.

7. Parasitic disease

Parasitic diseases accounted for 9.82% of the total 438 use reports and 19.11% of the 225 documented medicinal plant species. This category included helminth infection, intestinal worms, and malaria. Helminth infection was treated with the highest number of species (28), followed by intestinal worms (13 species) and malaria (2 species). Species such as *Citrus grandis* (L.) Osbeck, *Gymnopetalum chinense* (Lour.) Merr., *Hydrocotyle asiatica* L., *Melastoma malabathricum* L., *Momordica dioica* Roxb. ex Willd., *Peliosanthes bakeri* Hook.f., and *Pongamia pinnata* (L.) Pierre were exclusively used for helminth infection. In contrast, several plants showed multiple therapeutic applications. For instance, *Alstonia scholaris* (L.) R.Br., *Bryophyllum pinnatum* (Lam.) Oken, and *Hypericum japonicum* Thunb. were also used for diabetes, gastrointestinal disorders, jaundice, and kidney stones. Notably, *Andrographis paniculata* (Burm.f.) Nees was reported for all three parasitic ailments along with diabetes and stomach disorders, while *Nyctanthes arbor-tristis* L. was used for intestinal worms and malaria in addition to fever, jaundice, and joint pain. These findings indicate the broad ethnomedicinal importance of these species among the Bodo community.

8. Wounds and injuries

Wounds and injuries, including cuts, bleeding, wounds, dog bites, and swollen legs, were treated using 30 medicinal plant species, accounting for 6.85% of the 438 use reports and 13.33% of the 225 documented medicinal plants. Among these ailments, cuts and wounds were treated with the highest number of species (14 species). Species such as *Alternanthera brasiliana* (L.) Kuntze, *Amaranthus tricolor* L., *Bambusa tulda* Roxb., *Chromolaena odorata* (L.) R.M. King & H. Rob., *Dryopteris filix-mas* (L.) Schott, and *Pogostemon benghalensis* (Burm.f.) Kuntze were exclusively reported for cuts and wounds. Similarly, *Cuminum cyminum* L., *Oryza sativa* L., and *Vigna mungo* (L.) Hepper were specifically used for dog bites. Most of the remaining species exhibited multiple therapeutic applications in traditional healthcare practices.

9. Skeletal injuries

A total of 26 medicinal plant species were recorded for the treatment of skeletal injuries, particularly fractured hand and leg bones, representing 5.94% of the 438 use reports and 11.56% of the 225 recorded medicinal plant species. Species such as *Acorus calamus* L., *Bombax ceiba* L., *Crinum asiaticum* L., *Curcuma aromatica* Salisb., *Datura metel* L., *Dracaena trifasciata* (Prain) Mabb., *Entada rheedei* Spreng., *Gynura nepalensis* DC., *Litsea glutinosa* (Lour.) C.B. Rob., *Rhynchosyris retusa* (L.) Blume, and *Syzygium jambos* (L.) Alston were specifically reported for bone fracture healing among the Bodo community.

10. Respiratory disorders

Respiratory disorders, including asthma, bronchitis, tuberculosis (TB), common cold, and cough, were treated using 25 medicinal plant species, accounting for 5.71% of the 438 use reports and 11.11% of the 225 documented medicinal plants. Among these ailments, common cold and cough were treated with the highest number of species (16 species). *Justicia adhatoda* L. and *Malva verticillata* L. were exclusively reported for cough treatment, whereas the remaining species showed multiple therapeutic applications. Asthma, bronchitis, and tuberculosis were treated using six, two, and one plant species, respectively.

11. Oral and dental disorders

Oral and dental disorders accounted for 3.88% of the total 438 use reports and 7.56% of the 225 documented medicinal plant species. Various ailments such as tooth cavity, tooth decay, tooth ache, tongue bumps, mouth diseases, mouth ulcers, and leucoplakia were treated using traditional herbal remedies. *Streblus asper* Lour. was reported for tooth cavity treatment, while *Jatropha curcas* L., *Manilkara kauki* (L.) Dubard, *Piper nigrum* L., and *Solanum viarum* Dunal were used against tooth decay. Tooth ache was treated using *Achyranthes aspera* L., *Delonix regia* (Bojer ex Hook.) Raf., *Justicia gendarussa* Burm.f., and *Nicotiana tabacum* L. Species such as *Acmella ciliata* (Kunth) Cass. and *Acmella uliginosa* (Sw.) Cass. were used for tongue bumps, while *Cassia fistula* L. was also reported for the same ailment. Additionally, *Spilanthes paniculata* Wall. Ex DC. was used for mouth diseases, *Cajanus kerstingii* Harms and *Stellaria wallichiana* Benth. for mouth ulcers, and *Acmella uliginosa* (Sw.) Cass. for leucoplakia.

12. Hematological disorders

Blood-related disorders, including high blood pressure and blood purification, were treated using 16 medicinal plant species, representing 3.65% of the 438 use reports and 7.11% of the 225 documented medicinal plants. Species such as *Amaranthus viridis* L., *Brassica juncea* (L.) Czern., *Chenopodium album* L., *Piper betle* L., and *Homalomena aromatica* (Spreng.) Schott were reported as blood purifiers. Among these, *Homalomena aromatica* (Spreng.) Schott was also used for managing high blood pressure. While several species exhibited multiple therapeutic applications, *Cinnamomum tamala* (Buch. - Ham.) T. Nees & Eberm. and *Tamarindus indica* L. were exclusively reported for high blood pressure treatment.

13. Urinary tract infections (UTIs)

Urinary tract disorders, including urethritis, urine infection, burning sensation during urination, urine itching, and kidney stones, were treated using 10 medicinal plant species, representing 4.44% of the 225 documented medicinal plants and 2.28% of the 438 use reports. Among these, urethritis was treated with three species, namely *Hellenia speciosa* (J. Koenig) S. R. Dutta, *Kalanchoe pinnata* (Lam.) Pers., and *Scoparia dulcis* L. Kidney stones were treated using *Bryophyllum pinnatum* (Lam.) Oken and *Kalanchoe pinnata* (Lam.) Pers., while burning urination was managed using *Maranta arundinacea* L. and *Melia azedarach* L. Additionally, *Borassus flabellifer* L. was reported for urine infection and *Aloe vera* (L.) Burm.f. for urine itching.

14. Reproductive system disorders

A total of eight medicinal plant species were recorded for the treatment of reproductive system-related disorders, accounting for 1.83% of the 438 use reports and 3.56% of the 225 documented medicinal plants. This category included ailments such as azoospermia, hypogalactia, lactation-related problems, menstruation pain, and pregnancy-related conditions. Azoospermia was treated using *Clitoria ternatea* L. and *Cynodon dactylon* (L.) Pers., while menstruation pain was managed with *Hibiscus rosa-sinensis* L. and *Lasia spinosa* (L.) Thwaites. The remaining ailments were treated using one species each. Notably, *Hibiscus rosa-sinensis* L. was reported for both menstruation pain and pregnancy-related applications.

15. Ear, Nose and Throat disorder (ENT disorders)

ENT-related disorders accounted for eight medicinal plant species, representing 1.83% of the 438 use reports and 3.56% of the total 225 documented medicinal plants. The ailments documented under this category included sinusitis, nose bleeding, ear allergy, and ear pain. Among these, sinusitis was managed using the highest number of species, including *Drymaria cordata* (L.) Willd. ex-Schult., *Leucas aspera* (Willd.) Link, *Piper betle* L., and *Piper retrofractum* Vahl. Nose bleeding was treated using *Dendrocnide sinuata* (Blume) Chew and *Leucas aspera* (Willd.) Link. In contrast, *Colocasia esculenta* (L.) Schott and *Ficus hispida* L.f. were specifically reported for ear allergy and ear pain, respectively.

16. Ophthalmic disorders (Eye related problems)

Ophthalmic disorders were treated using five medicinal plant species, representing 1.14% of the 438 use reports and 2.22% of the 225 documented medicinal plants. The reported eye-related ailments included eye redness and white spots on the eyes. Eye redness was treated using *Hydrocotyle moschata* G.Forst., *Oxalis corniculata* L., and *Tabernaemontana divaricata* (L.) R.Br. ex Roem. & Schult., whereas white spots on the eyes were managed using *Musa balbisiana* Colla and *Narenga porphyrocoma* (Hance ex Trimen) Bor.

17. Neoplastic diseases

Neoplastic disorders, including cancerous wounds and blood cancer, were treated using three medicinal plant species, namely *Catharanthus roseus* (L.) G. Don, *Artocarpus chama* Buch. -Ham., and *Citrus × aurantium* L. These species together represented a small proportion of the documented ethnomedicinal flora used by the Bodo community.

18. Snake envenomation

Two medicinal plant species are used for the treatment of Envenomation from snake bites, namely *Aristolochia indica* L. and *Clitoria ternatea* L. These species represented 0.89% of the 225 documented medicinal plants and accounted for 0.46% of the 438 use reports.

19. Miscellaneous disorders

The miscellaneous disease category represented the largest proportion of ethnomedicinal applications documented in the present review. A total of 121 medicinal plant species, corresponding to 53.78% of the 225 recorded species and 27.63% of the 438 use reports, were used traditionally for the management of diverse ailments including diabetes, jaundice, fever, heart disease, body pain, migraine, piles, typhoid, and dengue. Among these ailments, diabetes was treated with the highest number of medicinal plants (29 species), followed by jaundice (28 species) and fever (22 species). Several species demonstrated overlapping therapeutic applications. For instance, *Piper longum* L. and *Terminalia chebula* Retz. were reported for both diabetes and jaundice, while *Hypericum japonicum* Thunb. was traditionally used for the treatment of jaundice and typhoid. The extensive use of medicinal plants within this category highlights the broad therapeutic scope and ethnopharmacological importance of traditional herbal practices among the Bodo community.

Discussion

Plants serve as a major source of bioactive compounds and have played a fundamental role in the discovery and development of novel therapeutic agents for the treatment of various human diseases. Traditional knowledge systems, folklore practices, and indigenous beliefs of ethnic communities have also significantly contributed to scientific advancement in ethnomedicine and drug discovery (Rehman et al. 2022; Boro et al. 2023). The systematic study of ethnomedicinal practices has facilitated the identification of alternative plant-based therapeutic approaches for the management of several ailments. However, the use of traditional herbal medicine has declined gradually over recent years due to factors such as modernization, cultural transition, and increased

accessibility and affordability of synthetic pharmaceuticals (Boro et al. 2023). Therefore, ethnobotanical surveys and scientific documentation are essential for preserving indigenous medicinal knowledge and traditional healthcare practices.

The present review, based on available literature including Basumatary et al. 2024a, 2025; Boro et al. 2023; Daimari et al. 2019; Baro et al. 2023; Saikia et al. 2020 and Swargiary et al. 2019, documented that all four districts of the Bodoland Territorial Council (BTC) Baksa, Chirang, Kokrajhar, and Udalguri-possess rich ethnomedicinal knowledge and extensive use of herbal remedies. Considerable variation was observed in the pattern of utilization of medicinal plants across different districts. Notably, the medicinal plants documented from Chirang district were largely associated with helminthic infections, which may reflect limited ethnobotanical exploration rather than reduced traditional knowledge within the region.

Species of various medicinal plants, including *Clerodendrum infortunatum* L., *Houttuynia cordata* Thunb., *Leucas aspera* (Willd.) Link, *Nyctanthes arbor-tristis* L., *Paederia foetida* L., and *Piper nigrum* L., were reported consistently across all four districts, indicating their widespread ethnomedicinal importance and cultural acceptance among the Bodo community. Their extensive utilization may be associated with their easy accessibility, abundance, and long-standing familiarity within the region.

The present review documented a total of 225 medicinal plant species belonging to 178 genera and 80 families, among which Asteraceae, Fabaceae, and Lamiaceae represented the dominant families. Leaves were identified as the most used plant part for the treatment of various ailments, possibly due to their easy availability, regenerative capacity, and rich phytochemical composition. Similar observations have also been reported by Barbhuiya et al. 2022; Bushi et al. 2021. Furthermore, the documented medicinal plants were reported to treat 93 ailments categorized into 14 disease groups. Gastrointestinal disorders represented the most dominant disease category, followed by dermatological disorders. Comparable results were also reported by Bushi et al. 2021, who documented a higher prevalence of medicinal plant use for gastrointestinal and skin-related disorders. The predominance of gastrointestinal ailments may reflect the high disease burden due to dietary habits, sanitation conditions, and environmental factors within rural communities (Maman et al, 2017).

Overall, the high diversity of medicinal plant species and their extensive therapeutic applications highlight the rich traditional knowledge and strong dependence of the Bodo community on herbal medicine as a primary healthcare resource. The present study findings review emphasize the significance of conserving ethnomedicinal knowledge and encourage further phytochemical and pharmacological investigations of traditionally used medicinal plants.

Table 1: List of published research works on Ethnomedicinal uses of plants in different parts of Bodoland Territorial Council, Assam.

Location	No. of herbal plants used in health care practices	Authors
Baksa District	128	Basumatary et al. 2025; Boro et al. 2023
Kokrajhar District	123	Daimari et al. 2019; Boro 2022; Basumatary et al. 2024a; Basumatary et al. 2024c; Basumatary et al. 2025
Udalguri District	86	Baro et al. 2023; Saikia et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2025
Chirang District	35	Swargiary et al. 2019

Table 2: List of Medicinal plants used by the Bodo Community in Traditional healthcare practices in four districts of Bodoland Territorial Council, Assam

SL. No	Name	Family	Vernacular Name (Bodo)	Parts used	Study Area (District)	Therapeutic Application	Reference
1	Achyranthes aspera L.	Amaranthaceae	Sampher Ultha	Root	Kokrajhar, Udalguri	Toothache	Basumatary et al. 2024b, Basumatary et al. 2024c
2	Acmella ciliata (Kunth) Cass.	Asteraceae	Xoru Jhari, Jhari Fisa	Leaf	Baksa	Tongue Bumps	Boro et al. 2023
3	Acmella paniculata (Wall. ex DC.) R.K. Jansen	Asteraceae	Dangor Jhari, Jhari Geder	Leaf	Baksa, Kokrajhar	Fever	Boro et al. 2023
4	Acmella uliginosa (Sw.) Cass.	Asteraceae	Xoru Jhari	Leaf, Flower	Baksa	Tongue Bumps, Leucoplakia, Cough	Boro et al. 2023, Basumatary et al. 2024

5	<i>Acorus calamus</i> L.	Acoraceae	Bos Bilai	Leaf	Udalguri	Fractured Bones	Basumatary et al. 2025
6	<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Bhel	Leaf, Fruit	Baksa	Body Pain, Stomachache, Loss Motion, Dizziness, High Pressure, Piles	Boro et al. 2023
7	<i>Ageratum conyzoides</i> L.	Asteraceae	Mwnam Dari/ Khal Met	Twig	Kokrajhar	Cut and Wounds, Stomach Disorder	Basumatary et al. 2024a, Basumatary et al. 2024c
8	<i>Allium sativum</i> L.	Amaryllidaceae	Sambram Gufur	Bulb	Baksa, Kokrajhar, Udalguri	High Pressure, Fever, Bone Paste Fracture	Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
9	<i>Alocasia indica</i> (Lour.) Spach	Araceae	Man Thaso	Rhizome	Baksa	High Pressure, Cough	Boro et al. 2023
10	<i>Alocasia macrorrhizos</i> (L.) G.Don	Araceae	Baranakha Thaso	Rhizome	Baksa	Gastric	Boro et al. 2023
11	<i>Alpinia galanga</i> (L.) Willd.	Zingiberaceae	Jermao	Tuber	Kokrajhar	Diabetes	Daimari et al. 2019
12	<i>Aloe vera</i> (L.) Burm.f.	Asphodelaceae	Sal Rani	Leaf	Baksa, Udalguri	Dizziness, Fever, Skin Problem, Stomach-Ache, Urine Itching	Boro et al. 2023; Basumatary et al. 2025
13	<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae	Sithona	Bark, Root	Kokrajhar, Udalguri, Chirang	Diabetes, Stomach Disorder, Helminth Infection	Daimari et al. 2019; Basumatary et al. 2024a; Basumatary et al. 2024c; Baro et al. 2023; Swargiary et al. 2019
14	<i>Alternanthera brasiliana</i> (L.) Kuntze	Amaranthaceae	Biholongi	Leaf	Kokrajhar & Baksa	Cut and Wounds	Boro et al. 2023; Basumatary et al. 2024c
15	<i>Amaranthus viridis</i> L.	Amaranthaceae	Khutra	Leaf	Baksa	Blood Purification	Boro et al. 2023
16	<i>Amaranthus tricolor</i> L.	Amaranthaceae	Biholyo Koroni	Leaf	Baksa	Cut And Wounds	Boro et al. 2023
17	<i>Amomum subulatum</i> Roxb.	Zingiberaceae	Boro Elasi	Seeds	Kokrajhar, Udalguri	Headache	Basumatary et al. 2024a; Basumatary et al. 2024b
18	<i>Ananas comosus</i> (L.) Merr.	Bromeliaceae	Anaras	Leaf	Baksa, Kokrajhar, Chirang	Intestine Worm, Baby Indigestion, Helminth Infection	Boro et al. 2023; Basumatary et al. 2024c; Swargiary et al. 2019

19	<i>Andrographis paniculata</i> (Burm.f.) Wall. ex Nees	Acanthaceae	Sirotha	Leaf, Flower, Rhizome	Baksa, Kokrajhar, Chirang	Diabetes, Malaria, Intestine Worm, Stomach Disorder, Helminth Infection	Boro et al. 2023; Daimari et al. 2019; Basumatary et al. 2024a; Basumatary et al. 2024b; Swargiary et al. 2019
20	<i>Areca catechu</i> L.	Araceae	Goi Bifang, Tamul	Rhizome	Baksa, Udalguri	Dysentery	Boro et al. 2023; Basumatary et al. 2024b
21	<i>Artocarpus chama</i> Buch. -Ham.	Moraceae	Samkothal	Leaf	Baksa	Blood Cancer	Boro et al. 2023
22	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Khantal	leaf	Kokrajhar, Udalguri	Diabetes	Daimari et al. 2019; Basumatary et al. 2024c
23	<i>Averrhoa carambola</i> L.	Oxalidaceae	Khwrddwi/ Kamrenga	Fruit	Udalguri	Jaundice, Cough	Basumatary et al. 2024; Saikia et al. 2020
24	<i>Aristolochia assamica</i> D.Borah & T.V.Do	Aristolochiaceae	Nilikhor	roots	Kokrajhar	Stomach-Ache	Basumatary et al. 2024a
25	<i>Aristolochia indica</i> L.	Aristolochiaceae	Nilikhor	roots	Kokrajhar	Snake Bite	Basumatary et al. 2024c
26	<i>Artemisia vulgaris</i> L.	Asteraceae	Na Deona	leaves	Kokrajhar	Blood Pressure	Basumatary et al. 2024c
27	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Nilikhor	roots	Kokrajhar, Chirang	Diabetes, Helminth Infection	Daimari et al. 2019; Swargiary et al. 2019
28	<i>Averrhoa carambola</i> L.	Oxalidaceae	Kordoi, Khwrddwi	Fruit	Baksa	Swollen, Jaundice	Boro et al. 2023
29	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Mahaneem	Leaf	Baksa, Kokrajhar, Udalguri	Diabetes, Allergy, Stomach Disorder	Boro et al. 2023; Daimari et al. 2019; Boro et al. 2023; Basumatary et al. 2024c
30	<i>Bacopa monnieri</i> (L.) Wettst.	Plantaginaceae	Brahmi	Leaf	Baksa	Intestine Worm	Boro et al. 2023
31	<i>Bambusa bambos</i> L.	Poaceae	Owa	outer cover of shoots	Kokrajhar	Cuts	Basumatary et al. 2024c
32	<i>Bambusa tulda</i> Roxb.	Poaceae	Makhal Ouwa	Leaf sheath	Baksa	Cut and Wounds	Boro et al. 2023
33	<i>Basella alba</i> L.	Basellaceae	Mwifrai	Twig	Kokrajhar	Wound (Like Cancer)	Basumatary et al. 2024c
34	<i>Bergera koenigii</i> L.	Rutaceae	Naraxingho, Nwrsing	Leaf	Baksa, Udalguri	Body Pain, Common Cold, Fever	Boro et al. 2023; Basumatary et al. 2025
35	<i>Bixa orellana</i> L.	Bixaceae	Sindur	Flower and Fruits	Kokrajhar	Stomach-Ache	Basumatary et al. 2024a
36	<i>Bombax ceiba</i> L.	Malvaceae	Sumbli	Roots	Udalguri, Kokrajhar	Fractured Bones	Basumatary et al. 2025
37	<i>Borassus flabellifer</i> L.	Arecaceae	Taal Misri	Processed	Kokrajhar	Urine Infection, Body Pain, Stomach Disorder	Basumatary et al. 2024a; Basumatary et al. 2024b

38	<i>Brassica juncea</i> (L.)	Brassicaceae	Lai	Leaf, Dry stem	Baksa	Blood Purification, Cough	Boro et al. 2023
39	<i>Bryophyllum pinnatum</i> (Lam.)	Crassulaceae	Path Gaja	leaf	Kokrajhar, Chirang, Udalguri	Diabetes, Helminth Infection, Kidney Stone	Daimari et al. 2019; Swargiary et al. 2019; Saikia et al. 2020
40	<i>Cajanus cajan</i> (L.) Huth	Fabaceae	Ahar	Leaf	Baksa	Jaundice, Fever	Boro et al. 2023
41	<i>Cajanus kerstingii</i> Harms	Fabaceae	Kokhling	leaf	Kokrajhar	Mouth Ulcer	Basumatary et al. 2024c
42	<i>Calotropis gigantea</i> (L.) W.T.Aiton	Apocynaceae	Gogonda Bilai/Naru	leaf	Kokrajhar	Bone Fracture/ Dislocation	Basumatary et al. 2024c; Daimari et al. 2019
43	<i>Camella sinensis</i> (L.) Kuntze	Theaceae	Sahpat	Leaf	Baksa	Hair Fall	Boro et al. 2023
44	<i>Capsicum annuum</i> L.	Solanaceae	Phanlu Bwddwn	Fruit	Kokrajhar, Udalguri	Migraine	Basumatary et al. 2024c; Basumatary et al. 2025
45	<i>Capsicum chinense</i> Jacq.	Solanaceae	Phanlu Khepjang, Bhoot Jolokia Banlu Fisa, Kon	Fruit	Baksa	Pimples	Boro et al. 2023
46	<i>Capsicum frutescens</i> L.	Solanaceae	Jolokia	Fruit	Baksa	Dizziness	Boro et al. 2023
47	<i>Carica papaya</i> L.	Caricaceae	Mwiduful, Omita	Leaf, Rhizome, flower, fruit	Baksa, Udalguri, Chirang	Gastric, Hypogalactia, Intestine Worm, Stomach-Ache, Dengue, Dysentery, Diabetes, High Cough, Helminth Infection	Boro et al. 2023; Basumatary et al. 2025; Swargiary et al. 2019
48	<i>Cassia alata</i> (L.) Roxb.	Fabaceae	Pankha	leaf	Udalguri	Skin Diseases	Saikia et al. 2020
49	<i>Cassia fistula</i> L.	Fabaceae	Kunulu	Fruit	Baksa, Udalguri	Tongue Bumps	Boro et al. 2023; Basumatary et al. 2024b
50	<i>Catharanthus roseus</i> (L.) G.Don	Apocynaceae	Nayan Tora	Leaf	Baksa, Kokrajhar, Udalguri	Diabetes, Cancer	Boro et al. 2023; Daimari et al. 2019; Saikia et al. 2019
51	<i>Centella asiatica</i> (L.) Urb.	Apiaceae	Bor Manimuni	Whole plant	Baksa, Kokrajhar, Udalguri	Stomach-Ache, Dizziness, Diarrhoea, Boil, Fever, Piles	Boro et al. 2023; Daimari et al. 2019; Basumatary et al. 2024a; Basumatary et al. 2024b; Saikia et al. 2020

52	Centipeda minima (L.) A.Braun & Asch.	Asteraceae	Hasutibon	Flower	Baksa	Common Cold	Boro et al. 2023
53	Chenopodium album L.	Amaranthaceae	Buthua, Bhotua	Leaf	Baksa	Skin Disease, Blood Purification	Boro et al. 2023
54	Chromolaena odorata (L.) R.M. King & H.Rob.	Asteraceae	Jharmoni	Flower	Baksa	Cut and Wounds	Boro et al. 2023
55	Chrysopogon aciculatus (Retz.) Trin.	Poaceae	Santhai	Root	Baksa	Jaundice	Boro et al. 2023
56	Cinnamomum tamala (Buch.-Ham.) T.Nees & C.H.Eberm.	Lauraceae	Tezpaatt	Leaf	Baksa, Kokrajhar	High Pressure	Boro et al. 2023; Basumatary et al. 2024c
57	Cinnamomum verum J. Presl	Lauraceae	Dalchini	Bark	Baksa, Udalguri	Asthma	Boro et al. 2023; Basumatary et al. 2024b
58	Cissus repens Lam.	Vitaceae	Hat Jora (Tinsira)/Mwitha kakrong	Stem	Kokrajhar	Bone Fracture	Basumatary et al. 2025
59	Cissus quadrangularis L.	Vitaceae	Hat Zora	Stem and leaf	Kokrajhar	Bone Fracture/Dislocation	Basumatary et al. 2024c; Basumatary et al. 2025
60	Cissampelos pariera L.	Menispermaceae	Nilkot, Tupri Lota	Leaf, Rhizome, flower, fruit	Baksa	Fever, Loose Motion	Boro et al. 2023
61	Citrus aurantiifolia (Christm.) Swingle	Rutaceae	Gol Nemu	Fruit, fruit peel, seed, leaf	Baksa	Intestine Worm, High Pressure, Wound Healing	Boro et al. 2023
62	Citrus x limon (L.) Osbeck	Rutaceae	Kaji Nemu	Leaf, Fruit	Baksa, Kokrajhar, Chirang	Body Pain, Intestine Worm, Stomach Disorder, Helminth Infection	Boro et al. 2023; Basumatary et al. 2024a, Basumatary et al; 2024c; Swargiary et al. 2019
63	Citrus x aurantium L.	Rutaceae	Nareng Komla Bigur	Fruit peel	Kokrajhar	Cancerous Wound (Putting)	Basumatary et al. 2024c
64	Citrus grandis (L.) Osbeck	Rutaceae	Nareng Jumbra	Fruit	Chirang	Helminth Infection	Swargiary et al. 2019
65	Clerodendrum colebrookianum Walp.	Lamiaceae	Mwkhwna Bijou	leaf	Kokrajhar, Udalguri	Lower Abdomen Pain and Stomach-Ache	Basumatary et al. 2024c; Basumatary et al. 2025
66	Clerodendrum indicum (L.) Kuntze	Lamiaceae	Ekhla Bir	leaf	Kokrajhar	Leg and Hand Bone Fracture	Basumatary et al. 2024c; Basumatary et al. 2025

67	<i>Clerodendrum infortunatum</i> L.	Lamiaceae	Mwkhna	Leaf	Baksa, Kokrajhar, Udalguri, Chirang	Ringworm, Diarrhoea, Intestine Worm	Boro et al. 2023; Dalmari et al. 2019; Basumatary et al. 2024a; Basumatary et al. 2024c; Swargiary et al. 2019
68	<i>Clitoria ternatea</i> L.	Fabaceae	Aparijita	Flower, leaf	Baksa, Kokrajhar, Chirang	Snake Bite, Azoospermia	Boro et al. 2023; Basumatary et al. 2024c; Swargiary et al. 2019
69	<i>Cocos nucifera</i> L.	Araceae	Narikhol	Fruit	Baksa, Kokrajhar, Udalguri	Brain Booster, Stomach Disorder	Boro et al. 2023; Basumatary et al. 2024a, Basumatary et al. 2024b; Basumatary et al. 2024c
70	<i>Colocasia esculenta</i> (L.) Schott	Araceae	Kola Kosu, Thaso Gwswm	Petiole	Baksa, Udalguri	Ear Allergy, Boil	Boro et al. 2023; Basumatary et al. 2025; Saikia et al. 2020
71	<i>Corchorus capsularis</i> L.	Malvaceae	Phathw, Morapat	Leaf	Baksa, Kokrajhar	Boil, Intestine Worm, Cut and Wounds, Fever, Diabetes	Boro et al. 2023; Basumatary et al. 2024c; Saikia et al. 2020
72	<i>Crassocephalum crepidioides</i>	Asteraceae	Doula	leaf	Kokrajhar	Allergy	Basumatary et al. 2024c
73	<i>Crinum asiaticum</i> L.	Amaryllidaceae	Khanari	leaf	Udalguri, Kokrajhar	Fractured Bones	Basumatary et al. 2025
74	<i>Crinum defixum</i> Ker Gawl.	Amaryllidaceae	Khanari	leaf	Kokrajhar	Leg and Hand Bone Fracture	Basumatary et al. 2024c
75	<i>Curcuma caesia</i> Roxb.	Zingiberaceae	Khatri Gwswm	Rhizome	Kokrajhar, Udalguri, Chirang	Stomach-Ache, Helminth Infection	Basumatary et al. 2024b; Basumatary et al. 2024c; Swargiary et al. 2019
76	<i>Cuminum cyminum</i> L.	Apiaceae	Jeera	Fruit	Baksa	Dog Bite	Boro et al. 2023
77	<i>Curcuma aromatica</i> Salisb.	Zingiberaceae	Hagranihaldhi	Rhizome	Udalguri, Kokrajhar	Fractured Bones	Basumatary et al. 2025
78	<i>Curcuma longa</i> L.	Zingiberaceae	Haldwi	Rhizome, leaf	Baksa, Kokrajhar, Udalguri	Diarrhoea, Skin Rejuvenation, Intestinal Worm	Boro et al. 2023; Basumatary et al. 2024a; Basumatary et al. 2024b; Basumatary et al. 2024c
79	<i>Cuscuta reflexa</i> Roxb.	Convolvulaceae	Rabon Nari	Stem	Baksa, Udalguri	Fever	Boro et al. 2023; Basumatary et al. 2024b
80	<i>Cyclea peltata</i> (Burm.f.) Hook.f. & Thomson	Menispermaceae	Phennel Khuga	leaf, vine	Kokrajhar, Udalguri	Jaundice	Basumatary et al. 2024b; Basumatary et al. 2024c

81	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Dubori	Twig, Root, leaf	Baksa, Kokrajhar	Dizziness, Cut and Wounds, Azoospermia, Jaundice, Vitiligo, Stomach Disorder	Boro et al. 2023; Basumatary et al. 2024a; Basumatary et al. 2024c; Basumatary et al. 2025
82	<i>Cyperus rotundus</i> L.	Cyperaceae	Motha, Koya Bon, Omakhaya	Leaf, Root	Baksa	Cut and Wounds, Stomach-Ache, Diarrhoea, Piles	Boro et al. 2023
83	<i>Datura metel</i> L.	Solanaceae	Dhatura	Fruit	Kokrajhar, Udalguri	Fractured Bones	Basumatary et al. 2025
84	<i>Delonix regia</i> (Bojer ex Hook.) Raf.	Fabaceae	Krishna Sura Bilai	leaf	Kokrajhar	Toothache	Basumatary et al. 2024c
85	<i>Dendrocnide sinuata</i> (Blume) Chew	Urticaceae	Khoma	Roots	Kokrajhar	Nose Bleeding	Basumatary et al. 2024c
86	<i>Dillenia indica</i> L.	Dilleniaceae	Ouw Tenga	Fruit	Baksa, Udalguri	Diabetes, Dysentery, Dandruff	Boro et al. 2023; Saikia et al. 2020
87	<i>Diplazium esculentum</i> (Retz.) Sw.	Aspleniaceae	Dhekiya	Leaf	Baksa	Cut and Wounds, Loose Motion	Boro et al. 2023
88	<i>Dracaena trifasciata</i> (Prain) Mabb.	Asparagaceae	Jibou Bilai	Leaf	Baksa	Fractured Bones	Boro et al. 2023
89	<i>Drymaria cordata</i> (L.) Willd. ex Schult.	Caryophyllaceae	Sanmwjwngkhri, Lai Jabori	Leaf, Twig	Baksa, Udalguri	Cut and Wounds, Sinus, Body Pain	Boro et al. 2023; Basumatary et al. 2024b
90	<i>Dryopteris filix-max</i> (L.) Schott.	Polypodiaceae	Bih Dhekiya	Leaf	Baksa	Cut and Wounds	Boro et al. 2023
91	<i>Dysoxylum gotadhora</i>	Meliaceae	Bagnal	Bark	Baksa	Boil	Boro et al. 2023
92	<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Moha Bhringoraj, Daogang Jwla	Leaf	Baksa	Hair Fall, Boil	Boro et al. 2023
93	<i>Elettaria cardomomum</i> (L.) Maton	Zingiberaceae	Elaichi	Fruit	Baksa, Kokrajhar, Udalguri	Asthma, Headache	Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2024c

94	<i>Elwendia persica</i> (Boiss.) Pimenov & Kljuykov	Zingiberaceae	Kala Jeera	Seed	Kokrajhar	Fever, Headache	Basumatary et al. 2024c
95	<i>Entada rheedei</i> Spreng.	Fabaceae	Gila Thaokri	Seed	Baksa	Fractured Bones	Basumatary et al. 2025
96	<i>Euphorbia nerifolia</i> L.	Euphorbiaceae	Siju	Leaf, Stem, Latex	Baksa	Cough, Asthma, Boil, Ringworm	Boro et al. 2023
97	<i>Equisetum ramosissimum</i> var. <i>huegelii</i> (Milde) Christenh. & Husby	Equisetaceae	Nwlwjora	Leaf	Kokrajhar	Bone Fracture	Basumatary et al. 2024c; Basumatary et al. 2025
98	<i>Flueggea leucopyrus</i> Willd.	Phyllanthaceae	Huken	Leaf	Kokrajhar, Udalguri	Chicken Pox, Jaundice	Basumatary et al. 2024b; Basumatary et al. 2024c
99	<i>Ficus racemosa</i> L.	Moraceae	Dumburu	Fruit	Kokrajhar	Diabetes	Daimari et al. 2019
100	<i>Ficus hispida</i> L.f.	Moraceae	Dimoru	Leaf, Fruit	Baksa, Udalguri	Ear Pain, Jaundice	Boro et al. 2023; Saikia et al. 2020
101	<i>Ficus religiosa</i> L.	Moraceae	Agot	Leaf	Baksa, Kokrajhar	Diabetes	Boro et al. 2023; Daimari et al. 2019
102	<i>Garcinia pedunculata</i> Roxb. Ex Buch.-Ham.	Clusiaceae	Thaikha	Fruit	Baksa, Kokrajhar	Stomach-Ache	Boro et al. 2023; Basumatary et al. 2024c
103	<i>Gnaphalium leuto-album</i> L.	Amaranthaceae	Bifang Sumu	Leaf	Udalguri	Skin Disease	Saikia et al. 2020
104	<i>Gonostegia hirta</i> (Blume) Miq.	Urticaceae	Samo Laothi	Fruit	Kokrajhar	Wound (Like Cancer)	Basumatary et al. 2024c
105	<i>Gomphostemma</i> sp.	Lamiaceae	Saka Biphang	Leaf	Udalguri	Bone Fracture	Basumatary et al. 2025
106	<i>Gymnopetalum chinense</i> (Lour.) Merr.	Cucurbitaceae	Kaila	Flower	Chirang	Helminth Infection	Swargiary et al. 2019
107	<i>Gynura nepalensis</i> DC.	Asteraceae	Daomeowai	Leaf	Baksa	Fractured Bones	Basumatary et al. 2025
108	<i>Heliotropium indicum</i> L.	Boraginaceae	Mwider Sundai	Leaf	Udalguri	Skin Disease	Saikia et al. 2020
109	<i>Hellenia speciosa</i> (J. Koenig) S.R. Dutta	Costaceae	Debi Tokon	Rhizome	Baksa, Kokrajhar, Udalguri	Urethritis	Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2024c
110	<i>Hemidesmus indicus</i> (L.) R.Br. ex Schult.	Apocynaceae	Bala Mwikhi	Twig	Kokrajhar	Lactation	Basumatary et al. 2024c
111	<i>Hodgsonia heteroclita</i> (Roxb.) Hook.f. & Thomson	Cucurbitaceae	Hagrani Jwgwnar	Fruit	Kokrajhar	Diabetes	Daimari et al. 2019
112	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Joba	Leaf, Flower	Baksa, Kokrajhar	Pregnancy, Cuts and Wounds, Vitiligo, Menstruation	Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025

						Pain	
113	<i>Holarrhena pubescens</i> Wall. ex G.Don	Apocynaceae	Indra Job	Flower, Fruit	Kokrajhar	Stomach-Ache	Basumatary et al. 2024a
114	<i>Homalomena aromatica</i> (Spreng.) Schott	Araceae	Gonsana	Petiole	Baksa	High Pressure, Blood Purification	Boro et al. 2023
115	<i>Houttuynia cordata</i> Thunb.	Saururaceae	Maisundri	Leaf	Baksa, Kokrajhar, Chirang, Udalguri	Stomach-Ache, Dysentery, Helminth Infection	Boro et al. 2023; Basumatary et al. 2024a; Swargiary et al. 2019; Saikia et al. 2020
116	<i>Hydrocotyle moschata</i> G.Forst.	Araliaceae	Xoru Manimuni	Leaf	Baksa	Diarrhoea, Stomach-Ache, Piles, Eye Redness	Boro et al. 2023
117	<i>Hydrocotyle sibthorpioides</i> Lam.	Apiaceae	Manimuni Fisa	Leaf	Kokrajhar, Udalguri, Chirang	Diabetes, Helminth Infection	Daimari et al. 2019; Basumatary et al. 2024b; Basumatary et al. 2024c; Swargiary et al. 2019
118	<i>Centella asiatica</i> (L.) Urb.	Araliaceae	Manimuni Gidir	Leaf	Chirang	Helminth Infection	Swargiary et al. 2019
119	<i>Hymenocallis littoralis</i> (Jacq.) Salisb.	Amaryllidaceae	Khanaribilai	Leaf	Kokrajhar	Bone Fracture	Basumatary et al. 2025
120	<i>Hypericum japonicum</i> Thunb.	Hypericaceae	Sona Phuli	Whole plant	Kokrajhar, Udalguri, Chirang	Typhoid, Jaundice, Gastric, Colic (Babies Cry), Helminth Infection	Basumatary et al. 2024a; Basumatary et al. 2024c; Basumatary et al. 2025; Swargiary et al. 2019
121	<i>Impatiens tripetala</i> Roxb. ex DC.	Balsaminaceae	Dumduga	Leaf	Baksa, Udalguri	Wounds, Bone Fracture, Jaundice	Boro et al. 2023
122	<i>Ipomoea batatas</i> (L.) Lam.	Convolvulaceae	Mitha Aloo	Root	Baksa	Fever	Boro et al. 2023
123	<i>Jatropha curcas</i> L.	Euphorbiaceae	Enda	Latex	Baksa, Kokrajhar	Tooth Decay	Boro et al. 2023; Basumatary et al. 2024c
124	<i>Justicia adhatoda</i> L.	Acanthaceae	Gufur Barsiki	Flower	Baksa	Cough	Boro et al. 2023
125	<i>Justicia gendarussa</i> Burm.f.	Acanthaceae	Jatrashi	Leaf, Branch	Kokrajhar, Udalguri	Colic (Babies Cry), Toothache, Asthma	Basumatary et al. 2024c; Saikia et al. 2020

126	Kalanchoe pinnata (Lam.) Pers.	Crassulaceae	Paatgoja	Leaf	Baksa, Kokrajhar	Kidney Stones, Stomach-Ache, Fever, Headache, Urethritis	Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
127	Lasia spinosa (L.) Thwaites	Araceae	Sibru	Leaf, Root	Baksa	Dizziness, Menstruation Pain, Jaundice, Pox	Boro et al. 2023
128	Lawsonia inermis L.	Lythraceae	Jenthokha	Leaf	Baksa, Udalguri	Hair Fall	Boro et al. 2023; Basumatary et al. 2024b
129	Leonurus sibiricus L.	Lamiaceae	Borom Buthur	Leaf, Root	Udalguri	Fever	Saikia et al. 2020
130	Leucas aspera (Willd.) Link	Lamiaceae	Dorun, Dharamful	Leaf	Baksa, Kokrajhar, Udalguri, Chirang	Sinus, Nosebleeds, Helminth Infection, Stomach Problem	Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2024c; Swargiary et al. 2019; Saikia et al. 2020
131	Lindernia crustacea (L.) F.Muell.	Linderniaceae	Na Bikhi	whole plant	Kokrajhar, Chirang	Diabetes, Helminth Infection	Daimari et al. 2019; Swargiary et al. 2019
132	Litsea glutinosa (Lour.) C.B.Rob.	Lauraceae	Bagh Naal	Leaf	Kokrajhar	Healing Fractured Bones	Basumatary et al. 2025
133	Malva verticillata L.	Malvaceae	Lapha	Dry stem	Baksa	Cough	Boro et al. 2023
134	Manilkara kauki (L.) Dubard	Sapotaceae	Bakul	Bark	Baksa	Tooth Decay	Boro et al. 2023
135	Maranta arundinacea L.	Marantaceae	Bon Chini Or Chop Chini	Rhizome	Kokrajhar	Burning Urine, Stomach-Ache	Basumatary et al. 2024c
136	Marsilea quadrifolia L.	Marsileaceae	Dwini Singri	Whole plant	Udalguri	Jaundice	Basumatary et al. 2024b
137	Melastoma malabatricum L.	Melastomataceae	Tinkur Bedor	Tubers	Chirang	Helminth Infection	Swargiary et al. 2019
138	Melia azedarach L.	Meliaceae	Rwmwnsitha	Leaf	Baksa	Burning Urine, Stomach-Ache	Boro et al. 2023
139	Mentha arvensis L.	Lamiaceae	Podma	Leaf	Baksa	Brain Booster	Boro et al. 2023
140	Mentha × piperita L.	Lamiaceae	Pepper Mint	Leaf	Kokrajhar	Headache	Basumatary et al. 2024c
141	Mikania micrantha Kunth	Asteraceae	Rifujee Bendwng, Latha Bendwng	Twigs, leaf	Kokrajhar, Chirang, Udalguri	Stop Bleeding, Jaundice, Stomach-Ache, Wound & Skin Diseases	Basumatary et al. 2024c; Swargiary et al. 2019; Saikia et al. 2020

142	Mimosa pudica L.	Fabaceae	Lajuki Lota	Stem	Baksa, Kokrajhar	Teeth Ache, Stomach Disorder	Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2024c
143	Momordica charantia L.	Cucurbitaceae	Tita Kerala	Fruit	Baksa, Kokrajhar, Udalguri	Diabetes	Boro et al. 2023; Daimari et al. 2019; Basumatary et al. 2024c
144	Momordica dioica Roxb. ex Willd.	Cucurbitaceae	Khangkhrikhola	Flower	Chirang	Helminth Infection	Swargiary et al. 2019
145	Morinda angustifolia Roxb.	Rubiaceae	Aso Gwkha	Root	Kokrajhar, Udalguri	Mild Jaundice	Basumatary et al. 2024b; Basumatary et al. 2024c
146	Moringa oleifera Lam.	Moringaceae	Sojina	Leaf, Bark	Baksa, Kokrajhar, Udalguri	High Pressure, Boil	Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
147	Morus alba L.	Moraceae	Meskuri	Fruit, Leaf, Root	Baksa, Kokrajhar, Udalguri	Jaundice, Menstruation	Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2024c
148	Murraya koenigii (L.) Spreng.	Rutaceae	Narasingha	Leaf	Udalguri, Chirang	Weight Loss, Helminth Infection, Stomach Problem, Heart Disease	Baro et al. 2023; Swargiary et al. 2019; Saikia et al., 2020
149	Musa balbisiana Colla	Musaceae	Athiyakol	Fruit peel, young plant, Leaf sheath	Baksa, Kokrajhar, Udalguri	Diarrhoea, Cough, Fever, Allergy, White Spot-On Eyes	Boro et al. 2023; Daimari et al. 2019; Basumatary et al. 2024c; Basumatary et al. 2025
150	Musa sanguinea Hook.f.	Musaceae	Malbhog Kol	Root	Baksa	Piles	Boro et al. 2023
151	Musa x chinensis Colla.	Musaceae	Kach Kol	Fruit	Baksa	Stomach-Ache	Boro et al. 2023
152	Myristica fragrans Houtt.	Myristicaceae	Joy Phol	Fruit	Kokrajhar, Udalguri	Headache	Basumatary et al. 2024b; Basumatary et al. 2024c
153	Nelumbu nucifera Gaertn.	Nelumbonaceae	Podo Phul	Stem	Kokrajhar	Diabetes	Daimari et al. 2019
154	Narenga porphyrocoma (Hance) Bor	Poaceae	Ikorabon	Stem	Baksa	White Spot-On Eyes	Boro et al. 2023
155	Nicotiana tabacum L.	Solanaceae	Thanku	Dry leaves, Root	Kokrajhar	Toothache, Stomach Disorder	Basumatary et al. 2024a; Basumatary et al. 2024c; Basumatary et al. 2025

156	<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Xewali	Young shoot, Leaf	Baksa, Kokrajhar, Udalguri, Chirang	Fever, Jaundice, Joint Pain, Baby Indigestion, Intestine Worm, Malaria	Daimari et al. 2019; Swargiary et al. 2019; Boro et al. 2023; Basumatary et al. 2024c,
157	<i>Ocimum basillicum</i> L.	Lamiaceae	Thulungsi	Leaf, Root	Baksa, Chirang	High Pressure, Cough, Dizziness, Allergy, Intestine Worm	Boro et al. 2023; Swargiary et al. 2019
158	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Tulsi	Root, Leaf	Kokrajhar, Udalguri, Chirang	Helminth Infection, Cough & Cold	Daimari et al. 2019; Swargiary et al. 2019; Baro et al. 2023; Basumatary et al. 2024c
159	<i>Opuntia ficus-indica</i> (L.) Mill.	Cactaceae	Cactus Like	Leaf	Baksa	Bone Fracture	Basumatary et al. 2025
160	<i>Oroxylum indicum</i> (L.) Kurz	Bignoniaceae	Kharong Khandai	Leaf, Bark	Kokrajhar, Udalguri, Chirang	Diabetes, Helminth Infection	Daimari et al. 2019; Swargiary et al. 2019; Baro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
161	<i>Oryza sativa</i> L.	Poaceae	Mairong	Fruit	Baksa	Dog Bite	Boro et al. 2023
162	<i>Oxalis corniculata</i> L.	Oxalidaceae	Singrimwikhi, Tengesi	Leaf	Baksa	Stomach-Ache, Dysentery, Smallpox, Eye Redness	Boro et al. 2023
163	<i>Paederia foetida</i> L.	Rubiaceae	Bhedeilota, Padrilewa	Whole plant	Baksa, Kokrajhar, Udalguri, Chirang	Stomach-Ache, Dizziness, Body Pain, Fever, Loose Motion	Swargiary et al. 2019; Saikia et al. 2020; Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
164	<i>Pandanus odorifer</i> (Forssk.) Kuntze.	Pandanaceae	Khewa	Leaf	Kokrajhar	Piles	Basumatary et al. 2024c
165	<i>Paspalum fimbriatum</i> Kunth	Poaceae	Dapsa	Whole plant	Kokrajhar	Diabetes	Daimari et al. 2019
166	<i>Peperomia pellucida</i> L.	Piperaceae	Purnowa	Leaf	Baksa	Swollen Leg	Boro et al. 2023
167	<i>Peliosanthes bakeri</i> Hook.f.	Liliaceae	Sikho Bifang	Tubers	Chirang	Helminth Infection	Swargiary et al. 2019
168	<i>Persicaria hydropiper</i> (L.) Delarbre.	Polygonaceae	Desongali	Leaf	Kokrajhar, Udalguri	Typhoid	Basumatary et al. 2024c; Basumatary et al. 2025

169	<i>Persicaria strigosa</i> (R.Br.) H.Gross	Polygonaceae	Alari Gufur	Leaf	Udalguri	Jaundice	Basumatary et al. 2024b
170	<i>Phallus indusiatus</i> Vent.	Phallaceae	Mwikhun Je	Fruiting body	Kokrajhar	Wound (Like Cancer)	Basumatary et al. 2024c
171	<i>Phlogacanthus jenkinsii</i> C.B.Clarke.	Acanthaceae	Baheka	Flower, Leaf	Kokrajhar	Gastric	Boro 2022
172	<i>Phlogacanthus thyrsoformis</i> (Roxb. ex Hardw.) Mabb.	Acanthaceae	Barsiki Bibar	Flower	Baksa	Cough, Intestine Worm, Diarrhoea, Gastric, Baby Indigestion	Boro et al. 2023
173	<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Amlokhi	Fruit	Baksa, Kokrajhar, Udalguri	Diabetes, Gastric	Boro et al. 2023; Daimari et al. 2019; Basumatary et al. 2024a; Basumatary et al. 2024c; Saikia et al. 2020
174	<i>Phlogacanthus tubiflorus</i> Nees.	Acanthaceae	Basikhor	Flower	Kokrajhar, Chirang	Diabetes, Helminth Infection	Daimari et al. 2019; Swargiary et al. 2019
175	<i>Piper betle</i> L.	Piperaceae	Phathwi	Leaf, Mature inflorescence	Baksa, Udalguri	Bone Fracture, Sinusitis, Blood Purifier	Saikia et al. 2020; Boro et al. 2023
176	<i>Piper longum</i> L.	Piperaceae	Simfri	Fruit	Kokrajhar, Udalguri, Chirang	Diabetes, Jaundice, Helminth Infection	Daimari et al. 2019; Swargiary et al. 2019; Basumatary et al. 2024c; Basumatary et al. 2025
177	<i>Piper nigrum</i> L.	Piperaceae	Jaluk	Fruit	Baksa, Kokrajhar, Udalguri, Chirang	Bronchitis, Tooth Decay, Jaundice	Swargiary et al. 2019; Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
178	<i>Piper retrofractum</i> Vahl	Piperaceae	Pipili, Samfri	Fruit	Baksa	Bronchitis, Sinus, Dog Bite	Boro et al. 2023
179	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Agwr Sita	Roots	Kokrajhar, Udalguri	Jaundice	Basumatary et al. 2024b; Basumatary et al. 2024c; Basumatary et al. 2025
180	<i>Pogostemon benghalensis</i> (Burm.f.) Kuntze.	Lamiaceae	Xukolota	Leaf	Baksa	Cut And Wounds	Boro et al. 2023
181	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Kharangsu Bipang	Seed	Chirang	Helminth Infection	Swargiary et al. 2019
182	<i>Portulaca oleracea</i> L.	Portulacaceae	Sonapuli	Leaf	Baksa	Fever, Diarrhoea, Cold Sore, Dizziness	Boro et al. 2023

183	<i>Pouzolzia zeylanica</i> (L.) Benn.	Urticaceae	Nasreng Khoru, Madhri Aam, Samfrenge	Leaf	Baksa	Boil	Boro et al. 2023
184	<i>Punica granatum</i> L.	Lythraceae	Dalim	Fruit	Baksa	Stomach-Ache, Diarrhoea, Intestine Worm	Boro et al. 2023
185	<i>Psidium guajava</i> L.	Myrtaceae	Sophari Bijou/Swmpnam Bijou	Twigs, Seed, Leaf, Fruit	Kokrajhar, Chirang, Udalguri	Stomach-Ache, And Gastric, Helminth Infection	Swargiary et al. 2019; Saikia et al. 2020; Basumatary et al. 2024c
186	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	Apocynaceae	Kharwkha	Root	Kokrajhar	Diabetes, Stomach Disorder	Daimari et al. 2019; Basumatary et al. 2024a; Basumatary et al. 2024c
187	<i>Rhynchostylis retusa</i> (L.) Blume	Orchidaceae	Manla Phul (Kopouphul)	Leaf	Udalguri	Healing Fractured Bones	Basumatary et al. 2025
188	<i>Ricinus communis</i> L.	Euphorbiaceae	Era	Leaf, Stem	Baksa, Kokrajhar	Vomiting, Fever, Dizziness, Body Pain, Boil, Urine Problem	Boro et al. 2023; Basumatary et al. 2024c
189	<i>Rosa cymosa</i> Tratt.	Rosaceae	Golabgufur	Flower	Udalguri	Weight Loss	Baro et al. 2023
190	<i>Rumex acetosa</i> L.	Polygonaceae	Suka	Leaf	Baksa	Stomach-Ache	Boro et al. 2023
191	<i>Santalum album</i> L.	Santalaceae	Chandan, Daosri Aitheng	Bark	Baksa, Kokrajhar	Dizziness	Daimari et al. 2019; Boro et al. 2023,
192	<i>Scleromitron diffusum</i> (Willd.) R.J.Wang	Rubiaceae	Kharpa Jiva	Leaf	Baksa	Dizziness, Boil	Boro et al. 2023
193	<i>Scoparia dulcis</i> L.	Plantaginaceae	Jestha Madhu	Root, Leaf	Baksa, Kokrajhar, Udalguri	Urethritis, Fever, Asthma, Jaundice, Wound and Body Pain	Saikia et al. 2020; Boro et al. 2023; Basumatary et al. 2024c,
194	<i>Senna occidentalis</i> (L.)	Fabaceae	Solleng	Leaf	Baksa, Kokrajhar, Udalguri	Jaundice, Fever, Stomach Disorder	Boro et al. 2023; Basumatary et al. 2024a; Basumatary et al. 2024b; Basumatary et al. 2024c
195	<i>Sida rhombifolia</i> L.	Malvaceae	Bamun Mara	Leaf, Root	Baksa	Boil, Wounds Healing	Boro et al. 2023
196	<i>Solanum indicum</i> L.	Solanaceae	Khunthai	Fruit, Root	Baksa, Chirang	Diabetes, Cut and Wounds, Helminth Infection	Boro et al. 2023; Swargiary et al. 2019

197	<i>Solanum tuberosum</i> L.	Solanaceae	Aloo	Tuber	Baksa	Burning	Boro et al. 2023
198	<i>Solanum viarum</i> Dunal.	Solanaceae	Beng Damoru, Ambou Fanthao	Root, Fruit	Baksa, Kokrajhar	Tooth Decay, Smallpox, Diabetes	Boro et al. 2023; Basumatary et al. 2024c
199	<i>Spilanthes paniculata</i> Wall. ex DC.	Asteraceae	Jari Bifang	Leaf, Inflorescence	Udalguri	Mouth Disease	Saikia et al. 2020
200	<i>Spinacia oleracea</i> L.	Amaranthaceae	Paleng	Leaf	Baksa	Stomach-Ache	Boro et al. 2023
201	<i>Spondias pinnata</i> (L.f.) Kurz	Anacardiaceae	Thaisri, Amora	Bark, Root	Baksa	Dog Bite, Gastric, Diarrhoea	Boro et al. 2023
202	<i>Stellaria wallichiana</i> Haines	Caryophyllaceae	Nabikhi	Whole plant	Kokrajhar	Mouth Ulcer and Jaundice	Basumatary et al. 2024c
203	<i>Stephania japonica</i> (Thunb.) Miers	Menispermaceae	Tuprilota	Leaf	Baksa, Kokrajhar, Udalguri	Fever, Boils	Saikia et al. 2020; Boro et al. 2023
204	<i>Stephania rotunda</i> Lour.	Menispermaceae	Dumaolu Bedor	Tuber	Kokrajhar, Udalguri	Gastric	Basumatary et al. 2024a; Basumatary et al. 2024c; Basumatary et al. 2025
205	<i>Streblus asper</i> Lour.	Moraceae	Sewra	Branch	Kokrajhar	Tooth Cavity	Basumatary et al. 2024c
206	<i>Syzygium aromaticum</i> (L.) Merr. & L.M.Perry	Myrtaceae	Loung	Dry flower	Baksa, Kokrajhar, Udalguri	Asthma, Jaundice	Daimari et al. 2019; Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2024c; Basumatary et al. 2025
207	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Jam	Bark	Baksa, Kokrajhar, Udalguri	Diabetes	Boro et al. 2023
208	<i>Syzygium jambos</i> (L.) Alston	Myrtaceae	Boga Jam	Root	Kokrajhar, Udalguri	Healing Fractured Bones	Daimari et al. 2019; Baro et al. 2023; Basumatary et al. 2025
209	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Apocynaceae	Kathanda	Flower	Baksa	Eye Redness, Fever	Boro et al. 2023
210	<i>Tamarindus indica</i> L.	Fabaceae	Thengkhleung	Fruit	Baksa, Kokrajhar, Udalguri	High Pressure	Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
211	<i>Tectona grandis</i> L.f.	Lamiaceae	Sigun	Twig	Kokrajhar	Diarrhoea	Basumatary et al. 2024c
212	<i>Tagetes erecta</i> L.	Asteraceae	Narjee Phool/Arba	Flower	Kokrajhar	Cuts and Bleeding	Basumatary et al. 2024c
213	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Combretaceae	Arjun	Bark, Flower bud	Baksa, Kokrajhar, Udalguri	Gastric, TB, Dog Bite, Burning, Jaundice	Daimari et al. 2019; Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al.

							2024c
214	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Bhomora	Fruit	Baksa, Kokrajhar	Gastric	Boro et al. 2023; Daimari et al. 2019
215	<i>Terminalia chebula</i> Retz.	Combretaceae	Selekha	Fruit	Kokrajhar, Udalguri, Chirang	Diabetes, Jaundice, Stomach Disorder, Helminth Infection	Swargiary et al. 2019; Daimari et al. 2019; Baro et al. 2023; Basumatary et al. 2024 c
216	<i>Thelypteris parasitica</i> (L.) Tardieu	Aspleniaceae	Sal Daokhumwi	Fronds	Kokrajhar	Allergy	Basumatary et al. 2024c; Basumatary et al. 2025
217	<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thomson	Menispermaceae	Amorlota	Stem	Baksa, Kokrajhar, Udalguri	Bone Fracture	Daimari et al. 2019; Boro et al. 2023; Basumatary et al. 2024b; Basumatary et al. 2025
218	<i>Trigonella foenum-graecum</i> L.	Fabaceae	Methi	Seed	Kokrajhar	Diabetes	Daimari et al. 2019; Boro et al. 2023
219	<i>Vigna mungo</i> (L.) Hepper	Fabaceae	Sobai Dali	Fruit	Baksa	Dog Bite	Boro et al. 2023
220	<i>Vitex negundo</i> L.	Lamiaceae	Posotiya	leaf	Baksa	Jaundice, High Pressure	Boro et al. 2023
221	<i>Withania somnifera</i> (L.) Dunal	Solanaceae	Aswagondha	Root	Baksa	Vitiligo	Boro et al. 2023
222	<i>Zanthoxylum oxyphyllum</i> Edgew.	Rutaceae	Jabrang	Fruit	Udalguri	Jaundice	Basumatary et al. 2024b
223	<i>Zingiber officinale</i> Roscoe	Zingiberaceae	Hijeng	Rhizome	Kokrajhar, Udalguri, Chirang	Cough, Dog Bite	Boro et al. 2023; Basumatary et al. 2024c; Basumatary et al. 2025
224	<i>Ziziphus jujuba</i> Mill.	Rhamnaceae	Bwigri Bijou	Twigs and leaves	Kokrajhar & Udalguri	Stomach-Ache, Boils	Saikia et al. 2020; Basumatary et al. 2024c
225	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Bogori	Leaf	Baksa	Allergy	Boro et al. 2023

Table 3: Number of medicinal plant species belonging to different families used in traditional healthcare practices by the Bodo community of BTC, Assam.

Sl. No.	Name of Family	No. of Plant Species	% of Total Species
1	Acanthaceae	6	2.67

2	Acoraceae	1	0.44
3	Amaranthaceae	7	3.11
4	Amaryllidaceae	4	1.78
5	Anacardiaceae	1	0.44
6	Apiaceae	3	1.33
7	Apocynaceae	7	3.11
8	Araceae	7	3.11
9	Araliaceae	2	0.89
10	Arecaceae	1	0.44
11	Aristolochiaceae	2	0.89
12	Asparagaceae	2	0.89
13	Asphodelaceae	1	0.44
14	Aspleniaceae	2	0.89
15	Asteraceae	13	5.78
16	Balsaminaceae	1	0.44
17	Basellaceae	1	0.44
18	Bignoniaceae	1	0.44
19	Bixaceae	1	0.44
20	Boraginaceae	1	0.44
21	Brassicaceae	1	0.44
22	Bromeliaceae	1	0.44
23	Cactaceae	1	0.44
24	Caricaceae	1	0.44
25	Caryophyllaceae	2	0.89
26	Clusiaceae	1	0.44
27	Combretaceae	4	1.78
28	Convolvulaceae	2	0.89
29	Costaceae	1	0.44
30	Crassulaceae	2	0.89
31	Cucurbitaceae	3	1.33
32	Cyperaceae	1	0.44
33	Dilleniaceae	1	0.44
34	Equisetaceae	1	0.44
35	Euphorbiaceae	3	1.33
36	Fabaceae	13	5.78
37	Hypericaceae	1	0.44
38	Lamiaceae	13	5.78
39	Lauraceae	3	1.33
40	Liliaceae	1	0.44
41	Linderniaceae	1	0.44
42	Lythraceae	2	0.89
43	Malvaceae	5	2.22
44	Marantaceae	1	0.44
45	Marsileaceae	1	0.44
46	Melastomataceae	1	0.44

47	Meliaceae	3	1.33
48	Menispermaceae	5	2.22
49	Moraceae	7	3.11
50	Moringaceae	1	0.44
51	Musaceae	3	1.33
52	Myristicaceae	1	0.44
53	Myrtaceae	4	1.78
54	Nelumbonaceae	1	0.44
55	Oleaceae	1	0.44
56	Orchidaceae	1	0.44
57	Oxalidaceae	3	1.33
58	Pandanaceae	1	0.44
59	Peperomiaceae	1	0.44
60	Phallaceae	1	0.44
61	Phyllanthaceae	2	0.89
62	Piperaceae	4	1.78
63	Plantaginaceae	2	0.89
64	Plumbaginaceae	1	0.44
65	Poaceae	7	3.11
66	Polygonaceae	3	1.33
67	Polypodiaceae	1	0.44
68	Portulacaceae	1	0.44
69	Rhamnaceae	2	0.89
70	Rosaceae	1	0.44
71	Rubiaceae	3	1.33
72	Rutaceae	8	3.56
73	Santalaceae	1	0.44
74	Sapotaceae	1	0.44
75	Saururaceae	1	0.44
76	Solanaceae	9	4.00
77	Theaceae	1	0.44
78	Urticaceae	3	1.33
79	Vitaceae	2	0.89
80	Zingiberaceae	8	3.56
Total		225	100.00

Figure 2: Representation of medicinal plant families used by the Bodo community for traditional healthcare in BTC, Assam, India.

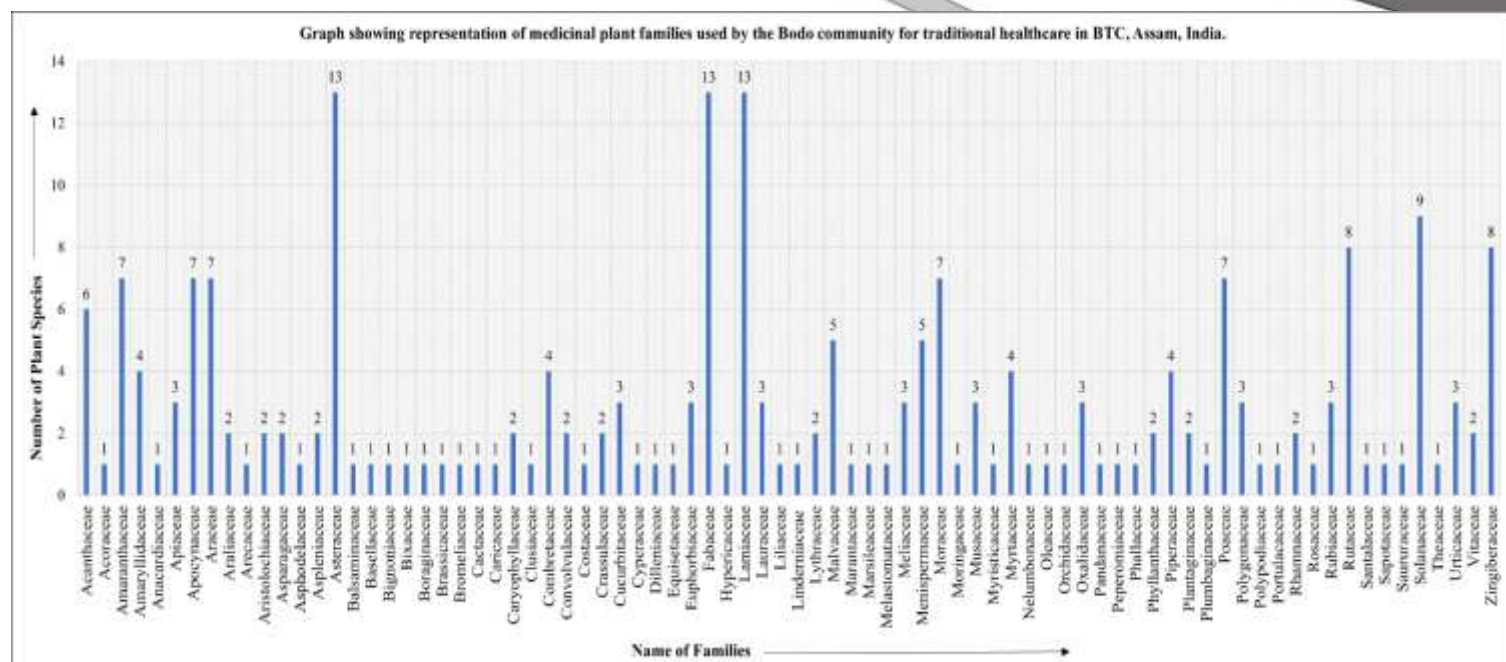


Table 4: Number of plant parts used as medicine by the Bodo community in traditional healthcare practices across four districts of BTC, Assam, India.

Sl. No.	Name of Plants parts used	No. of parts used	% of total 269 parts used
1	Bark	8	2.97
2	Branch	1	0.37
3	Bulb	1	0.37
4	Flower (including dry)	15	5.58
5	Flower Bud	1	0.37
6	Fruit	43	15.99
7	Fruit Peel	3	1.12
8	Inflorescence	2	0.74
9	Latex	1	0.37
10	Leaf	110	40.89
11	Leaf Sheath	1	0.37
12	Petiole	2	0.74
13	Processed	1	0.37
14	Rhizome	12	4.46
15	Root	26	9.67
16	Seed	7	2.60
17	Shoot cover	1	0.37
18	Stem (including dry)	11	4.09
19	Tuber	5	1.86
20	Twig	9	3.35
21	Vine	1	0.37
22	Whole Plant	7	2.60
23	Young Plant	1	0.37
TOTAL		269	100.00

Figure 3: Distribution of plant parts used for medicinal purposes by the Bodo community across four districts of BTC, Assam, India.

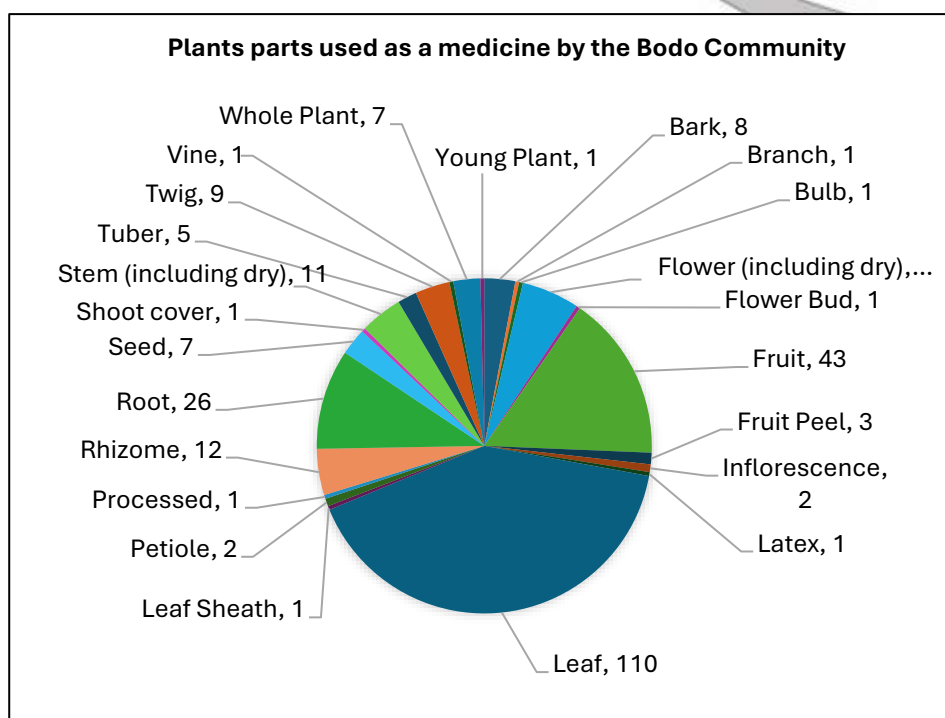
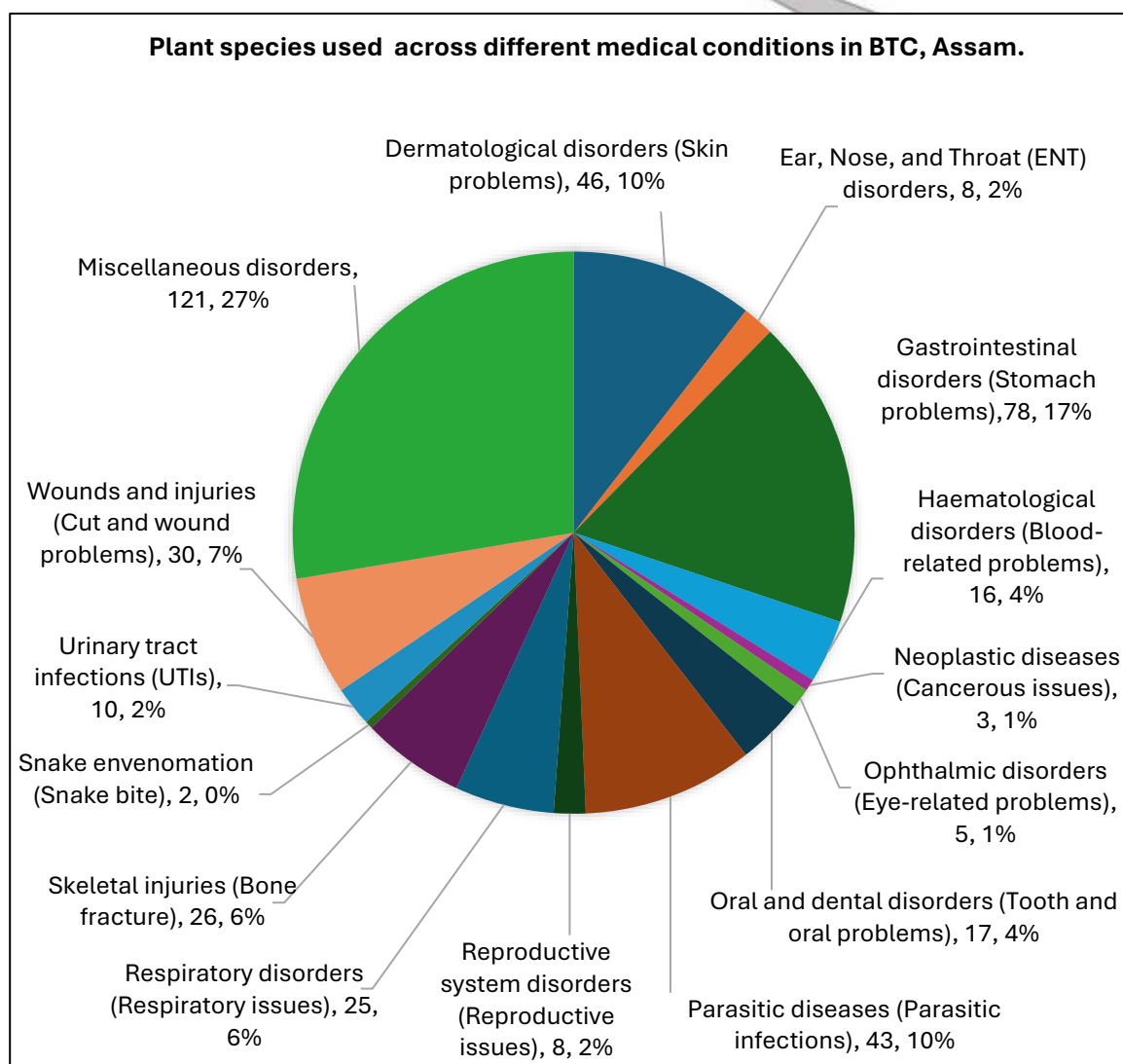


Table 5: Medicinal plant species used by the Bodo community for the treatment of various ailments across BTC, Assam. India.

Disease Category	No. of Plants species reported	% of total 438 plants reported
Dermatological disorders (Skin problems)	46	10.50
Ear, Nose, and Throat (ENT) disorders	8	1.83
Gastrointestinal disorders (Stomach problems)	78	17.81
Haematological disorders (Blood-related problems)	16	3.65
Neoplastic diseases (Cancerous issues)	3	0.68
Ophthalmic disorders (Eye-related problems)	5	1.14
Oral and dental disorders (Tooth and oral problems)	17	3.88
Parasitic diseases (Parasitic infections)	43	9.82
Reproductive system disorders (Reproductive issues)	8	1.83
Respiratory disorders (Respiratory issues)	25	5.71
Skeletal injuries (Bone fracture)	26	5.94
Snake envenomation (Snake bite)	2	0.46
Urinary tract infections (UTIs)	10	2.28
Wounds and injuries (Cut and wound problems)	30	6.85
Miscellaneous disorders	121	27.63
Total	438	100.00

Figure 4: Disease-wise representation of medicinal plant species utilized in traditional healthcare practices in BTC, Assam, India.



Conclusions

The present review documented a satisfactory number of herbal plants used by the Bodo community of BTAD region for the treatment of 14 disease categories using various parts of the plants indicating the important role of medicinal plants and primary dependence of Bodo community on medicinal plants for treatment of multiple human ailments. However, due to lack of scientific documentation, modernization, deforestation and availability of modern health care facilities, the ethnomedicinal knowledge are declining among the younger generations. The present review highlights the need of conservation of ethnomedicinal knowledge. Furthermore, phytochemical and pharmacological investigations of the documented medicinal plants will serve as a source for the development of novel plant based therapeutic agents.

Acknowledgements

The authors sincerely acknowledge the support and facilities provided by the Department of Zoology, Bodoland University and Kokrajhar University, for the successful completion of this review. We are grateful to the researchers and authors whose published studies formed the basis of this synthesis. The authors also acknowledge the valuable resources made available through various scientific databases and libraries that facilitated the literature search and compilation of information.

Author Contributions

Danswring Basumatary: conceived the review topic, designed the overall structure of the manuscript, and contributed to the literature search, analysis, and interpretation of the relevant information.

Beauty Narzary: conducted the literature review, organized the collected information, and contributed substantially to drafting the manuscript.

Puspanjali Brahma: contributed to the critical analysis and synthesis of the literature, prepared the tables/figures where

applicable, and critically revised the manuscript for important intellectual content.

Bichitra Narzary: supervised the work, provided critical guidance throughout the preparation of the manuscript, and critically reviewed and edited the final version.

Conflicts of Interest

The authors have no conflict of interest to declare.

Data Availability

The data supporting the findings of this study are included within the article and its supplementary materials. Additional information may be obtained from the corresponding author upon reasonable request.

References

- [1] Arora, R.K., 1987. Ethnobotany and its role in the conservation and use of genetic resources in India. *Ethnobotany* 9, 6–15.
- [2] Barbhuiya, P.A., Laskar, A.M., Mazumdar, H., Dutta, P.P., Pathak, M.P., Dey, B.K., Sen, S., 2022. Ethnomedicinal practices and traditional medicinal plants of Barak Valley, Assam: A systematic review. *Journal of Pharmacopuncture* 25(3), 149–185.
- [3] Baro, J., Das, M., Mahapatra, D., Choudhury, M., Goswami, S., Sarma, J., Shome, A., Basena, K., Bhattacharyya, P., Beniwal, A., 2023. Documentation of antiobesogenic plants used by Bodo community of Assam, India. *Biological Forum—An International Journal* 15, 416–428.
- [4] Basumatary, J., Das, A., Tag, H., 2024a. Plants used by the Bodo traditional community of Kokrajhar District (in BTAD) of Assam in Northeast India for the treatment of stomach disorders. *Pleione* 18, 214–227.
- [5] Basumatary, J., Das, A.P., Tag, H., 2024b. Ethnomedicinal plants used by traditional healers of Bodo community in Udalguri district of BTAD, Assam for treatment of jaundice. *Journal of Bioresources* 11(1), 16–23.
- [6] Basumatary, J., Thungon, R.N., Kalita Hui, P., Tag, H., 2024c. Ethnobotany of medicinal plants used by the Bodo community living along urban localities of Kokrajhar district in BTAD region of Assam, India. *Journal of Bioresources*.
- [7] Basumatary, J., Thungon, R.N., Lendo, P.N., Hui, P.K., Das, A.P., Tag, H., 2025. Healing fractured bones—traditional medicinal plants used by Bodo tribe in Bodoland Territorial Area Districts (BTAD) of Assam, India. *Ethnobotany Research and Applications* 30, 1–17.
- [8] Boro, B., 2022. Traditional health care practices of the Bodos of rural area of Assam, India. *International Journal of Novel Research and Development* 7(8), 1001–1009.
- [9] Boro, M., Das, B., Boro, K., Nath, M., Buragohain, P., Roy, S., Sarma, P., Kalita, S., Nath, N., 2023. Quantitative ethnobotany of medicinal plants used by the Bodo community of Baksa District, Assam, India. *Biodiversitas Journal of Biological Diversity* 24, 3169–3182.
- [10] Bushi, D., Bam, K., Mahato, R., Nimasow, G., Nimasow, O.D., Tag, H., 2021. Ethnomedicinal plants used by the indigenous tribal communities of Arunachal Pradesh, India: A review. *Ethnobotany Research and Applications* 22, 1–40.
- [11] Cox, P.A., Balick, M.J., 1994. The ethnobotanical approach to drug discovery. *Scientific American* 270(6), 82–87.
- [12] Daimari, M., Roy, M., Swargiary, A., Baruah, S., Basumatary, S., 2019. An ethnobotanical survey of antidiabetic medicinal plants used by the Bodo tribe of Kokrajhar district. *Indian Journal of Traditional Knowledge* 18, 421–429.
- [13] Endle, R.S., 1911. *The Kacharis*. Akansha Publishing House.
- [14] Heinrich, M., Gibbons, S., 2001. Ethnopharmacology in drug discovery: An analysis of its role and potential contribution. *Journal of Pharmacy and Pharmacology* 53(4), 425–432.
- [15] Hussain, I., Khattak, M.U.R., Muhammad, R.Z., Khan, N., Khan, F.A., et al., 2011. Phytochemical screening and antimicrobial activities of selected medicinal plants of Khyber Pakhtunkhwa, Pakistan. *African Journal of Pharmacy and Pharmacology* 5(6), 746–750.
- [16] Kotoky, J., Das, P.N., 2008. Medicinal plants used for liver diseases in some parts of Kamrup district of Assam, a north-eastern state of India. *Fitoterapia* 79, 384–387.
- [17] Mahmud, S., Shareef, H., Ahmad, M., Gouhar, S., Rizwani, G.H., 2010. Pharmacognostic studies on fresh mature leaves of *Holoptelea integrifolia* (Roxb.) Planch. *Pakistan Journal of Botany* 42(6), 3705–3708.
- [18] Maman, M.L., Moussa, I., Ikhri, K., 2017. Ethnobotanical survey: A comprehensive review of medicinal plants used against gastrointestinal disorders in Niger, West Africa. *Jundishapur Journal of Natural Pharmaceutical Products* 12(4).
- [19] Manna, S.S., Mishra, S.P., 2018. Ethnomedicinal survey of plants used by tribal communities in Lalgarh forest range, West Bengal, India. *The Journal of Phytopharmacology* 7(2), 199–202.
- [20] Nath, N., 2016. Indigenous medicinal plant knowledge of tonsillitis in Nalbari district, Assam. *European Journal of Pharmaceutical and Medical Research* 3(1), 395–397.
- [21] Parasuraman, S., Thing, G.S., Dhanaraj, S.A., 2014. Polyherbal formulation: Concept of Ayurveda. *Pharmacognosy Reviews* 8(16), 73–80.
- [22] Rehman, S., Iqbal, Z., Qureshi, R., Rahman, I.U., Sakhi, S., Khan, I., Ijaz, F., 2022. Ethnoveterinary practices of medicinal plants among tribes of Tribal District of North Waziristan, Khyber Pakhtunkhwa, Pakistan. *Frontiers in Veterinary Science* 9, 815294.
- [23] Saikia, N., Doley, S.N., Bora, S., Gogoi, J., 2020. Ethnobotanical studies of some medicinal plant resources practiced by the Bodo tribes of Udalguri District, Assam. *Journal of Agriculture and Technology* 7(1–2), 1–5.

- [24] Shankar, R., Lavekar, G.S., Deb, S., Sharma, B.K., 2012. Traditional healing practices and folk medicines used by the Mishing community of North East India. *Journal of Ayurveda and Integrative Medicine* 3, 124–129.
- [25] Sharma, M., Sharma, C.L., Debbarma, J., 2014. Ethnobotanical studies of some plants used by Tripuri community of Tripura, Northeast India with special reference to magico-religious beliefs. *International Journal of Plant, Animal and Environmental Sciences* 4(3), 518–528.
- [26] Singh, O.R., Narzary, B.C., 2020. Traditional knowledge of medicinal plants and the healing practices of the Bodos. *Journal of Indian History and Culture* 310.
- [27] Swargiary, A., Roy, M., Daimari, M., 2019. Survey and documentation of ethnobotanicals used in the traditional medicines system of tribal communities of Chirang District of Assam against helminthiasis. *Biomedical and Pharmacology Journal* 12.