

Medicinal Flora of the Meitei of Cachar: A Study of Twelve Healing Plants

H. Biju Singha¹, Sadhna Awasthi²

Uttaranchal University, Dehradun

Abstract

Aim of the review: The main objective of this review paper is to highlight the traditional knowledge that have been deeply embedded into the culture of Meitei community of Cachar, Assam, with respect to the use of traditional medicinal plants for curing common ailments, various illness, sickness and treatment of certain disease. This review paper aims to highlight the pharmacologically and medicinal significance of some plant species and their traditional healing practices. This review paper also aims to answer the plant species used by the Meitei community of Cachar, Assam and different health ailments treated.

Ethnobotanical relevance: The Meitei community of Cachar have always had a close relationship with the land and nature around them. Their understanding of local herbs and plants as medicine didn't come from a single moment of discovery, but developed over centuries through careful observation and experience. Living in the rich and diverse environment of Cachar, the Meiteis were naturally attuned to the plants that grew in their surroundings. They began to notice which plants were helpful for treating common ailments, easing pain, or promoting healing. The Meitei community of Cachar, Assam, with their yearlong practices and experiences still rely on the medicinal plants for primary healthcare.

Methodology: This review is the result of a comprehensive and systematic approach which is culturally respectful to documenting the traditional medicinal knowledge related to the twelve selected plant species used by the Meitei community of Cachar, Assam in their day to day lives for treating various ailments. The methodology balanced rigorous scientific evaluation with culturally grounded analysis, honoring the value of traditional healing systems while contributing meaningful data to the larger fields of ethnobotany and future medicinal plant research and development.

Result: In the result, it documents twelve uncommon species of medicinally significant plants used by the Meitei community of Cachar, Assam. It includes 12 species of plants along with their morphological characteristics, their medicinal significance, chemical constituents and the plant parts that are used for the treatment of various ailments.

Conclusion: The traditional knowledge of Meitei community of Cachar district of Assam about the use of the recorded plants species with its beneficial medicinal properties maybe of immense value in the pharmacological experiments particularly for the treatment of ailments like malaria, flu, hypertension, jaundice, cancer and diabetes.

Keywords: Meitei Ethnomedicine, Cachar, Assam, Medicinal Plants, Traditional Healing

1. INTRODUCTION

1.1. Overview of Cachar:

Cachar, a district located in the North-Eastern part of India, in the state of Assam is known for its greenery and diverse national heritage. The area of Cachar lies in a zone where the sub-tropical climate, alluvial fertile soils with abundant rainfall and high humidity makes an environment highly favorable for the variety

of plant species to growth (Assam State Biodiversity Board, 2018). The district Cachar serves as a hotspot for a number of plant species. This green biodiversity hotspot holds an immense cultural, economic and ecological significance (Deka et al., 2012), thus, making it an area of interest for many ecologists, botanists and conservationists.

The Cachar district is one of the largest districts of Assam. Cachar covers a total area of 3,786 square kilometers and is located in the southern of Assam. Cachar forms a major part of the Barak Valley region along with the Hailakandi and Karimganj districts. Cachar district of Assam is characterized by the mix of hills, plains, forests and rivers thus, making diversity in geography and biodiversity (Kumar and Tripathi, 2001).

1.2. Vegetation of Cachar:

The district Cachar is a mixed vegetation of tropical evergreen forests, riverine grasslands, semi-evergreen forests and deciduous forests, creating a variety of habitats (Champion and Seth, 1968). The flora of Cachar is widely characterized by a spectrum of plants life, ranging from delicate herbs, shrubs and climbers to towering tropical trees. These varied habitats are scattered with grasslands, area of agricultural lands, bamboo thickets which contribute to the intricate ecological balance of the region (Bora and Kumar, 2003).

The district Cachar is a home to a variety of endemic and native plants which includes various species with ornamental, medicinal and economic value. Some of the key species in the Cachar region include Teak (*Tectona grandis*), Sal (*Shorea robusta*), Mahogany (*Swietenia mahagoni*) and a variety of fruit-bearing trees such as Mango (*Mangifera indica*) and Jackfruit (*Artocarpus heterophyllus*) (Pandey and Barve, 2011). Cachar is also known for its bamboo species and are extensively used in construction and local crafts.

The flora of Cachar plays a crucial role in the lives of its inhabitants, in addition to its ecological richness. The local, indigenous communities of the region have a deep connection with its local vegetation, using for medicines, foods, shelter and cultural practices. Some key medicinal plants like Tulsi (*Ocimum sanctum*), Neem (*Azadirachta indica*) and Ashwagandha (*Withania somnifera*) are widely used in traditional medicine for healthcare systems (Dhiman et al., 2020). Also, the forest supports a wide range of non-timber forest products such as wild fruits, resins, honey which contributes to the rural economy of the inhabitants (Sharma and Manhas, 2015).

1.3. Meteorology of Cachar:

The climatic conditions and geographical of Cachar contributes significantly to the diversity of the botany. The district Cachar, which is located in the state of Assam, India, it experiences a tropical climate, variations in temperature and is characterized by significant rainfall.

The Cachar region receives an annual rainfall ranging from 2000 to 2700 mm with relative humidity levels spanning from 52% to 92% and temperature fluctuating between 12 degrees Celsius to 34 degrees Celsius (IMD, 2021). The month of June to September is primarily considered as the monsoon season, the heavy rainfall supports the cultivation of tea, rice and other crops which also supports variety of floral species. However, the heavy precipitation and the construction of poor drainage system in many areas have made the region prone to flood and water-logging especially the regions that falls under or near Barak River (Assam State Biodiversity Board, 2018).

The winter temperature of Cachar region ranges from 12 degree to 20 degree Celsius. Summer temperature of Cachar region ranges from 24 degree to 34 degree Celsius. Thus, this significant seasonal variation, with

winters being relatively mild and summers often warm and humid supports wide variety of plant species of the region (Indian Meteorological Department, 2021).

The relative humidity of the Cachar district of Assam state ranges from 52% to 92% thus leading to the contribution of the region's high levels of moisture throughout the year (Indian Meteorological Department, 2021). Thus, this high level of humidity is favorable for various economically important crops such as rice, tea but it can also create various challenges such as pests outbreak and fungal infestations (Deka et al., 2012).

The Cachar region of Assam occasionally experiences extreme weather phenomena which includes storm and heavy precipitation during monsoon and pre-monsoon season which lead to the significant damage of the plant species. Heavy rainfall often causing soil erosion in the area covered by hills thus affecting the fertility of the soil and ultimately leading to destruction of various species of plant species (Deka et al., 2012). The region of Cachar has seen a significant changes in climate. These includes the increased in the frequency of floods affecting the residential areas and agricultural areas, erratic rainfall patterns, alterations in biodiversity (Kumar and Tripathi, 2001).

1.4. Geography of Cachar:

The district Cachar of the state Assam, India, is a region of significant geographical interest due to its diversity in topography features, richness in ecology and climatic conditions. The area of Cachar is characterized by a varied landscape which consists of hills, river valleys and plains. The second-largest river in Assam, the Barak River, is an important geographical feature which influences the region's agriculture and overall hydrology (Pandey and Barve, 2011). Cachar district is bordered by Mizoram to the south, North Cachar Hills and Manipur to the east thus contributing to its variation in topography. The soil composition also varies from alluvial soil in the plains to the lateritic soil in the areas with hills (Champion and Seth, 1968).

The district Cachar in the state Assam, India, is a region which is very rich in biodiversity of different plants including not only economically important plants but also medicinal plants that have been used traditionally by the indigenous communities for the treatment of various ailments (Pandey and Barve, 2011). The region's fertile soils, lush green forests and diverse climatic condition creates a suitable environment for the wide variety of medicinal plants. The medicinal flora has played a very significant role in the traditional medicinal healthcare system of the indigenous tribes and communities for the centuries, thus, forming a core important part in the ethnomedicine in the region (Singh and Singh, 2009; Devi and Singh, 2016; Dhiman et al., 2020).

1.5. Origin of Meitei Community in Assam:

The Meitei people of Assam, originally from Manipur, gradually migrated to areas of Assam like Karbi Anglong and Cachar over many centuries. While there is no specific date marking their arrival, historians suggest that their migration took place in several phases, especially after the fall of the Kingdom of Manipur in the 19th century (Banerjee, 1992; Singh, 2006).

A more significant wave of migration happened after the British annexed Manipur in 1891. During this period, many Meiteis moved to neighboring regions, including Cachar, seeking better economic opportunities and escaping political instability (Banerjee, 1992). Over the years, the Meitei community established themselves in Assam, and today, they are a well-integrated ethnic group, particularly in areas like Cachar. They continue to uphold their unique traditions and language, while also blending into the local culture (Singh, 2006).

1.6. Traditional knowledge of Medicinal Plants:

The Meitei people have always had a close relationship with the land and nature around them. Their understanding of local herbs and plants as medicine didn't come from a single moment of discovery, but developed over centuries through careful observation and experience (Devi and Singh, 2012). Living in the rich and diverse environment of Manipur, the Meiteis were naturally attuned to the plants that grew in their surroundings. They began to notice which plants were helpful for treating common ailments, easing pain, or promoting healing (Sharma and Patel, 2010).

In the early days, much of this knowledge would have been acquired through trial and error. The Meiteis likely observed the effects of various plants over time, learning which ones were effective for treating fever, injuries, or stomach problems (Singh, 2008). As they shared this knowledge within the community, it was passed down from generation to generation, largely through oral tradition. Elders, especially the healers known as "Maiba" (male healers) and "Maibi" (female healers), were the keepers of this knowledge, and their teachings played a central role in preserving these practices (Devi and Singh, 2020), their understanding of medicinal plants wasn't just based on practical experience, but also on cultural and spiritual beliefs. For the Meiteis, healing was not only about treating the body but also about balancing the body with the spirit (Singh, 2008). Many of the plants used for medicinal purposes had spiritual significance and were believed to possess sacred properties. Healing rituals often involved prayers and offerings to the gods, creating a connection between, spirituality, and health (Devi and Singh, 2020).

The Meitei people also interacted with neighboring communities, which likely influenced their knowledge of local plants. These exchanges allowed them to learn new methods and remedies, which helped their own practices. As time went on, the Meiteis' understanding of plants became more refined, and their healing knowledge was enriched by these interactions (Singh, 2008; Devi and Singh, 2020). The local healers, also commonly known as Maiba (male healers), Maibi (Female healers) or Ojhas, have preserved and passed down the knowledge about the healing properties of the medicinal plants from generations to generations. The use of medicinal plants is not only limited to common ailments but also used for some diseases (Devi and Singh, 2012). The medicinal plants contain bioactive compounds which exhibit anti-inflammatory, antimicrobial, antifungal, antioxidant and immunomodulatory properties which makes them a very valuable resource for the research of pharmaceutical (Sharma and Patel, 2010).

The Meitei community of Cachar, Assam, with their yearlong practices and experiences still rely on the medicinal plants for primary healthcare. These medicinal plants exhibit pharmacological activities which signifies the traditional knowledge of the Meitei community of Cachar, Assam (Devi and Singh, 2012).

The main objective of this review paper is to highlight the use of uncommon species of plants having medicinal significance and the traditional knowledge that have been deeply embedded into the culture of Meitei community of Cachar, Assam, with respect to the use of traditional medicinal plants for curing common ailments, various illness, sickness and treatment of certain disease. This review paper aims to highlight the pharmacologically and medicinally significant of some plant species and their traditional healing practices. This review paper also aims to answer the plant species used by the Meitei community of Cachar, Assam and different health ailments treated.

2. METHODOLOGY

This review paper is the fruit of a detailed and meticulous process with its sole aim for keeping in record as well as synthesizing traditional medicinal knowledge with a particular focus on ethnobotanical practices which involves medicinal plants used by the Meitei community of Cachar, Assam. Keeping in mind the fast-

paced modernization and environmental changes the urgent need for the documentation of the rich traditional knowledge and systems were undertaken with the methodology designed to be systematic as well as inclusive. The review draws itself from a variety of inter-disciplinary sources- which includes pharmacology, botany, anthropology, ethnobotany, and public health in order to give a more holistic perspective.

2.1 Scope and Purpose of the Study

The main aim of this study is to record, present detailed information as well as validate the medicinal plants used by the Meitei community of Cachar, Assam. The study focused not just in understanding the medicinal properties of the plants, but also delving into the cultural, symbolic, and therapeutic roles that they play in the traditional health systems. This review also serves the purpose of bridging the gap between the rich indigenous knowledge about medicinal plants and contemporary scientific validation, thus aiding to the cultural preservation of the traditional practices and knowledge for future generations and making a contribution in the field of ethnopharmacology.

2.2 Literature Review and Data Collection Strategy

The foundation of this study is based on a comprehensive review of literature so as to gather as much data as possible which is authentic. Thorough search was done of academic databases as well as grey literature was conducted. The major databases used includes Google Scholar, PubMed, Science Direct, Scopus, JSTOR and Web of Science. Apart from these sources reports from NGOs working on indigenous knowledge, government publications, doctoral and master's dissertations, institutional archives, and books on traditional medicine and ethnobotany were also referred.

The keyword combinations that were used are: "*Meitei medicinal plants*," "*Traditional healthcare Northeast India*," "*Cachar Assam ethnobotany*," "*Meitei community folk medicine*," "*Zingiber montanum medicinal use*," "*Houttuynia cordata traditional knowledge*," "*postpartum care plants in Meitei culture*," and other particular plant names used in Meitei healing practices.

The articles that were primarily referred to in this study included research papers or books published between 2000 and 2024 in majority this was done so to ensure the relevance and practicality of the study. However, foundational ethnographic or botanical works were also included if they provided critical context.

2.3 Inclusion and Exclusion Criteria

In this review a set of inclusion and exclusion criteria were applied so as to ensure the quality and relevance of the sources.

Inclusion Criteria:

Reports and articles which provide botanical identification and medicinal preparation methods. Studies that focused on traditional medicinal uses of plants by the Meitei or other Northeast Indian communities. Peer reviewed journals, ethnobotanical surveys, validated field studies, and institutional publications. Works that have phytochemical analysis or pharmacological validations of traditionally used plants.

Exclusion Criteria:

Unpublished field notes without community validation or peer review. Studies lacking scientific or common plant names, proper taxonomic identification, or source citations. Literature focused solely on culinary uses without medicinal context. Each of the sources were carefully evaluated for credibility, scientific rigor, and

cultural relevance. Cross-referencing was also done so as to make sure of the traditional uses of plants and match them with pharmacological findings where available.

2.4 Plant Identification and Taxonomic Verification

Careful research was done to verify the scientific names and classification of each plant was done so as to avoid confusion caused by regional names and outdated taxonomies. Synonyms and accepted names were confirmed using reliable taxonomic databases such as International Plant Names Index (IPNI), Kew's Plants of the World Online, The Plant List. In the review, the most up-to-date nomenclature has been used and where traditional names were cited, they were followed by the corresponding scientific names to maintain scientific consistency and clarity.

2.5 Organization and Structuring of Data

Data collected for this review were systematically categorized and synthesized into detailed ethnobotanical monographs. Each monograph includes the following components:

Botanical Description: The plant's physical and morphological characteristics.

Traditional Uses: How the plant is used by the Meitei healers and households as a medicine, preparation techniques (e.g., decoctions, topical applications, oral ingestion).

Phytochemical Composition: The chemical constituents of the plant identified from previous studies.

Pharmacological Properties: The plant's effectiveness based on laboratory, animal, or clinical studies.

Cultural Significance: The plant's symbolic and socio-cultural roles, such as in rituals, postpartum care, or seasonal practices.

This approach provides an in-depth understanding of each plant as well as facilitates comparison and further research.

2.6 Ethnographic Integration and Cultural Context

The review, though it did not conduct or involve direct fieldwork, great care was taken to ensure the inclusion of perspectives from ethnographic literature which had documented the ground realities of the Meitei community. There is also a particular attention paid to the gendered knowledge such as women's role in postpartum care and herbal healing, seasonal plant use, and the transmission of medicinal knowledge orally. This aspect of the review helps in tracing the pharmacological data in real-world cultural context, ultimately helping it to maintain its authenticity and relevance.

2.7 Tools for Reference Management and Data Handling

For this review the reference management software Zotero was used to manage and organize the large volume of references and extract relevant quotations and data. To catalogue the plants, excel spreadsheets were created categorizing each plant by its vernacular name, botanical name, parts used, ailments treated, and corresponding literature. The database also works as a means to identify frequently used plant species as well as overlapping uses of certain plants.

2.8 Ethical Considerations

Although this review is derived from secondary data without the involvement of direct interaction with human participants, it recognizes the ethical responsibility of appropriately acknowledging and respecting indigenous knowledge systems. For all the traditional knowledge used proper citations have been provided

and every effort was made to avoid misappropriation and misrepresentation. This work aligns with the Nagoya Protocol on Access and Benefit Sharing (ABS), which strives for equitable recognition of community-based traditional knowledge.

This review methodology evinces an interdisciplinary and culturally respectful approach to documenting traditional Meitei medicine. The study aims to honor the value of traditional healing systems by balancing rigorous scientific evaluation with culturally or traditionally grounded analysis while making a meaningful contribution to wider fields of ethnobotany and future medicinal plant research. The resulting work serves as an archive to the rich cultural knowledge as well as a scientific resource reflecting the immense knowledge engraved in the day-to-day practices of the Meitei community of Cachar, Assam.

3. RESULT

3.1 *Cyperus rotundus* (Chumthang maru): *Cyperus rotundus* is commonly known as Chumthang maru by the Meitei community of Cachar, Assam. *Cyperus rotundus* is a perennial plant belonging to the Cyperaceae family, reaching up to 140 cm in height (Kumar et al., 2018; Singh et al., 2012). It has a triangular flower stems and linear leaves which reach about 5-20 cm long, and the rhizomes forming chains up to 25 mm in diameter, with dark reddish-brown tubers (Ghani, 2003). The flowers of *Cyperus rotundus* are bisexual which consists of three stamens and a three stigma- pistil, while its fruit is a three-angled achene (Kumar et al., 2018; Goyal et al., 2011).

Medicinal properties: *Cyperus rotundus* is loaded with chemical constituents which includes isocyperol, terpenoids, cadalene flavonoids, cryptotene, mustakone, sesquiterpenes, sigeonyl, valencene, rotundene, a-cyperone, kaempferol, quercetin, luteolin, patchoulene, isopatchoulene, cellulose triacetate, sigeonyl acetate and sugebiol (Upadhyay et al., 2014; Verma and Singh, 2020). The extracts from the leaves and tubers contain auxins and phenolic compounds, promoting adventitious rooting and contributing to its medicinal effects (Singh and Devi, 2016). *Cyperus rotundus* is a medicinally significant plant, the rhizome paste of this plant alleviates diarrhoea and sesquiterpenes like cyperol suppress intestinal spasms (Asian Journal of Pharmacy and Pharmacology, 2019). Its dark reddish-brown tubers infusions help in the reduction of fever, though its mechanisms remain understudied (Gupta et al., 2017). Though this plant, *Cyperus rotundus* is less documented in Meitei texts Mutha rhizomes are bartered in local markets as a “universal remedy” (Sharma, 2019). Older generations of the Meitei community often associate it with the term Lamok meaning spiritual cleansing (Devi, 2015).

3.2 *Cassumunar Ginger* (Tekhao yaikhu): *Zingiber cassumunar*, now considered a synonym of *Zingiber montanum*, is a plant belonging to the family Zingiberaceae, the rhizomes of this plant are used for various medicinal purposes (Sirirugsa, 1999; Jantan et al., 2011). The rhizomes of this plant are tan to dark brown in colour with golden yellow, dense, fibrous flesh (Sivaraksa et al., 2009). The plant, *Zingiber cassumunar* has an upright stem which is long and thin with lanceolate leaves growing in an opposite formation (Larsen et al., 1999).

Medicinal properties: *Zingiber cassumunar* is of great medicinal significance, the rhizomes of this plant contain a wide range of bioactive compounds which contribute to its effective medicinal properties, phenylbutanoids which are known for its antioxidant and anti-inflammatory effects (Tewtrakul et al., 2003). *Zingiber cassumunar* also contain important compound, curcuminoid desmethoxycurcumin which has been identified for its potential antioxidant and anticancer properties (Journal of Natural Products, 2020). The essential oils extracted from the rhizomes contains terpenoids which shows strong and effective antimicrobial and analgesic effects (Jantan et al., 2011; Bhuiyan et al., 2009). *Zingiber cassumunar* has a great medicinal significance and use for the treatment of various health ailments. The rhizome oil derived

from cassumunar ginger has anti-inflammatory properties which helps in reducing joint swelling in arthritis patients, attributed to phenylbutanoids (Journal of Natural Products, 2020). The essential oils of the plant zingiber cassumunar has antimicrobial properties which inhibit *Candida albicans*, supporting its use in vaginal infections (Das & Bhattacharya, Indian Journal of Traditional Knowledge, 2018). The local Meitei healers also use Cassumunar rhizomes in postpartum care which is often mixed with mustard oil for abdominal massages (Das and Bhattacharya, 2018).

3.3 *Bryophyllum pinnatum* (Mana Heidak):

Bryophyllum pinnatum is a fleshy succulent herb belonging to the Crassulaceae family, it can typically grow up to 1.5 meters in height (Sharma et al., 2014). It has a thick, fleshy, opposite ovate leaves with scalloped margins (Kamboj and Saluja, 2009). One particular thing that from other plants is that this plant has numerous adventitious buds that form along the leaf edges which are capable of developing into new plants which is a feature that symbolizes regeneration and vitality (Patil et al., 2010). The flowers of this plant are tubular and droop in terminal panicles which can vary in color from greenish-yellow to reddish-purple (Kirtikar and Basu, 2005).

Medicinal properties: The plant, *Bryophyllum pinnatum* contains important compounds such as bufadienolides, kaempferol, quercetin, phenolic acids, and alkaloids (Matos et al., 1999; Kamboj and Saluja, 2009). It has been proven to exhibit nephroprotective, anti-inflammatory, antimicrobial, and analgesic effects. (Ojewole, 2005; Matos et al., 1999). Among the Meitei community, this plant is known for its numerous curatives uses. One such use or application is the practice of chewing the fresh leaves or extracting their juice to treat kidney stones, urinary tract infections, and gastrointestinal issues (Sharma et al., 2014). The crushed leaves paste of this plant is also helpful in stopping external bleeding as well as promote wound healing (Kamboj and Saluja, 2009). Its efficacy is also seen in lowering fevers and treating insect bites which has been handed down from generation to generation (Sharma et al., 2014).

3.4 *Houttuynia cordata* (Fishmint/toningok):

Houttuynia cordata is a low-growing, perennial herb which thrives in shaded, moist areas such as near water bodies, the edges of paddy fields and are locally known as Toningok among the Meitei community in Cachar, Assam (Devi and Singh, 2011). The plant can be evidently recognized by its vibrant green leaves, white-bracted flowers and heart-shaped leaves. *Houttuynia cordata* emits a strong, fishy smell for which it is also called as fishmint, which is one of its significant distinguishing features (Singh et al., 2019). The plant has creeping rhizomes which allow it to spread quickly, making it both easily accessible and resilient (Zhao et al., 2015).

Medicinal uses: The medicinal significance of the plant *Houttuynia cordata* is heavily supported by its rich composition, which includes compounds such as decanoyl acetaldehyde, quercetin, rutin, β -myrcene, and methyl-n-nonyl ketone, compounds which are known for its anti-inflammatory, antimicrobial, antioxidant and immunomodulatory properties (Das et al., 2020). For instance, decanoyl acetaldehyde shows a potent antibacterial property, which support the plant's traditional use in curing infection and wound care. The action of all these compounds offers an antiviral and hepatoprotective effects, which are now an area of scientific interest beyond its traditional uses (Zhao et al., 2015). Among Meitei community, it is used as traditional medicine and plays an important role in Meitei community daily healthcare practices. The plant is commonly consumed as raw or as a chutney or the plant parts are prepared as a mild decoction for the treatment of various ailments such as skin inflammation, respiratory infections, gastrointestinal disorders (Devi & Singh, 2011; Singh et al., 2019). The plant is well-known for its particular cooling and detoxifying properties (Das et al., 2020). *Houttuynia cordata* is also often used to treat problems like stomach ache, food

poisoning or indigestion. The plant is used to treat respiratory ailments like flu, coughs, colds, and asthma (Zhao et al., 2015). The plant is prepared either as a juice or through steam inhalation by using its leaves. Women of the Meitei community also uses *Houttuynia cordata* in postpartum care and for the menstrual regulation, thus reflecting its significant traditional role in the gynaecological health (Devi and Singh, 2011).

3.5. *Persicaria odorata* (Vietnamese Coriander/Phakpai):

Persicaria odorata is a low-growing herb (Nguyen et al., 2016). *Persicaria odorata* is commonly known as Phakpai by the Meitei community in Cachar, Assam. *Persicaria odorata* is a perennial herb with trailing stems that root at the nodes. The leaves of this plant, *Persicaria odorata* are lanceolate, aromatic and often marked with dark chevron patterns. The plant has small pink or purplish flowers in axillary clusters (Trung et al., 2015).

Medicinal properties: *Persicaria odorata* is enriched with bioactive molecules that supports its ethnopharmacological significance. The essential oils extracted from *Persicaria odorata* contains aliphatic aldehydes which supports the plant's aromatic and antimicrobial activities (Nguyen et al., 2016). The plant also moderately contains fatty alcohols like 1-decanol and 1-dodecanol which enhances the plant's antiseptic and anti-inflammatory properties (Trung et al., 2015). This plant is also enriched with phenolic acids and flavonoids, which are potent to help reduce inflammation (Do et al., 2014). *Persicaria odorata* also contains terpenoids and sesquiterpenes, which are responsible for its potent antimicrobial and anti-inflammatory properties. The Meitei community use this herb as both in cooking as well as use it for medicinal purposes for treating various ailments like indigestion, diarrhoea, and abdominal discomfort (Nguyen et al., 2016). The plant is also used in postpartum diets to reduce the water retention and inflammation. One common use of this herb is, while brewing tea using its leaves which is known for its effective cooling and digestive effects (Trung et al., 2015).

3.6. *Musa* spp. (Banana Flower):

Musa spp. which is also commonly known as banana flower. *Musa* spp. is a large herbaceous monocot plant with pseudo-stems formed by tightly packed leaf bases (Kumar et al., 2002). The inflorescence of this plant consists of rows of yellowish flowers shielded by maroon bracts. The female flowers of this plant develop into banana fruits, while the male flowers and floral axis form the 'banana flower' (Robinson and Gulan Sauco, 2010)

Medicinal properties: The banana flower is enriched with a variety of important bioactive compounds contributing to its medicinal significance. Banana flowers contain phenolic acids like catechol, gallic acids and ferulic acids which is known for its potent antioxidant properties (Kandasamy et al., 2012). It contains flavonoids like myricetin, kaempferol and quercetin and is known for its antidiabetic and anti-inflammatory activities (Sulaiman et al., 2011). Banana flower is also rich in tannins which contribute to its antimicrobial properties (Manorama and Rukmini, 1991). Sterols and triterpenoids are present in banana flower which contributes to its effect of lowering the calories (Usha et al., 2010). Compound such as saponins and alkaloids are found in smaller quantity in banana flowers which are responsible of its antidiabetic and antimicrobial properties (Singh et al., 2016). It is also rich in good source of dietary fibres such as magnesium, potassium, iron, vitamin C and vitamin E, making it a nutritious ingredient for food (Anbuselvi et al., 2012). In Meitei households, banana flowers are considered a medicinal food. They are used to regulate menstruation, improve lactation, and reduce blood sugar levels. Another benefit is that cooked banana flowers help to alleviate abdominal bloating and pain. The infusions are also used in managing infections and ulcers.

3.7. *Blumea lanceolaria* (Leikhaman):

Among Meitei community, *Blumea lanceolaria* is called as Leikhaman. *Blumea lanceolaria* is an erect, strongly aromatic shrub that can grow up to a height of 2 meters (Kirtikar and Basu, 1935; Hooker, 1885). The leaves of this plant are lanceolate with serrated margins. *Blumea lanceolaria* thrives in an open grassland and it bears small yellow composite flower heads (Singh and Sandhu, 2010).

Medicinal uses: *Blumea lanceolaria* is known for its rich bioactive compounds, contributing to its medicinal significance. It is enriched with volatile oils in its leaves and aerial parts, the essential oils contain compounds like camphor, lanceol, limonene, cineole and borneol which shows anti-inflammatory and antimicrobial properties (Choudhury et al., 2011; Singh et al., 2006). *Blumea lanceolaria* contains flavonoids and phenolics which contributes to its antioxidant and hepatoprotective properties (Sundararajan et al., 2006; Das et al., 2010). The plant is also enriched with terpenoids and sesquiterpenes (Rahman et al., 2013), steroids and tannins (Manandhar, 2002; Kirtikar and Basu, 1935) and alkaloids (Choudhury et al., 2011) which is responsible for exhibiting antimicrobial, wound healing properties. *Blumea lanceolaria*, leikhaman is widely used in postpartum care and fever management. Steam from boiled leaves of this plant is inhaled which is great for treating nasal congestion and flu symptoms. Leaf paste derived from this plant, Leikhaman is applied for muscle pain and boils. It is also used in traditional massages to relieve rheumatic conditions (Sharma & Chhetri, 2011).

3.8 *Ocimum canum* (Mayangton/Mayangba): *Ocimum canum* is a soft-stemmed herbaceous plant that grows upright, typically reaching to a height of 30 to 90 cm (Karthikeyan et al., 2009). The leaves of this plant are hairy, oval-shaped, and emit a strong fragrance. Glands on the leaf surface secrete essential oils, giving the plant its distinctive aroma (Saha et al., 2013). The plant has small purplish flowers which grow in terminal spikes and are typical of the Lamiaceae family (Mukherjee et al., 2005).

The seeds of the plant become slimy when wet which helps them stick to surfaces and disperse efficiently (Rathi et al., 2011). Chemical analysis shows that compounds like camphor, linalool, and 1,8-cineole dominate its essential oil profile (Verma et al., 2016), making it distinct from other basil varieties. In Meitei households, *Ocimum canum* is often used for treating mild illnesses like cough, fever, and digestive issues. The leaves of this plant are also crushed and mixed with honey helpful for sore throats, or steeped in hot water to make a healing tea for colds (Devi & Singh, 2017). This plant is also a common remedy for flatulence and mild stomach discomfort. Apart from its use as a medicine for curing common ailments, the plant is burned or placed at doorways during traditional rituals to repel insects and purify the surroundings, a practice tied to both health and spirituality (Sanjenbam et al., 2014). Many Meitei families grow this plant in their house for its pleasant scent and protective aura (Singh & Sharma, 2012). Studies have verified the antibacterial and antifungal potential of *Ocimum canum*, especially against common microbes like *E. coli* and *S. aureus* (Singh et al., 2010). The essential oil extracted from its leaves has shown effectiveness in treating skin infections and inflammation (Dhawan et al., 2013). The plant is rich in phytochemicals with anti-inflammatory and antioxidant properties, supporting its traditional use for wounds, minor injuries, and as a general tonic (Baskaran et al., 2016). Researchers have also found its extracts capable of neutralizing harmful free radicals in lab tests, suggesting a role in managing oxidative stress (Kumar et al., 2015). The traditional healers in the Meitei community believe that it boosts immunity, especially during weather changes, though this use remains under-documented in formal literature (Laishram et al., 2020).

3.9. *Alocasia indica* (Yendem):

Alocasia indica commonly known as Yendem by the Meitei is a large, erect, perennial herb with a prominent underground rhizome (Singh and Devi, 2016). The plant can grow between 1.5 to 2.5 meters tall. Its leaves

which are arrow-shaped can measure up to 90 cm in length, with a dark green, glossy surface and pronounced venation (Kirtikar and Basu, 1935). The inflorescence of this plant comprises a pale-yellow spadix encased in a greenish spathe (Singh and Devi, 2016). The tuberous rhizome which is starchy in nature but it also contains calcium oxalate crystal making it toxic in raw form (Chatterjee and Prakrashi, 1995). The Meitei community processes the rhizome through boiling and fermentation before medicinal use (Singh & Devi, 2016).

Medicinal properties: *Alocasia indica* is a plant rich with a number of phytochemicals that helps in treating ailments and other remedies thus it is used by the Meitei community in its traditional healing system. The plant is known for its anti-inflammatory, analgesic, and anticancer potential as it contains alkaloids such as indicine-N-oxide and other nitrogenous compounds (Chatterjee & Pakrashi, 1995 et al., 2010). It also contains flavonoids such as quercetin and kaempferol derivatives in its leaves and rhizomes which aids as antioxidant and anti-inflammatory effects (Saxena et al., 2013). The plant also exhibits antimicrobial and astringent properties as it contains hydrolysable tannins and polyphenols (Chopra et al., 1956). *Alocasia indica* also has saponins which is reported to enhance immune response as well as have cytotoxic activity (Gupta et al., 2012). Despite its medicinal properties the rhizome of the *Alocasia indica* contains raphides of calcium oxalate which are by nature toxic and can cause irritation when come in contact with, however boiling and fermentation can reduce its toxicity (Singh & Devi, 2016; Kirtikar & Basu, 1935). The plant's rhizome after it is detoxified can be used for nutritional purposes as it is rich in starch, dietary fiber and some other essential minerals (Manandhar, 2002). Poultices made from pounded leaves of this plant are applied to treat swollen joints and muscular inflammations. This practice is common among elders who rely on traditional methods for arthritis and localized pain (Singh & Devi, 2016). Decoctions from the *Alocasia indica* rhizome are consumed in small, carefully prepared quantities to treat dyspepsia, bloating, and mild diarrhoea. The preparation is always cooked thoroughly to deactivate toxins (Yumnam et al., 2013). Fresh juice from crushed leaves is also applied to treat open cuts and superficial wounds, believed to promote faster clotting and healing (Bora & Sharma, 2012). Leaf pastes of *Alocasia indica* is also used externally to treat eczema, boils, and insect bites. This practice is especially seen in rural households where formal dermatological care is not available (Das, Dutta, & Baruah, 2015). *Alocasia indica* is also helpful for snakebite and insect sting remedies although it is not an antidote by itself, *Alocasia indica* is incorporated into multi-plant remedies in emergency treatments for bites and stings, highlighting its role in the Meitei ethnopharmacological system (Singh & Devi, 2016). Scientific studies have revealed that *Alocasia indica* contains several classes of bioactive compounds, including flavonoids, alkaloids, saponins, tannins, and phenolic acids (Kumar, Singh, & Chauhan, 2014). These contribute to the plant's anti-inflammatory, antimicrobial, and wound-healing properties. Despite its traditional use, further pharmacological validation is required to isolate and clinically assess its active principles.

3.10. *Andrographis paniculata* (Bhuguti/Vubati): *Andrographis paniculata*, also commonly known as green chiretta or creat is an annual herbaceous plant belonging to the Acanthaceae. *Andrographis paniculata* is native plant species to India, Southeastern and Southern Asia, Sri Lanka (Akbar, 2011; Mishra et al., 2007). *Andrographis paniculata* grows as an herb reaching to a height of 30cm to 110cm. The plant has a lance-shaped leaves and have hairless blades. The stem is slender and dark green in color (Chandrasekaran et al., 2020). *Andrographis paniculata* is also known to be as the king of bitters and is widely used for its medicinal properties among the Meitei community of Cachar, Assam (Singh and Singh, 2018). The Meitei community possess a rich traditional knowledge concerning particularly to the use of plants for medicinal purposes (Devi et al., 2020). In Northeastern part of India, *Andrographis paniculata* is known for its highly effective medicinal properties such as antiviral, anti-inflammatory effects (Puri et al., 1993; Hossain et al., 2014). The plant species is traditionally used to manage certain conditions like respiratory infections (cough,

cold), malaria and other viral and bacterial infections like fevers, flu, stomachaches and dysentery Gupta et al., 2017; Tiwari et al., 2010). The plant species is used to apply on skin for treating skin infections and related conditions (Mishra et al., 2007).

Medicinal Properties: *Andrographis paniculata* commonly known as “king of bitters” is rich in compounds such as diterpenoid, lactones, flavonoids, xanthenes and other phenolic compounds which help contribute to its wide medicinal efficacy (Akbar, 2011; Rajagopal et al., 2003). One of the most effective compounds present in *Andrographis paniculata* is diterpenoid which acts as an anti-inflammatory, antioxidant, antiviral, antipyretic, hepatoprotective, immunomodulatory, and anticancer (Mishra et al., 2007; Akbar, 2011). Other compounds such as luteolin and apigenin help in protecting tissues from oxidative stress as they exhibit strong antioxidant and free radical scavenging activity (Rajagopal et al., 2003). This plant also possesses neo andrographolide, 14-dexoy-11, 12-didehydroandrographolide, and andrographan which also shows antimicrobial and cytotoxic properties (Zhang & Tan, 2000). *Andrographis paniculata* also contains xanthenes and polyphenols which acts as an anti-inflammatory and immunostimulant, thus further validating its traditional use against fevers, infections, and hepatic disorders (Kumar et al., 2012). For the Meitei, Vubati/Bhuguti is a first responder in times of sickness. Its aerial parts and roots are harvested for remedies passed down from one generation to another generation (Devi et al., 2020; Singh and Singh, 2018). The bitter leaves of *Andrographis paniculata* is brewed into tea or poultices which are helpful against dengue, malaria, and respiratory infections (Akbar, 2011; Hossain et al., 1993). Several studies validate this, highlighting andrographolide-its main compound as a fever reducer and antiviral agent (Mishra et al., 2007; Puri et al., 1993). During flu seasons, Meitei households often simmer the leaves with ginger, a practice mirrored in clinical trials showing its effectiveness against sore throats and colds (Gupta et al., 2017; Tiwari et al., 2010). The local doctors or traditional healers prescribe Bhuguti/ Vubati for stomach aches and dysentery. Its anti-inflammatory diterpenes soothe gut lining, while flavonoids regulate bowel movements (Chandrasekaran et al., 2020; Hossain et al., 2014). One common practice is also the use of crushed leaf paste mixed with honey is a common cure for children’s colic (Devi et al., 2020; Mishra et al., 2007). The herb’s hepatoprotective property is also helpful for detoxifying after snakebites or alcohol overindulgence (Akbar, 2011, Mishra et al., 2007). It was found in recent research that it also helps to lower blood sugar and LDL cholesterol, making it an ally for metabolic health (Chandrasekaran et al., 2020; Hossain et al., 2014). Meitei local doctors also apply the leaf extracts to wounds or eczema, leveraging its antimicrobial flavonoids (Devi et al., 2020; Singh and Singh, 2018). Lab studies confirm its effectiveness against *Staphylococcus* and *E. coli* (Gupta et al., 2017; Tiwari et al., 2010).

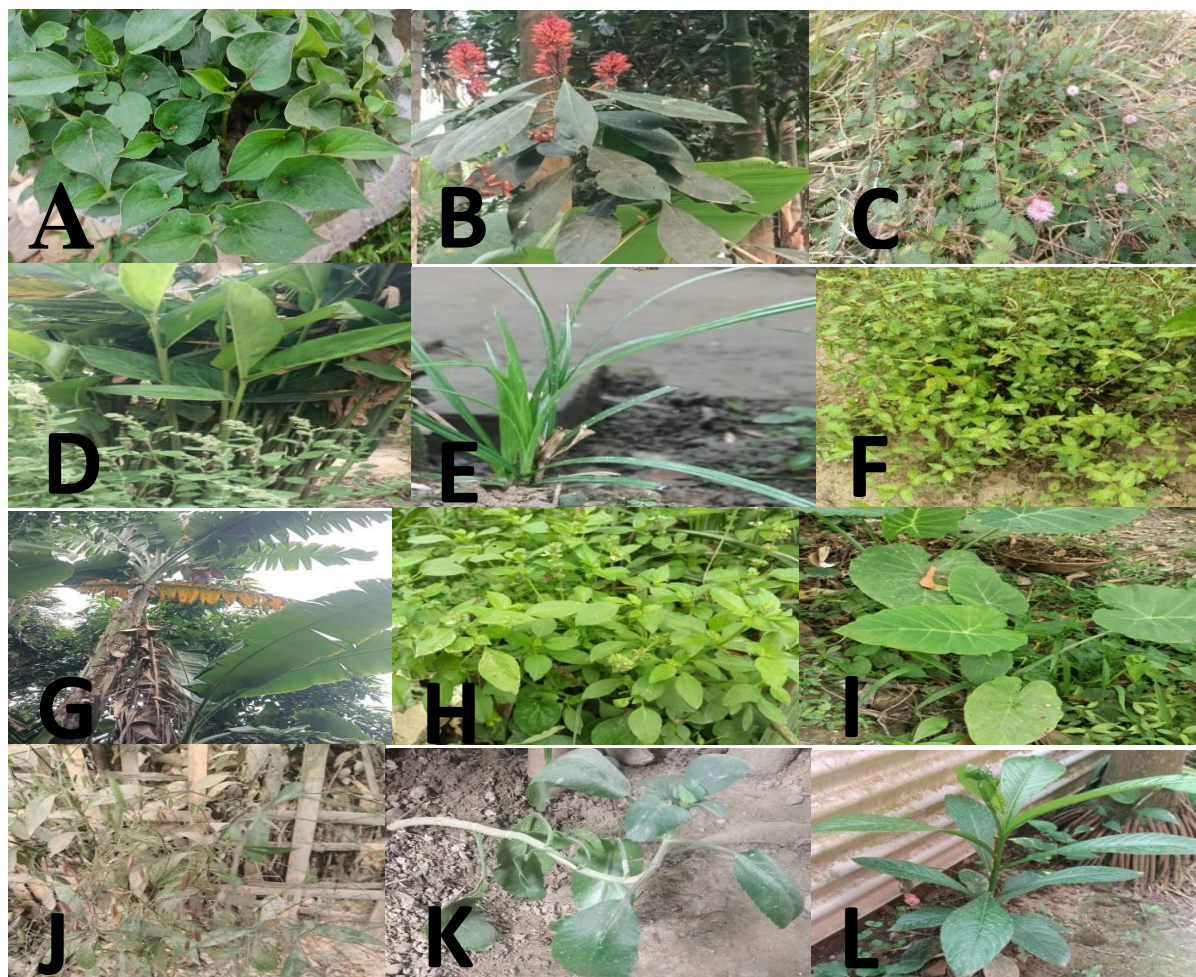
3.11. Mimosa Pudica (Shameplant/Lamekaithibi): *Mimosa Pudica* locally known as Lajwanti or the “sensitive plant”. *Mimosa pudica* is a creeping herb which is known for its continuous thigmonastic movements (Singh et al., 2012; Jain and DeFilipps, 1991). Among Meitei community it is commonly known as Lamekaithibi and poses great medicinal significance (Devi et al., 2020; Singh and Singh, 2018). The plant has slim, prickly stems and bipinnate leaves that fold inward upon tactile stimulation (Sharma et al., 2005). Its spherical flowers pink in colour bloom seasonally and measure approximately 1 cm in diameter, while seed pods form in clusters (Goyal et al., 2014). The roots of this plant are fibrous with nitrogen-fixing nodules common in tropical regions (Kumar et al., 2010).

Medicinal properties: *Mimosa pudica* known for its rich medicinal uses constitutes a diverse array of bioactive phytochemicals. Phytochemical analysis of this plant has revealed the presence of alkaloids, tannins, terpenoids, flavonoids, saponins, glycosides, steroids, and phenolic compounds, which is responsible for its varied pharmacological activities (Kumar et al., 2010; Sharma et al., 2012). The plant contains mimosine, a non-protein amino acid which is found in the leaves and roots that aids in activities

such as antimicrobial, antiproliferative, and antioxidant (Kumar et al., 2010). The presence of flavonoids such as quercetin, kaempferol, and myricetin are known for anti-inflammatory, antioxidant, and hepatoprotective effects which aids in detoxification and protection against oxidative stress (Rajendran et al., 2001). Saponins and tannins aids in astringent, antimicrobial, and anti-diarrheal properties, which supports the traditional use the plant in treating wounds, dysentery, and diarrhoea (Singh et al., 2012). The plant also contains terpenoids and steroids which has anti-inflammatory and analgesic potential, while glycosides contribute in cardioprotective and cytotoxic effects (Sharma et al., 2010). *Mimosa pudica* also contains phenolic compounds such as gallic acid and ellagic acid which enables it to scavenge free radicals and protect cellular components (Kumar et al., 2010). Its chemical constituents include 7,8,3',4'-tetrahydroxyl-6-[alpha-L-rhamnopyranosyl-(1->2)]-beta-D-glucopyranosyl flavone, ascorbic acid, beta-carotene, inosine, and norepinephrine, contributing to its pharmacological activities such as anthelmintic, antivenom, and wound healing effects (Goyal et al., 2014; Singh and Singh, 2018). The fresh leaf paste derived from *mimosa pudica* or Lajwanti is made and applied to ulcers and burns by Meitei healers. Studies have shown that its effective is caused by flavonoids like quercetin, which accelerates tissue regeneration (Das et al., 2022). The consumption of the root decoctions of *mimosa pudica* helps in the regulation of blood sugar. A rodent study conducted in 2020 demonstrated a 34% reduction in glucose levels after 21 days of treatment (Journal of Ethnopharmacology, 2020). Ethanolic extracts from *mimosa pudica* inhibit *Pseudomonas aeruginosa*, validating its use in urinary tract infections (Kalita & Bora, 2009).

3.12. *Phlogacanthus thyrsoformis* (Nomangkha/Namangkha): *Phlogacanthus thyrsoformis* is an evergreen shrub which can grow up to 2 to 3 meters in height. The leaf of *Phlogacanthus thyrsoformis* has large, opposite leaves which are ovate, lanceolate with smooth and entire margins and pointed tips. The leaves of *Phlogacanthus thyrsoformis* are dark green in colour and measure approximately 12 to 20 cm in length. The stem of *Phlogacanthus thyrsoformis* are semi-woody and purplish at the nodes which is a common trait found in many species belonging to the Acanthaceae family (Kanjilal et al., 1939). *Phlogacanthus thyrsoformis* produces striking terminal inflorescences which forms a dense thyrsoid cluster which are reddish-orange tubular flowers. Each flower of this plant is bilabiate with a curved corolla which helps to attract pollinators such as insects and bees. The fruit of *Phlogacanthus thyrsoformis* is a slender capsule in which the seeds are dispersed after getting burst, furthermore the hygroscopic hairs of this plant help to aid in wind dispersal (Kanjilal et al., 1939).

Medicinal properties: Among the Meitei households in Cachar, *Phlogacanthus thyrsoformis* is traditionally consumed as a leafy vegetable, often cooked with fish or pork during the colder months. The leaves of this plant are also believed to have warming properties thus it is commonly used to treat flu, coughs, sore throats, mild fevers and bronchial discomfort. The older generation of the Meitei community often recommend boiling the leaves to prepare a mild decoction or adding them to broths as a preventive measure against seasonal respiratory illnesses (Singh, Singh, & Sandhu, 2003). *Phlogacanthus thyrsoformis* have confirmed the presence of bioactive compounds such as flavonoids, alkaloids, saponins, and phenolic acids which may contribute to its therapeutic efficacy (Sharma & Devi, 2015). Scientific studies have revealed that the leaf and flower extracts of *Phlogacanthus thyrsoformis* exhibit anti-inflammatory, antimicrobial, and analgesic properties, supporting its traditional applications (Borah, Nath, & Bordoloi, 2010). Furthermore, the antioxidant activity as identified in the plant could validate its role in managing oxidative stress-related conditions, particularly during seasonal transitions when immunity is vulnerable (Das, Dutta, & Sharma, 2016). However, these findings remain largely preliminary and require deeper pharmacological study, especially in relation to traditional preparation methods practiced by the Meitei community.

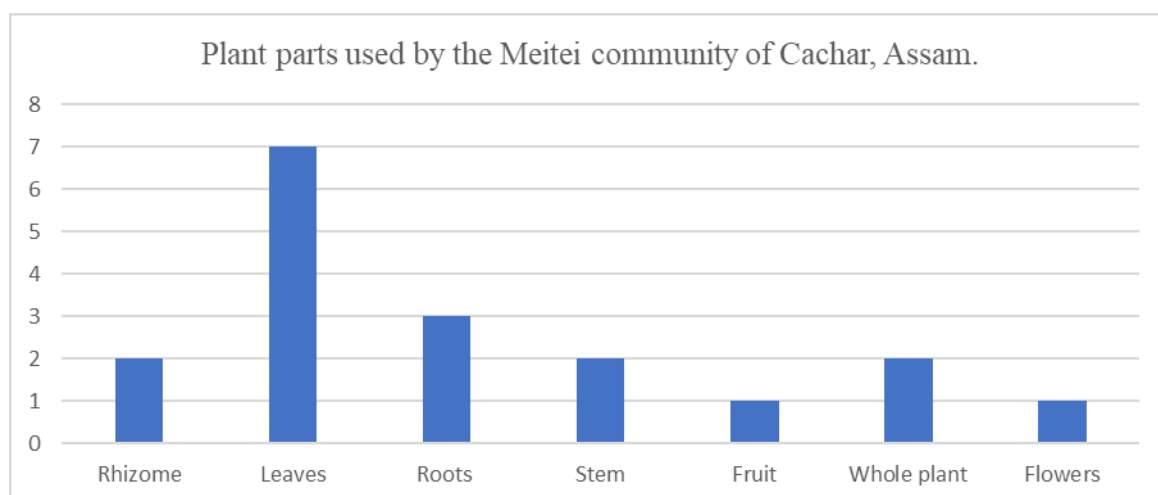


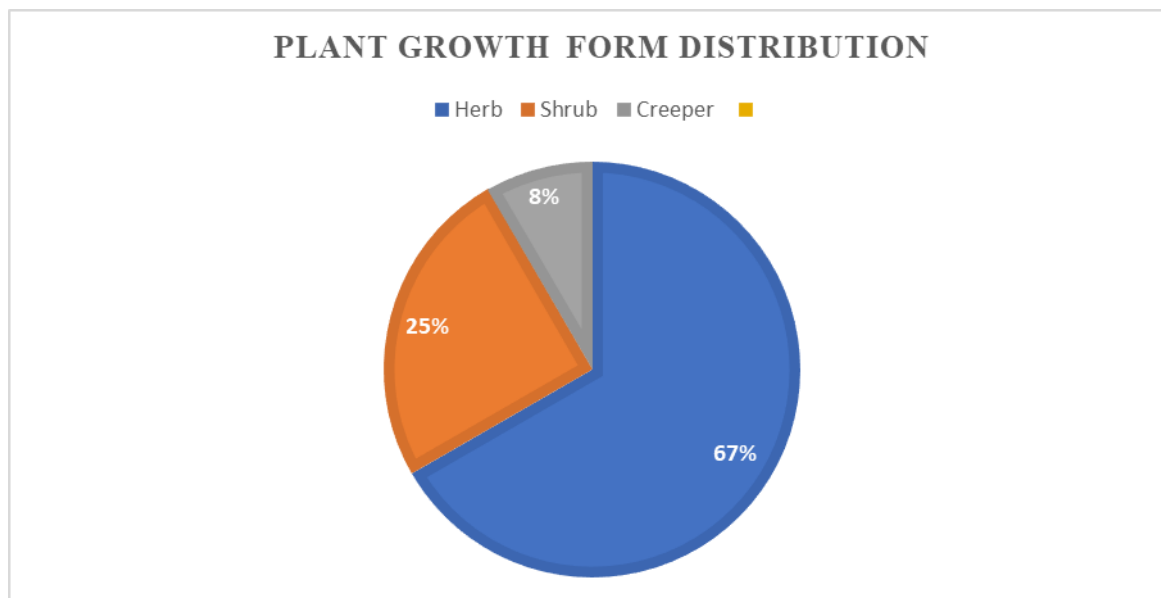
Figures: A- *Houttuynia cordata*, B- *Phlogacanthus thyrsoformis*, C- *Mimosa pudica*, D- *Zingiber cassumunar*, E- *Cyperus rotundus*, F- *Persicaria odorata*, G- *Musa* spp., H- *Ocimum canum*, I- *Alocasia indica*, J- *Andrographis paniculata*, K- *Bryophyllum pinnata*, L- *Blumes lanceolaria*.

Table: Traditional Uses of medicinal plants of selected plants among the Meitei Community living in Cachar, Assam.

Scientific name	Vernacular name (Meitei)	Part Used	Ailments Treated	Preparation Method
<i>Cyperus rotundus</i>	Chumthang maru	Rhizome	Digestive disorders, fever	Rhizome decoction taken orally
<i>Zingiber cassumunar</i>	Tekhao yaikhu	Rhizome	Inflammation, joint pain	Rhizome crushed and applied topically
<i>Bryophyllum pinnatum</i>	Mana heidak	Leaves	Wounds, kidney stones	Leaf juice extracted and consumed or applied
<i>Houttuynia cordata</i>	Fishmint/ toningok	Stem, root, leaf	Stomach ache, infection	Leaf, stem, roots paste are applied topically as well as it is consumed.
<i>Persicaria</i>	Phakpai	Leaves	Diarrhoea,	Fresh leaves chewed or

Scientific name	Vernacular name (Meitei)	Part Used	Ailments Treated	Preparation Method
<i>odorata</i>			flatulence	decocted
<i>Musa spp.</i>	Lafu tharo	Root, stem, fruit	Diarrhoea, urinary tract infections	Juice extracted from pseudostem or root
<i>Blumea lanceolaria</i>	Leikhaman	Whole plant	Rheumatism, respiratory disorders.	Decoction taken orally
<i>Ocimum canum</i>	Mayangton/Mayan gba	Leaves	Flu, cough, cold, fever.	Leaves boiled or crushed and inhaled
<i>Alocasia indica</i>	Yendem	Roots, leaves.	Inflammation, skin diseases.	Paste is applied topically, consumed sometimes.
<i>Andrographis paniculata</i>	Vubati/Bhuguti	Leaves	Fever, liver disorders, infections	Bitter decoction prepared from leaves
<i>Mimosa pudica</i>	Shameplant/Lame kaithibi	Whole plant	Piles, wounds, insomnia	Whole plant juice or poultice applied
<i>Phlogacanthus thyrsiformis</i>	Namangkha/Noma ngkha	Leaves, flowers	Bronchitis, asthma	Flower and leaf extract used as syrup





Conclusion:

The Meitei community of Cachar, Assam, with its rich traditional medicinal knowledge shows a deeply rooted relationship between people with the surrounding environment and the plants. Over several generations, this traditional knowledge system was derived through observation, trial, and intergenerational transmission thus forming an invaluable collection of practical ethnobotanical wisdom. The 12 plant species documented in this review, including *Cyperus rotundus*, *Zingiber cassumunar*, *Bryophyllum pinnatum*, and others, serves as a glimpse into the vast pharmacopeia of the Meitei people.

The thing that makes this traditional knowledge particularly significant is not only because of its therapeutic utility but also because of its cultural context. For the Meiteis, healing is not just a biological process but it is an integral part of their social, spiritual, and ecological dimension. The plants which hold medicinal value are used in ritualistic contexts, household remedies, and even community health practices, this is seen particularly in remote areas where there is a lack of access to modern healthcare. This evinces the adaptability and resourcefulness of traditional knowledge systems in the face of changing environments and healthcare needs.

Each of the plants studied reveals a specific pattern of use that reflects both empirical understanding and holistic healing. For instance, *Andrographis paniculata*, known for its intense bitterness, is widely used for treating fever and liver disorders, a practice also observed in Ayurvedic and traditional Chinese medicine, suggesting a cross-cultural recognition of its bioactive properties. In the same manner, *Mimosa pudica*, the humble “touch-me-not” plant seemingly useless is great for treating wounds and insomnia, demonstrating how even commonly found species have therapeutic potential when observed with a trained traditional eye. More importantly many of these plants manifest scientifically validated pharmacological effects. Studies have shown that *Bryophyllum canum* evinces diuretic and wound healing effects, *Zingiber cassumunar* possesses anti-inflammatory and analgesic properties and *Ocimum canum* contains essential oils which has antimicrobial effects. These scientific validations not only affirm the usefulness of traditional knowledge in treating common ailments but also present opportunities for the advancement of drugs as well as pave way for the development of integrative healthcare models that combine modern and traditional systems.

However, the passing down of this knowledge to the younger generation is at risk. The ever-growing influence of modern medicine, rapid urbanization, and cultural homogenization has led to the gradual decline of indigenous practices. Younger generations as a result often lack the knowledge of traditional

names of plants and their uses for treating ailments in a traditional way, and the elders who possess this rich knowledge are diminishing in number. Unless documented and preserved, this rich heritage could be lost forever. It is, therefore important to not only archive the plants and their uses, as done in this review, but also to support community-based conservation, educational initiatives, and local healing traditions. There are also ethical considerations in the study and potential commercialization of traditional medicinal knowledge. Issues of intellectual property rights, benefit-sharing, and cultural sensitivity must be addressed carefully. The Meitei community, like many indigenous groups, has historically been marginalized, and their knowledge should not be extracted or commodified without ensuring their full consent and equitable benefits. Collaborative ethnobotanical research models that engage local communities as partners not just subjects to offer a promising way forward.

From a biodiversity perspective, the plants that are used in Meitei traditional medicine are primarily sourced from local forests, agricultural land, and household gardens. This speaks volumes about the community's reliance on a biodiverse habitat and highlights the link between ecological conservation and cultural survival. Pollution of water sources or degradation of forests directly affects the availability and efficacy of medicinal plants. Conservation strategies must, therefore, be aligned with the protection of indigenous knowledge and the habitats where these plants grow in. In reflecting on the broader relevance of this research, it becomes very clear that traditional medicinal knowledge systems like that of the Meiteis hold immense potential for modern society. As there is rise in antibiotic resistance and chronic diseases become more common, the need for novel therapeutic agents, many of which may be derived from plants is more the need of the hour than ever. Medicine derived from traditional means offers not only a source of remedy but a more integrative and holistic way of thinking about health and well-being.

Furthermore, the cultural richness and knowledge embedded in plant use from how the leaves of *Blumea lanceolaria* are brewed into a soothing tea for bronchial issues, to the way *Alocasia indica* is prepared carefully to avoid toxicity reveals a sophisticated understanding of biochemistry honed over the centuries. These traditional practices, although sometimes lacking formal scientific language, embody precise empirical logic and deserve respectful study. In conclusion, the ethnomedicinal knowledge of the Meitei community in Cachar represents an invaluable heritage gained through generations that bridges the domains of health, ecology, and culture. This review, through its focus on selected plant species, aims not only to document these traditional practices but to affirm their usefulness and relevance in today's world. Protecting and revitalizing this knowledge requires a multidisciplinary approach combining botany, pharmacology, anthropology, and community participation to ensure that these traditions are not just remembered, but respected and re-integrated into future models of health and sustainability.

By documenting these traditional medicinal practices, we take a step toward recognizing the intellectual legacy of the Meitei community and encouraging a more pluralistic, inclusive approach to healthcare. As we move forward, the synergy between traditional and modern medicine may well become one of our most powerful tools in addressing the global health challenges of the 21st century.

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