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ETHNOBOTANICAL SURVEY OF MEDICINAL PLANTS UTILISED BY THE PEOPLE OF BHOLA DISTRICT IN BANGLADESH

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Abstract: This ethnobotanical survey documents medicinal plant diversity and traditional knowledge in Bhola District, Bangladesh, a deltaic ecosystem underrepresented in ethnobotanical literature. Semi-structured interviews were conducted with 100 informants between June and December 2025, recording plant species, preparation methods, and therapeutic applications. In total 39 medicinal plant species from 28 families were documented, with Combretaceae and Lamiaceae being the most prevalent families (7.69% each). Trees (35.9%) and herbs (33.3%) were the dominant growth forms, while leaves (43.3%) and fruits (22.4%) were the most utilised plant parts. Decoction (46.2%) and juice extraction (23.1%) were the primary preparation methods. Relative frequency of citation (RFC) analysis revealed *Allium sativum* (0.85), *Aloe vera* (0.82), and *Curcuma longa* (0.73) as the most culturally significant species. Informant consensus factor (ICF) values ranged from 0.67 to 0.91, with digestive disorders (0.91), respiratory diseases (0.88), and skin diseases (0.86) showing the highest consensus. These findings provide baseline data for the evidence-based integration of traditional medicine into healthcare frameworks and identify priority species for phytochemical investigation and conservation management in this vulnerable deltaic ecosystem.

Key words: medicinal plants, traditional knowledge, ethnobotany, agricultural knowledge, Barisal Division in south-central Bangladesh.

Introduction

Traditional medicine serves as the primary healthcare resource for approximately 80% of the global population, particularly in developing countries with limited access to modern medical facilities (Ikhoyameh et al., 2024; WHO, 2013). The WHO Traditional Medicine Strategy 2025–2034 and Traditional

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Medicine Global Summit recognise traditional and complementary medicine as essential for achieving Universal Health Coverage (Wong et al., 2025), reflecting mounting evidence supporting ethnomedicinal efficacy in primary healthcare delivery (Hoenders et al., 2024).

Medicinal plants represent an invaluable repository of phytochemical diversity, with approximately 50% of approved pharmaceuticals derived from natural products or semi-synthetic derivatives (Pirintsos et al., 2022). Ethnobotanical approaches demonstrate remarkable predictive power, with phylogenetically clustered medicinal plants exhibiting convergent therapeutic applications across disparate regions (Chele et al., 2025), leading to landmark discoveries from artemisinin to taxol (Soejarto et al., 2005).

Bangladesh, located within the Indo-Burma biodiversity hotspot, contains over 5,000 vascular plant species (Mukul et al., 2018) and rich ethnobotanical heritage among the Garo, Chakma, Marma, and Bengali populations (Faruque et al., 2018). However, the country faces unprecedented biodiversity loss due to habitat destruction, agricultural expansion, climate change, and urbanisation (Biswas, 2025), with 24% of animal species and 39.4% of plant species facing imminent extinction (Haseeb, 2024). The progressive erosion of traditional knowledge among younger generations driven by globalization, rural-urban migration, and a preference for allopathic medicine necessitates urgent documentation before this invaluable heritage disappears (Voeks and Leony, 2004).

Bhola District, in Bangladesh's south-central deltaic region, presents a unique ecology characterised by riverine ecosystems, alluvial plains, and coastal influences supporting specialised flora adapted to periodic flooding and saline intrusion. Despite its ecological significance and substantial population, Bhola remains underrepresented in ethnobotanical literature, with no comprehensive documentation of its medicinal plant diversity and traditional knowledge systems, impeding conservation planning and bioprospecting initiatives (Chen et al., 2016).

This investigation addresses this gap through a comprehensive ethnobotanical survey with specific objectives: (1) documenting the diversity and taxonomic composition of medicinal plant species; (2) recording preparation methods, plant parts used, and therapeutic applications; (3) quantifying cultural consensus through ethnobotanical indices including RFC and ICF; (4) identifying priority species for phytochemical investigation and conservation. This research provides fundamental data linking traditional knowledge with scientific validation, while supporting sustainable biodiversity conservation and community healthcare advancement in this vulnerable deltaic ecosystem.

Material and Methods

The ethnobotanical survey was conducted in Bhola District, Barisal Division, south-central Bangladesh (21°54' to 22°52' N and 90°34' to 91°01' E). As Bangladesh's largest island district, Bhola encompasses 3,403.48 km² (BBS, 2024), and is bounded by Lakshmipur and Barisal districts to the north, the Bay of Bengal to the south, the lower Meghna River and Shahbazpur Channel to the east, and Patuakhali District and Tetulia River to the west (Bhuiyan et al., 2024).

Ethnobotanical data were collected between June and December 2025 using convenience and snowball sampling techniques (Tongco, 2007), following standard protocols (Alexiades & Sheldon, 1996). Semi-structured interviews and focus group discussions were held with 100 informants including local residents, traditional healers, and community elders. Free and prior informed consent was obtained following the International Society of Ethnobiology Code of Ethics (International Society of Ethnobiology, 2006).

Demographic data (age, gender, occupation) and ethnobotanical information (local names, plant parts used, preparation methods, administration frequency, and ailments treated) were collected. Field observations and participatory plant walks ensured accurate plant identification (Cotton, 2002).

Plant specimens were collected, pressed, dried, and deposited as voucher specimens in the Agricultural Herbarium, Department of Agricultural Science, Daffodil International University, with unique codes (DIU-AH-BH-XXX). Plant identification was conducted using taxonomic keys, online databases (Plants of the World Online: http://plantsoftheworldonline.org/), and relevant literature (Uddin et al., 2003), following World Flora Online nomenclature (http://www.worldfloraonline.org/).

Ethnobotanical data were organised using Microsoft Excel 2019. Plants were arranged in descending order of relative frequency of citation (RFC) values. Quantitative ethnobotanical indices were used to assess cultural significance and informant consensus (Heinrich et al., 1998).

RFC quantified the local importance and frequency of use for each species (Tardío and Pardo-de-Santayana, 2008):

$$\mathrm{RFC} = \frac{\mathrm{FC}}{\mathrm{N}} \tag{1}$$

where FC is the number of informants citing a species and N is the total number of informants (N = 100). RFC values range from 0 to 1; values ≥ 0.70 indicate high cultural significance.

ICF assessed agreement among informants for specific ailment categories (Ahmad et al., 2014):

$$\mathrm{IFC} = \frac{\mathrm{Nur} - \mathrm{Nt}}{\mathrm{Nur} - 1} \tag{2}$$

where Nur is the number of use reports per illness category and Nt is the number of species used. ICF values range from 0 to 1; values near 1 indicate high consensus and effective information exchange, while values near 0 indicate low consensus.

Results and Discussion

Demographic characteristics of informants

A total of 100 informants participated, comprising 64 males (64%) and 36 females (36%). The age distribution showed that 39% were 20–40 years, 44% were 41–60 years, and 17% were 61–80 years. Farmers constituted the majority (52%), followed by employed individuals (23%), housewives (12%), religious leaders (8%), and retired persons (5%) (Table 1). The predominance of male informants and middle-aged participants reflects patterns in South Asian ethnobotanical studies, where traditional knowledge is concentrated among older males due to cultural practices and agricultural activities (Ahmad et al., 2014; Islam et al., 2014). The lower participation of younger informants raises concerns about knowledge erosion, emphasising urgent documentation needs.

Table 1. Demographic profile of informants from Bhola District, Bangladesh.

Category	Sub-category	Number (%)
Gender	Male	64 (64%)
	Female	36 (36%)
Age (years)	20-40	39 (39%)
	41-60	44 (44%)
	61-80	17 (17%)
Occupation	Farmer	52 (52%)
	Employed	23 (23%)
	Housewife	12 (12%)
	Religious leader	8 (8%)
	Retired	5 (5%)

Source: Authors' field survey.

Taxonomic diversity and family distribution

The survey recorded 39 medicinal plant species from 28 botanical families (Table 2). Combretaceae and Lamiaceae showed the highest representation with 3 species each (7.69%), followed by Acanthaceae, Apocynaceae, Arecaceae, Cucurbitaceae, Piperaceae, Rutaceae, and Zingiberaceae each with 2 species (5.13%). The remaining 19 families were represented by a single species each. The dominance of Combretaceae and Lamiaceae aligns with global ethnobotanical patterns; these species possess diverse phytochemical profiles including flavonoids, alkaloids, and saponins (Wink, 2013). The prominence of Zingiberaceae, particularly *Curcuma longa* (RFC 0.70) and *Zingiber officinale* (RFC 0.68), reflects traditional Asian ethnopharmacology valuing rhizomatous plants rich in curcuminoids and gingerols with validated anti-inflammatory and antioxidant properties (Kocaadam & Şanlier, 2017). This distribution is similar to findings from other Bangladesh studies (Faruque et al., 2018; Islam et al., 2014; Uddin et al., 2003).

Table 2. Documented medicinal plants in Bhola District including voucher no., local name, scientific name, family, growing method, parts used, medicinal uses, preparation method and RFC.

Local name (voucher no.)	Scientific name	Family	Habit	Parts used	Medicinal uses	Method of preparation	RFC
Rasun (DIU-AH-BH-001)	*Allium sativum* L.	Amaryllidaceae	Herb	Bulb	Gastric problems, hypertension	Paste; orally	0.85
Ghritokumari (DIU-AH-BH-002)	*Aloe vera* (L.)	Asphodelaceae	Herb	Leaf	Skin diseases, dermatitis, burns, wounds	Leaf paste applied externally	0.82
Neem (DIU-AH-BH-003)	*Azadirachta indica*	Meliaceae	Tree	Leaf, bark	Acne, diabetes, malarial fever, itches	Decoction; orally/topically	0.78
Paan (DIU-AH-BH-004)	*Piper betle* L.	Piperaceae	Climber	Leaf, petiole	Digestive problems, bronchitis	Chewing; paste; orally	0.76
Amloki (DIU-AH-BH-005)	*Phyllanthus emblica* L.	Phyllanthaceae	Tree	Fruit	Coughs, hair loss	Juice extraction; orally	0.75
Narikel (DIU-AH-BH-006)	*Cocos nucifera* L.	Arecaceae	Tree	Root, fruit	Stomach ache, rheumatism	Decoction; orally/topically	0.73
Tulsi (DIU-AH-BH-007)	*Ocimum tenuiflorum* L.	Lamiaceae	Herb	Leaf	Coughs, fever	Juice extraction; orally	0.72
Karela (DIU-AH-BH-008)	*Momordica charantia* L.	Cucurbitaceae	Climber	Fruit, leaf	Diabetes, blood sugar control	Juice extraction; orally	0.71
Holud (DIU-AH-BH-009)	*Curcuma longa* L.	Zingiberaceae	Herb	Rhizome	Skin diseases, wounds	Paste/powder; topically	0.70
Supari (DIU-AH-BH-010)	*Areca catechu* L.	Arecaceae	Tree	Root, seed	Diarrhea, helminthiasis	Chewing; orally	0.70
Telakucha (DIU-AH-BH-011)	*Coccinia grandis* (L.) Voigt	Cucurbitaceae	Climber	Leaf	Diabetes	Juice extraction; orally	0.69
Ada (DIU-AH-BH-012)	*Zingiber officinale*	Zingiberaceae	Herb	Rhizome	Coughs, gastric problems	Paste/juice; orally	0.68

Table 2. Continuation.

Local name (voucher no.)	*Scientific name*	Family	Habit	Parts used	Medicinal uses	Method of preparation	RFC
Sojne data (DIU-AH-BH-013)	*Moringa oleifera* Lam.	Moringaceae	Tree	Leaf, bark, fruit	Hypertension, arthritis	Juice extraction; orally	0.68
Amm (DIU-AH-BH-014)	*Mangifera indica* L.	Anacardiaceae	Tree	Leaf, root, bark	Dental problems, diarrhea	Decoction; orally/topically	0.67
Bel (DIU-AH-BH-015)	*Aegle marmelos* (L.) Corr.	Rutaceae	Tree	Fruit, leaf	Constipation, dysentery	Juice/direct consumption; orally	0.66
Bashok (DIU-AH-BH-016)	*Justicia adhatoda* L.	Acanthaceae	Shrub	Leaf, root	Diabetes, coughs	Decoction; juice; orally	0.65
Peyara (DIU-AH-BH-017)	*Psidium guajava* L.	Myrtaceae	Tree	Leaf, fruit, seed	Diabetes, diarrhea	Decoction; juice; orally	0.64
Sarpagandha (DIU-AH-BH-018)	*Rauvolfia serpentina* (L.) Benth.	Apocynaceae	Herb	Root	Hypertension, insomnia	Decoction; powder; orally	0.63
Arjun (DIU-AH-BH-019)	*Terminalia arjuna*	Combretaceae	Tree	Bark	Heart disorders, bone fracture	Decoction; paste; orally	0.62
Lebu (DIU-AH-BH-020)	*Citrus aurantifolia*	Rutaceae	Shrub	Fruit	Fever, coughs	Juice extraction; orally	0.61
Bohera (DIU-AH-BH-021)	*Terminalia bellirica*	Combretaceae	Tree	Fruit, leaf	Constipation, anemia	Powder; orally	0.60
Haarzora (DIU-AH-BH-022)	*Cissus quadrangularis* L.	Vitaceae	Climber	Whole plant	Body pain, wounds	Paste; topically	0.60
Apang (DIU-AH-BH-023)	*Achyranthes aspera* L.	Amaranthaceae	Herb	Root, leaf, seed	Diarrhea, jaundice	Juice extraction; orally	0.59
Thankuni (DIU-AH-BH-024)	*Centella asiatica*	Apiaceae	Herb	Whole plant	Stomach disorders, dysentery	Juice extraction; orally	0.58
Horitoki (DIU-AH-BH-025)	*Terminalia chebula* Retz.	Combretaceae	Tree	Fruit, leaf	Constipation, asthma	Powder; decoction; orally	0.58
Sonalu (DIU-AH-BH-026)	*Cassia fistula* L.	Fabaceae	Tree	Fruit, leaf	Constipation, skin diseases	Direct consumption; paste; orally	0.57
Kalomegh (DIU-AH-BH-027)	*Andrographis paniculata*	Acanthaceae	Herb	Leaf, whole plant	Malaria, diabetes	Juice extraction; orally	0.56
Papaya (DIU-AH-BH-028)	*Carica papaya* L.	Caricaceae	Tree	Fruit, leaf	Dysentery, ring worm, digestive problems	Direct consumption; paste; orally/topically	0.55
Chalta (DIU-AH-BH-029)	*Dillenia indica* L.	Dilleniaceae	Tree	Fruit, bark	Digestive problems, diabetes	Direct consumption; decoction; orally	0.55

Table 2. Continuation.

Local name (voucher no.)	*Scientific name*	Family	Habit	Parts used	Medicinal uses	Method of preparation	RFC
Mehedi (DIU-AH-BH-030)	*Lawsonia inermis* L.	Lythraceae	Shrub	Leaf	Wounds, diabetes	Paste; juice; orally/topically	0.54
Bandhanya (DIU-AH-BH-031)	*Clerodendrum viscosum* Vent.	Lamiaceae	Shrub	Leaf	Jaundice, helminthiasis	Juice extraction; orally	0.53
Shatamul (DIU-AH-BH-032)	*Asparagus racemosus*	Asparagaceae	Climber	Whole plant, root	General weakness, reproductive health	Decoction; orally	0.52
Nirgundi (DIU-AH-BH-033)	*Vitex negundo* L.	Lamiaceae	Shrub	Leaf, root	Rheumatic pain, wounds	Paste; decoction; orally	0.51
Gol morich (DIU-AH-BH-034)	*Piper nigrum* L.	Piperaceae	Climber	Fruit	Fever, digestive problems	Powder; orally	0.50
Anaras (DIU-AH-BH-035)	*Ananas comosus* (L.) Merr.	Bromeliaceae	Herb	Leaf, fruit	Helminthiasis, jaundice	Juice extraction; orally	0.49
Bishalyakarani (DIU-AH-BH-036)	*Kalanchoe pinnata* (Lam.) Pers.	Crassulaceae	Herb	Leaf	Kidney stones, wounds	Juice extraction; paste; orally	0.48
Nayantara (DIU-AH-BH-037)	*Catharanthus roseus* (L.) G.Don	Apocynaceae	Herb	Leaf, flower	Diabetes, hypertension	Juice extraction; orally	0.47
Kumarilata (DIU-AH-BH-038)	*Smilax zeylanica* L.	Smilacaceae	Climber	Stem	Indigestion, weakness	Direct consumption; orally	0.46
Dhutra (DIU-AH-BH-039)	*Datura metel* L.	Solanaceae	Herb	Leaf, seed	Mental disorders, asthma	Paste; topically (caution: toxic)	0.45

Source: Authors’ field survey.

Growth form distribution

Trees constituted the dominant category with 14 species (35.9%), followed by herbs with 13 species (33.3%), climbers with 7 species (17.9%), and shrubs with 5 species (12.8%) (Figure 1). The predominance of trees contrasts with numerous Bangladeshi ethnobotanical surveys where herbs typically dominate (Faruque et al., 2018), likely reflecting Bhola's unique deltaic ecosystem with extensive riverine forests. Trees accumulate higher concentrations of bioactive metabolites due to their prolonged growth (Wink, 2008); however, this preference raises sustainability concerns as harvesting bark and roots causes permanent damage. The substantial herb representation (33.3%) shows balanced utilization of different growth forms.

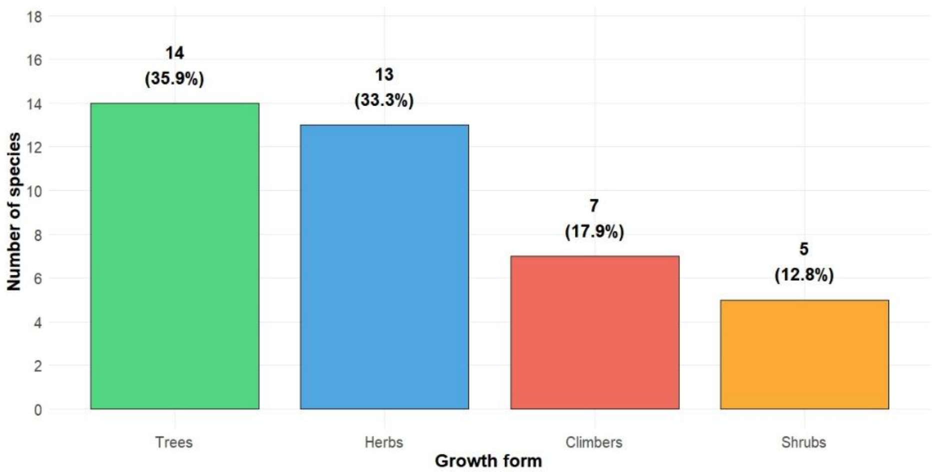

Figure 1. Distribution of medicinal plants by growth form.
Source: Authors' calculations based on field survey data.

Leaves were the most utilised plant part (43.3%, 29 uses), followed by fruits (22.4%, 15 uses), roots (11.9%, 8 uses), bark and seeds (9.0% each, 6 uses), rhizomes (3.0%, 2 uses), and bulbs (1.5%, 1 use) (Figure 2).

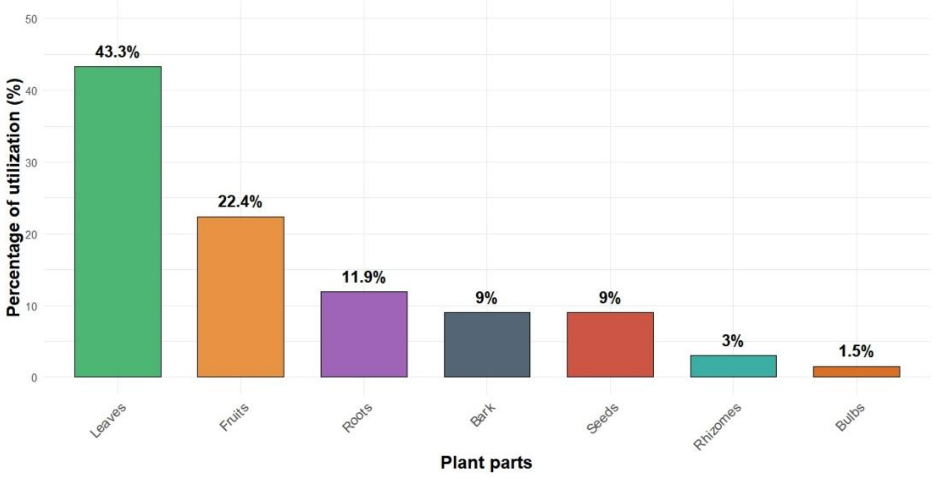

Figure 2. Frequency of utilisation of different plant parts.
Source: Authors' calculations based on field survey data.

The predominant leaf utilisation aligns with global ethnobotanical patterns and reflects both ecological sustainability and phytochemical considerations. Leaves are easily accessible, regenerate rapidly, and contain high concentrations of bioactive secondary metabolites including flavonoids, alkaloids, and terpenoids. The use of fruits as the second-most used represents an ecologically sustainable practice minimising plant mortality while maximising phytochemical access, as leaves are the primary sites for secondary metabolite biosynthesis (Ncube & Van Staden, 2015).

Methods of preparation

Decoction was the most prevalent preparation method (46.2%), followed by juice extraction (23.1%), paste/crushed application (15.4%), direct consumption (7.7%), powder (5.1%), and chewing (2.6%). Decoction effectively solubilises polar bioactive compounds, including glycosides, alkaloids, and saponins through thermally-assisted extraction (Zhang et al., 2018), demonstrating empirical understanding of pharmaceutical principles aligning with modern phytochemical isolation techniques. Juice extraction (23.1%) preserves thermolabile compounds such as ascorbic acid and volatile constituents that degrade during heating (Tapsell et al., 2006), reflecting sophisticated knowledge regarding optimal extraction techniques for different therapeutic applications.

Relative frequency of citation (RFC)

RFC values ranged from 0.45 to 0.85, indicating substantial variation in cultural importance. *Allium sativum* exhibited the highest RFC (0.85), followed by *Aloe vera* (0.82), *Azadirachta indica* (0.78), *Piper betle* (0.76), and *Phyllanthus emblica* (0.75). Species with RFC $\geq$0.70 were considered highly significant. The highest RFC for *Allium sativum* reflects its multifunctional applications, validated by research demonstrating antimicrobial, antihypertensive, and immunomodulatory activities from organosulfur compounds (Bayan et al., 2014). *Azadirachta indica* (RFC 0.78) recognised as a ‘village pharmacy’ with documented antibacterial, antifungal, antimalarial, and immunostimulant properties from limonoids and azadirachtin (Alzohairy, 2016). *Aloe vera* demonstrates strong consensus for treating skin diseases and burns, supported by pharmacological studies validating its wound-healing and anti-inflammatory properties (Sánchez et al., 2020).

Informant consensus factor (ICF) for ailment categories

Medicinal plants were classified into 12 major ailment categories. ICF values ranged from 0.67 to 0.91, demonstrating high consensus (Table 3). Digestive system disorders exhibited the highest ICF (0.91, 35 use reports, 12 species), reflecting the prevalence of gastrointestinal complaints in rural Bangladesh and extensive therapeutic repertoires (Kadir et al., 2013). Respiratory diseases showed an ICF of 0.88 (28 use reports, 9 species), while skin diseases recorded an ICF of 0.86 (24 use reports, 8 species). These elevated values suggest selective use of specific species for particular ailments, reflecting coherent traditional medical knowledge warranting priority for pharmacological investigation (Beressa et al., 2024).

Table 3. Disease categories and ICF values of medicinal plants from Bhola District.

Ailment category	Diseases/ailments	Number of plant species used	ICF
Digestive system disorders	Constipation, diarrhoea, dysentery, stomach ache, gastritis, indigestion	12	0.91
Respiratory diseases	Cough, cold, asthma, bronchitis, fever	9	0.88
Skin diseases	Wounds, skin infections, eczema, ringworm, burns, acne	11	0.87
Metabolic disorders	Diabetes, blood sugar control	8	0.86
Cardiovascular diseases	Hypertension, high blood pressure, heart disease	6	0.84
Musculoskeletal disorders	Bone fracture, body pain, arthritis, rheumatism, back pain	7	0.82
Infectious diseases	Malaria, chicken pox, measles, typhoid	5	0.80
Urogenital disorders	Urinary problems, kidney stones, burning sensations	4	0.77
Hepatic disorders	Jaundice, liver problems	4	0.75
Dental problems	Toothache, dental infections	3	0.71
Nervous system disorders	Headache, mental disorders, insomnia	3	0.69
General symptoms	Weakness, hair loss, general debility	3	0.67

Source: Authors' calculations based on field survey data.

Phytochemical and pharmacological validation

Many documented species have undergone scientific investigation. *Phyllanthus emblica* (RFC 0.75) demonstrates antidiabetic, hepatoprotective, and immunomodulatory activities attributed to tannins and gallic acid derivatives (Chaphalkar et al., 2017). *Terminalia chebula* exhibits antimicrobial and laxative properties due to chebulinic acid (Bag et al., 2013). However, several species with moderate RFC values remain underexplored, representing opportunities for bioprospecting. The convergence of high RFC values, elevated ICF scores, and traditional applications provides a rational framework for prioritising species for investigation.

Conservation and knowledge erosion

Bangladesh faces biodiversity loss due to habitat destruction, agricultural expansion, and climate change (Mukul et al., 2018). Species with high RFC values experience increased harvesting pressure, particularly slow-growing trees affected by destructive harvesting practices (Chen et al., 2016). Cultivation protocols, medicinal plant gardens, and community-based conservation are essential for sustainability. Knowledge erosion among younger generations threatens ethnobotanical heritage, emphasising urgent needs for systematic documentation, educational initiatives, and integration into formal healthcare, while respecting intellectual property rights and ensuring benefit-sharing.

This study documented valuable traditional knowledge revealing sophisticated therapeutic understanding within Bhola communities. High ICF and RFC values demonstrate coherent traditional medical systems serving as primary healthcare resources. An integrated approach combining ethnobotanical documentation, scientific validation, sustainable cultivation, community-based conservation, and policy support is essential for preserving biological and cultural heritage while enhancing healthcare access. Future research should employ larger sample sizes, extended survey periods, phytochemical analysis, pharmacological validation, and molecular authentication to substantiate traditional claims and inform conservation strategies (Rivera et al., 2014).

It has been shown that medicinal plants are exceptionally rich in micronutrients. Ethnobotanical studies are essential for identifying ways to use natural plant resources, and such research should be continued in the future (Filipović et al., 2023; Stevanović et al., 2023; Stevanović et al., 2024; Dimitrijević et al., 2024; Miskoska-Milevska et al., 2025).

Conclusion

This ethnobotanical study documented 39 medicinal plant species from 28 families in the Bhola District, Bangladesh’s unique deltaic ecosystem. High informant consensus factor values (0.67–0.91) demonstrate well-established traditional medical systems, particularly for digestive, respiratory, and dermatological conditions. *Allium sativum*, *Aloe vera*, and *Curcuma longa* showed elevated cultural significance, warranting pharmacological investigation. However, limited youth participation signals knowledge erosion, highlighting the need for urgent documentation initiatives. Substantial tree utilisation (35.9%) raises sustainability concerns necessitating community-based conservation strategies. This baseline data supports the evidence-based integration of traditional medicine into healthcare frameworks while identifying priority species for bioprospecting and conservation in this vulnerable ecosystem. Future ethnobotanical studies are essential for understanding how to harness natural plant resources.

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ETNOBOTANIČKO ISTRAŽIVANJE LEKOVITIH BILJAKA KOJE KORISTE STANOVNICI OKRUGA BHOLA U BANGLADEŠU

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Ovo etnobotaničko istraživanje dokumentuje raznovrsnost lekovitih biljaka i tradicionalno znanje u okrugu Bhola u Bangladešu, ekosistemu delte koji je nedovoljno zastupljen u etnobotaničkoj literaturi. Sprovedeni su polustrukturirani intervjui sa 100 ispitanika u periodu između juna i decembra 2025. godine, beležeći biljne vrste, metode pripreme i terapijske primene. Ukupno je dokumentovano 39 vrsta lekovitih biljaka iz 28 porodica, pri čemu su porodice Combretaceae i Lamiaceae bile najzastupljenije (po 7,69%). Drveće (35,9%) i zeljaste biljke (33,3%) predstavljali su dominantne oblike rastinja, dok su listovi (43,3%) i plodovi (22,4%) bili najčešće korišćeni delovi biljaka. Dekokt (odvar) (46,2%) i ceđenje soka (23,1%) bili su primarni načini pripreme. Analiza relativne učestalosti navođenja (engl. *relative frequency of citation – RFC*) pokazala je da su *Allium sativum* (0,85), *Aloe vera* (0,82) i *Curcuma longa* (0,73) kulturno najznačajnije vrste. Vrednosti faktora saglasnosti ispitanika (engl. *informant consensus factor – ICF*) kretale su se od 0,67 do 0,91, pri čemu su poremećaji digestivnog trakta (0,91), respiratorne bolesti (0,88) i kožna oboljenja (0,86) pokazali najveći stepen saglasnosti. Ovi nalazi pružaju osnovne podatke za integraciju tradicionalne medicine u zdravstvene okvire zasnovane na dokazima i identifikuju prioritetne vrste za fitohemijska istraživanja i mere očuvanja u ovom osetljivom ekosistemu delte.

Ključne reči: lekovite biljke, tradicionalno znanje, etnobotanika, poljoprivredno znanje, oblast Barisal u južnom centralnom Bangladešu.

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