

A taxonomic checklist of the Fabaceae Lindl. of Mymensingh division, Bangladesh

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Abstract

The present study provides a taxonomic checklist of the family Fabaceae distributed in the Mymensingh Division of Bangladesh. Field surveys and herbarium investigations confirmed the occurrence of 141 species belonging to 79 genera in the study area. The genus *Albizia* Durazz. was the most dominant, with seven species, followed by *Senna* Mill. (six species), *Crotalaria* L. and *Dalbergia* L.f. (five species each), and *Senegalia* Raf. (four species). The recorded species include 55 herbs, 52 trees, 22 shrubs, and 12 lianas that are most frequently found in homesteads and woodlands, followed by hill slopes, scrub jungles, roadsides, fallow lands, and agricultural fields. In the study area, the native species (66.67%) prevail over exotic species (33.33%). The documented species possess significant economic and agricultural importance, and the majority of the recorded species (59.57%) are used in traditional medicine. The Mymensingh district harboured 128 species, the highest number in the division. Seven species recorded from the study area are assessed as Vulnerable (VU) in the IUCN's Plant Red List of Bangladesh, which emphasises the conservation importance of the divisional flora. The findings of this study reveal a rich repository of leguminous flora in the Mymensingh Division, characterised by a high proportion of tree species, and suggest the urgent need for targeted conservation strategies to protect this precious flora, particularly the seven VU legume species.

Keywords: Taxonomy, Angiosperms, Fabaceae, Mymensingh, Bangladesh.

INTRODUCTION

The Fabaceae, or Leguminosae, commonly known as the legume, pea, or bean family, is a group of flowering plants which are agriculturally and economically important. It includes trees, shrubs, lianas, and perennial or annual herbaceous plants, which are easily recognized by their characteristic legume (pod) fruit and compound (rarely simple) leaves with stipules. This family holds significant importance due to its high diversity, abundance, medicinal value, and contribution to diverse edible vegetable resources. These plants are also important because legumes help in nitrogen fixation and thus reduce the cost of fertilizers for farmers (Singh *et al.*, 2021).

Previously, no taxonomic study particularly on the Fabaceae family of the Mymensingh Division, including specific distribution of the species based on specimen examination, was published in Bangladesh, though some large-scale taxonomic inventories were conducted in the region covering the current political boundary of this country before its independence (Roxburgh, 1814; Hooker, 1872-1897; Prain, 1903), many narrow- to wide-ranging taxonomic studies were published after its independence (Khan *et al.*, 1996; Rahman and Yusuf, 1996; Mia and Uddin, 2000; Ara *et*

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al., 2007; Ahmed *et al.*, 2008-2009; Ahmed *et al.*, 2009; Rahman & Alam, 2013; Rahman *et al.*, 2015; Haque *et al.*, 2018; Shetu *et al.*, 2018; Rahman *et al.*, 2019; Khan *et al.*, 2021 a & b; Hossain *et al.*, 2022; Shetu *et al.*, 2022), and 87 fascicles on 99 families produced by the Bangladesh National Herbarium (Khan, 1972–1987; Uddin & Shetu, 2016; Islam, 2023). However, the Fabaceae of only Khulna Division has been published based on specimen examination (Shetu & Khan, 2026).

In all previous studies on the flora of Bangladesh, information on the precise distribution, localities and habitats of the species of Fabaceae in Mymensingh Division, and citations of their specimens examined are lacking. Besides, nomenclature changes are taking place spontaneously owing to new combinations or merging of taxa based on intensive taxonomic research and newer systematic evidence. The occurrences of some species in the Mymensingh Division which are cited in the previous literature are also questionable due to the unavailability of the specimens or the lack of information on their specific distribution within the political boundary of Bangladesh. Additionally, the forested areas of this division constitute important representatives of tropical moist deciduous forests in the region. Many areas of this division, previously covered with natural vegetation, do not harbour now any notable number of species or level of plant species diversity. However, the existing green areas of this division, especially hilly areas, are still harbouring a good number of wild and cultivated plant species that comprise the flora of this division. Therefore, conducting a comprehensive taxonomic study across this division was found to be crucial for documenting the current species composition of Fabaceae, identifying potentially threatened taxa, and assessing temporal changes in species composition in the context of climate change. Furthermore, the study aimed to generate fundamental taxonomic data to support the effective conservation and sustainable management of Fabaceae species within the region.

MATERIALS AND METHODS

Mymensingh Division, with an area of 10,485 km², is one of the eight administrative divisions of Bangladesh. Formed in 2015, this division comprises four districts, viz., Jamalpur, Mymensingh, Netrokona, and Sherpur, which previously constituted the northern region of Dhaka Division (BBS, 2022) (Figure 1). It harbours a rich diversity of plant species across its wide range of habitats and ecosystems comprising its thriving agricultural region, protected areas (e.g., Kadigarh and Madhupur National Parks in the Mymensingh District), forest areas (e.g., Durgapur Hill Forest of Netrokona District and Balijuri and Runtia Forest of Sherpur District), botanical garden, and numerous wetlands. Most of the diverse habitats supporting the flora across this division are subjected to severe anthropogenic pressures, including habitat degradation, land encroachment, hill cutting, resource overexploitation, plantation of exotic species, unplanned monoculture plantation, uncontrolled tourism, hydro-climatic risks including vigorous growth of Invasive Alien Species (IAS), climate-driven impacts, erratic precipitation patterns that aggravate intense flash floods, altered wetland hydrology, and transboundary border-belt degradation (Rahman 2015; BBS, 2022).

The present taxonomic study of the family was based on fresh collections of representative plant samples from the different habitats of the Mymensingh Division of Bangladesh and the herbarium materials preserved in different herbaria of this country. Some floristic works and literature available by different researchers were consulted also. A detailed survey was carried out in the Bangladesh Forest Research Institute Herbarium (BFRIH), Bangladesh National Herbarium (DACB), Dhaka University Salar Khan Herbarium (DUSH), and Jahangirnagar University Herbarium (JUH) during 2023-2025. Species-specific field visits were conducted for the collection of the representative plant specimens from the different districts of Mymensingh Division. Representative plant specimens were collected, prepared, dried, and preserved using conventional herbarium procedures and techniques (Bridson & Forman, 1989; Singh & Subramaniam, 2008) and stored and studied at Jahangirnagar University Herbarium (JUH).

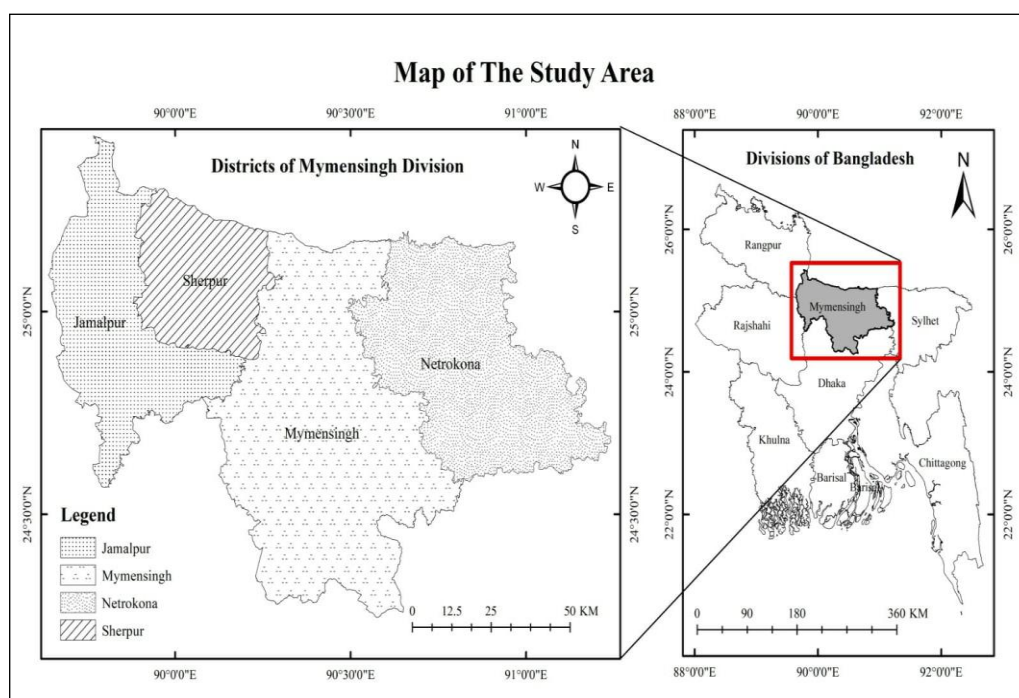


Fig. 1. Map of the study area

In this study, the family limit of Fabaceae has been circumscribed following the APG IV system (Angiosperm Phylogeny Group, 2016), and all taxa have been arranged alphabetically in the checklist. All plant specimens belonging to each taxon were preliminarily identified through consulting the expert plant taxonomists and matching them with authentically identified voucher specimens preserved at BFRIH, DACB, DUSH, and JUH. Besides, the morphological characters of each taxon, known through careful observation on its representative specimens, including the dissected parts, using hand lenses and stereo-binocular microscopes, were matched with the taxonomic descriptions and key characters available in taxonomic literature, including the modern floras (Hooker, 1876-1878; Prain, 1903; Khatun, 2008;

Khatun, 2009; Khatun *et al.*, 2009; Wu *et al.*, 1999-2013). Specimens of the preliminarily identified taxa were compared with the clear type images available on the websites of various international herbaria (B, BM, K, P, etc.). The nomenclature of each taxon was verified and adopted by consulting international nomenclatural databases, viz., GBIF (2023), POWO (2025), Tropicos (2025), and WFO (2025). Nativeness of the identified taxa was checked in POWO (2025). The local name and uses were collected through interviews with the local people and relevant literature (Ghani, 1998, and Huq, 2019). The occurrence and distribution (Table 1) of the Fabaceae species within the study area were documented through field observations of current population sizes, distribution ranges, and regeneration status, as well as through published literature (Khatun, 2008; Khatun, 2009; Khatun *et al.*, 2009) and labels of herbarium specimens (BFRIH, DACB, DUSH, and JUH). The Red List status of the Fabaceae species cited in Table 1 was adopted from IUCN Bangladesh (2024).

RESULTS AND DISCUSSION

This taxonomic study has constructed a checklist of 141 species under 79 genera of Fabaceae found in the Mymensingh Division of Bangladesh with representative specimen citations. The genus *Albizia* Durazz. with seven species was the largest, followed by *Senna* Mill. with six species, *Crotalaria* L. and *Dalbergia* L.f. with five species each, and *Senegalia* Raf. with four species. Among them, 55 are herbs (39.00%), followed by 52 trees (36.88%), 22 shrubs (15.60%), and 12 lianas (8.51%). Among these, wild species constituted the largest proportion, 48.94% (69 species), planted species accounted for 40.42% (57 species), while cultivated species represented 10.64% (15 species) of the total. These results indicate that wild species dominated the flora, whereas planted and cultivated species also formed a considerable component of the overall species composition.

The majority of the species are found as native (94 species, 66.67%), and the rest of the species are recorded as exotic (47 species, 33.33%). Most species are recorded in homesteads (112 species, 79.43%), followed by woodlands (67 species, 47.52%), hill slopes (59 species, 41.84%), scrub jungles (52 species, 36.85%), roadsides (48 species, 34.04%), fallow lands (41 species, 29.07%), and agricultural fields (32 species, 22.69%). Among the 141 Fabaceae species documented in the study area, 55 species are found in each of the Mymensingh Division's four districts, viz., Mymensingh, Netrokona, Sherpur, and Jamalpur, which reflects their widespread distribution and ecological adaptability across the division. Except for these species, Jamalpur harbours 21 species, Mymensingh 73 species, Netrokona 12 species, and Sherpur 43 species.

Based on their frequency of occurrence, 42 (29.79%) species in the study area are categorised as common, 71 (50.35%) species as occasional, and 28 (19.86%) species as rare, indicating distinct patterns of the species distribution and abundance within the area. Some exotic species, such as *Amherstia nobilis* Wall., *Bauhinia pottsii* G. Don, *Brownea coccinea* Jacq., *Gliricidia sepium* (Jacq.) Kunth, *Phanera sirindhorniae* (K. Larsen & S.S.

Larsen) Mackinder & R. Clark, *Saraca cauliflora* Baker, *S. indica* L., and *Zapoteca portoricensis* (Jacq.) H.M. Hern., are rarely found in the study area.

All the species are found to be economically and agriculturally important. Among these, 84 species are significant for medicine and are followed by ornamental (24), green manure (17), timber (16), fuelwood (12), fodder (10), vegetables (9), pulses (6), and fibre (3) (Figure 2).

Among the 141 recorded species, seven are listed in the IUCN's Plant Red List of Bangladesh as Vulnerable (VU) and 30 as Least Concern (LC), while the status of 104 species has not yet been assessed. Amidst seven VU species, *Alysicarpus rugosus* (Willd.) DC., *Bauhinia variegata* L., *Dendrolobium triangulare* (Retz.) Schindl., *Mucuna monosperma* Roxb. ex Wight, and *Piliostigma malabaricum* (Roxb.) Benth. were recorded as rare, whereas *Dalbergia rimosa* Roxb. and *Ticanto crista* (L.) R. Clark & Gagnon were found occasionally in the study area (IUCN Bangladesh, 2024).

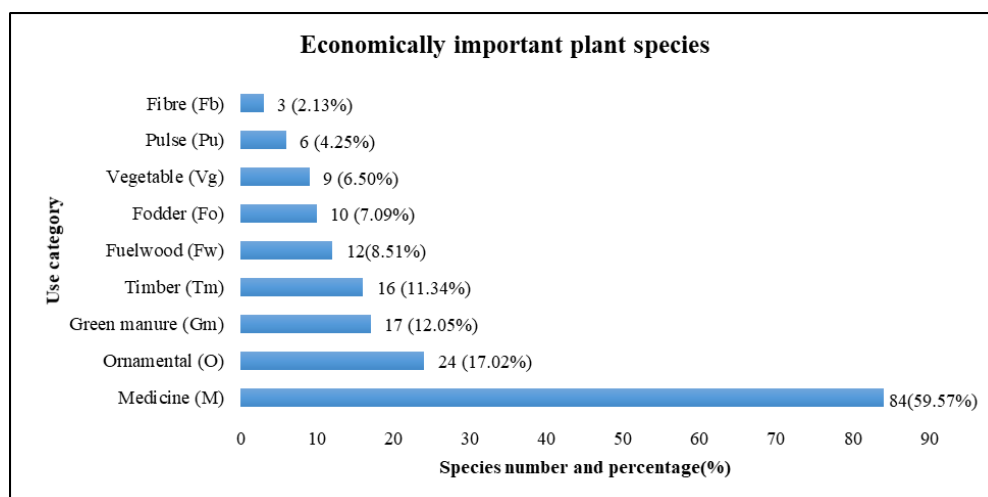


Fig. 2. Economic importance of Fabaceae species found in the Mymensingh Division, Bangladesh

The taxonomic enumeration of Fabaceae, including the native and exotic species recorded in the Mymensingh Division, is almost similar to that of the Khulna Division. However, the occurrence of herbaceous species in Khulna Division (46.48%) was higher than that (39.00%) recorded in Mymensingh Division. In contrast, the Khulna Division harbours a lower proportion of tree species (30.98%) than the Mymensingh Division (36.88%). The genus *Albizia* was the largest (seven species), followed by *Senna* (six species) and *Crotalaria* and *Dalbergia* (five species each), whereas in Khulna Division, *Crotalaria* was the largest genus (eight species), followed by *Senna* (seven species), *Vigna* Savi (six species), and *Albizia* (five species). In Mymensingh Division, among the four districts, Mymensingh harboured the highest number of Fabaceae species (128) compared to Netrokona, which housed the lowest number of species (67 species), while in Khulna Division, Khulna District harboured the maximum number of species (124 species).

compared to Jhenaidah, which housed the lowest number of species (80 species) (Shetu & Khan, 2026).

This study provides the first comprehensive taxonomic assessment exclusively focused on the leguminous plant species of the Mymensingh Division, Bangladesh. The rich diversity of leguminous species documented in the study area plays a vital role in maintaining ecosystem functions and supporting sustainable agricultural systems. These species enhance soil fertility through biological nitrogen fixation, reduce soil erosion by stabilizing the soil with their root systems, improve soil health and crop productivity through crop rotation, and serve as valuable sources of food, fodder, timber, fuel, medicine, and other economic resources. Furthermore, they provide essential habitat and nutritional support for diverse animal groups, thereby contributing significantly to biodiversity conservation, ecological balance, and the socio-economic and environmental sustainability of the region.

Table 1. List of species of the family Fabaceae found in Mymensingh Division

Scientific name	Bangla nam	Habit	Origin	Distribution	Occurrence	Red List status	Use	RSE
<i>Abrus precatorius</i> L.	Kunch	L, w	Na	All districts	Occasional	LC	M	SSS 5604
<i>A. pulchellus</i> Wall. Ex Thw.	Kaichagula	L, w	Na	S	Rare	NA	M	DACB 8502
<i>Acacia auriculiformis</i> A. Cunn. ex Benth.	Akashmoni	T, pl	Ex	All districts	Common	NA	Tm	SSS 5802
<i>A. mangium</i> Willd.	Mangium	T, pl	Ex	All districts	Common	NA	Tm	SSS 5615
<i>Adenanthera pavonina</i> L.	Raktachanda	T, pl	Na	M	Rare	NA	Tm, M	SSS 5633
<i>Aeschynomene aspera</i> L.	Shola	S, w	Na	All districts	Common	NA	Gm, Fw	SSS 5823
<i>A. indica</i> L.	Bhathsola	H, w	Na	All districts	Common	NA	Gm, Fw	SSS 5613
<i>Albizia chinensis</i> (Osbeck) Merr.	Chakua koro	T, pl	Na	All districts	Common	LC	Tm	SSS 5655
<i>A. julibrissin</i> Durazz.	Golapi siris	T, pl	Na	All districts	Common	NA	Tm	SSS 5707
<i>A. lebeck</i> (L.) Benth.	Kalo koro	T, pl	Na	All districts	Common	LC	Tm	SSS 5619
<i>A. lucida</i> (Jacques) Benth.	Motor koro	T, pl	Na	M, N	Common	LC	Tm, M	SSS 5838
<i>A. myriophylla</i> Benth.	Titulya koro	T, pl	Na	J	Common	NA	Tm	DACB 10285
<i>A. odoratissima</i> (L.f.) Benth.	Tetuya koro	T, pl	Na	J	Common	LC	Tm	DACB 10235
<i>A. procera</i> (Roxb.) Benth.	Sada koro	T, pl	Na	All districts	Common	LC	Tm, Fw	SSS 5640
<i>Amherstia nobilis</i> Wall.	Raj ashok	T, pl	Ex	M	Rare	NA	O	SSS 5886
<i>Alysicarpus bupleurifolius</i> (L.) DC.	Pan-nata	H, w	Na	M, S	Occasional	NA	M	SSS 5656

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Scientific name	Bangla name	Habit	Origin	Distribution	Occurrence	Red List status	Use	RSE
<i>A. rugosus</i> (Willd.) DC.	NK	H, w	Na	M	Rare	VU	Fo, M	SSS 5708
<i>A. vaginalis</i> (L.) DC.	Pan-nata	H, w	Na	All districts	Common	NA	Fo, Gm	SSS 5696
<i>Arachis hypogaea</i> L.	Cheena bada	H, cv	Ex	All districts	Occasional	NA	N, Oy	SSS 5606
<i>Bauhinia acuminata</i> L.	Sada kanchar	S, pl	Ex	M	Common	LC	O	SSS 5680
<i>B. pottsii</i> G.Don	Lava kanchar	S, pl	Ex	M	Rare	NA	O	SSS 5988
<i>B. purpurea</i> L.	Rakta Kanchan	T, pl	Na	All districts	Common	LC	M, O	SSS 5695
<i>B. variegata</i> L.	Lal kanchan	T, pl	Na	M, S	Rare	VU	M, O	SSS 5687
<i>Brachypterum scandens</i> (Roxb.) Wight & Arn. ex Miq.	Mahajanilata	L, w	Na	M, N, S	Occasional	LC	M	DACB 8998
<i>Brownea coccinea</i> Jacq.	Supti	T, pl	Ex	M	Rare	NA	O	SSS 5681
<i>Butea monosperma</i> (Lam.) Kuntze	Palash	T, pl	Na	All districts	Occasional	LC	M, O	SSS 5739
<i>Caesalpinia pulcherrima</i> (L.) Sw.	Radhachura	S, pl	Ex	All districts	Occasional	NA	M, O	SSS 5692
<i>Cajanus cajan</i> (L.) Huth	Arhar	S, pl	Ex	All districts	Common	NA	M, Pu	SSS 5682
<i>C. scarabaeoides</i> (L.) Thouars	Banurkalai	H, w	Na	All districts	Common	NA	M	SSS 5889
<i>Calliandra emarginata</i> (Humb. & Bonpl. Ex Willd.) Benth.	Lal calliandra	T, pl	Ex	M	Occasional	NA	O	SSS 5828
<i>C. haematocephala</i> Hassk.	Powder puff	T, pl	Ex	All districts	Occasional	NA	M, O	SSS 5738
<i>Canavalia gladiata</i> (Jacq.) DC.	Moushim	H, cv	Na	All districts	Occasional	NA	Vg, Gm	SSS 5947
<i>Cassia fistula</i> L.	Sonalu	T, pl	Ex	All districts	Occasional	LC	M, O	SSS 5677
<i>C. javanica</i> L.	Java sonalu	T, pl	Na	M	Occasional	LC	M, O	SSS 5769
<i>Centrosema pubescens</i> Benth.	Projapoti shii	H, w	Ex	M	Occasional	NA	M	SSS 5856
<i>Cicer arietinum</i> L.	Chhola	H, cv	Ex	M, J	Occasional	NA	Pu	SSS 5772
<i>Clitoria ternatea</i> L.	Aparajita	H, pl	Ex	All districts	Occasional	NA	O	SSS 5869
<i>Codariocalyx gyroides</i> (Roxb. ex Link) Hassk.	Beguni shalpan	H, w	Na	All districts	Occasional	NA	Gm	SSS 5774
<i>C. motorius</i> (Houtt.) H.Ohashi	Turup chand	S, w	Na	All districts	Occasional	NA	M	SSS 5871
<i>Crotalaria alata</i> Buch.-Ham. Ex	Pakha jhunjhuni	H, w	Na	M, S	Occasional	NA	Fo, Gm	SSS 5777

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Scientific name	Bangla name	Habit	Origin	Distribution	Occurrence	Red List status	Use	RSE
D. Don								
<i>C. juncea</i> L.	Shonpat	H, cv	Na	All districts	Occasional	NA	Fb	SSS 5780
<i>C. pallida</i> Aiton	Jhun-jhuni	H, w	Na	All districts	Common	LC	Fb, M	SSS 5876
<i>C. prostrata</i> Rottler ex Willd.	Choto-jhunjhuni	H, w	Na	M, S	Common	NA	M	SSS 5782
<i>C. spectabilis</i> Roth	Pipli-jhunjhuni	H, w	Na	M, S	Occasional	NA	Fo, M	SSS 5785
<i>Cynometra ramiflora</i> L.	Singra	T, pl	Na	M	Rare	LC	M, Tm	SSS 5874
<i>Dalbergia latifolia</i> Roxb.	Sitsal	T, pl	Na	S	Occasional	NA	M	DACB 8925
<i>D. pinnata</i> (Lour.) Prain	Keti	T, pl	Na	M, S	Occasional	NA	Fo, Fw	SSS 5961
<i>D. rimosa</i> Roxb.	Kawa gurum	T, w	Na	J, M, S	Occasional	VU	Tm	DACB 8971
<i>D. sissoo</i> DC.	Sissoo	T, pl	Na	All districts	Occasional	NA	Tm, Fw	SSS 5727
<i>D. stipulacea</i> Roxb.	Dadbari	S, w	Na	M, N, S	Occasional	LC	Fw, Fp	SSS 5822
<i>Delonix regia</i> (Bojer ex Hook.) Raf.	Krishnachura	T, pl	Ex	All districts	Common	NA	O	SSS 5825
<i>Dendrolobium triangulare</i> (Retz.) Schindl.	Bir jarwar	S, w	Na	J, M	Rare	VU	M	DACB 9215
<i>Derris cuneifolia</i> Benth.	NK	L, w	Na	M	Rare	NA	Fp	SSS 5944
<i>Entada rheedei</i> Spreng.	Gila	L, pl	Na	M	Rare	LC	M	SSS 5881
<i>Erythrina fusca</i> Lour.	Kanta manda	T, pl	Na	All districts	Common	LC	Lf, M	SSS 5884
<i>E. stricta</i> Roxb.	Teliemandar	T, pl	Na	All districts	Common	LC	Lf, M	SSS 5730
<i>E. variegata</i> L.	Mandar	T, pl	Na	All districts	Occasional	LC	M, O	SSS 5858
<i>Flemingia chappar</i> Buch.-Ham. ex Benth.	Sal pan	S, w	Na	M, S	Occasional	NA	M	SSS 5733
<i>F. macrophylla</i> (Willd.) Kuntze ex Merr.	Bara-salpan	S, w	Na	M, N, S	Occasional	LC	M	SSS 5892
<i>F. paniculata</i> Wall. ex Benth.	NK	S, w	Na	S	Rare	NA	M	SSS 5831
<i>F. strobilifera</i> (L.) W.T. Aiton	Sim busak	S, w	Na	M, S	Occasional	NA	M	DACB 9538
<i>F. semialata</i> Roxb. ex W.T. Aiton	NK	S, w	Na	S	Rare	NA	Sb	DACB 9543
<i>Gliricidia sepium</i> (Jacq.) Kunth	Gliricidia	T, pl	Ex	J, M	Occasional	NA	Gm, Lf	DACB 9375
<i>Grona heterocarpus</i> (L.) H. Ohashi & K.	Kodalia	H, w	Na	M, S	Occasional	NA	M	SSS 5720

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Ohashi <i>G. heterophylla</i> (Willd.) H. Ohashi & K. Ohashi	Bon motorshuti	H, w	Na	M, N, S	Common	NA	M	SSS 5674
<i>G. triflora</i> (L.) H. Ohashi & K. Ohashi	Kulaliya	H, w	Na	All districts	Common	NA	M, Sb	SSS 5666
<i>Guilandina bonduc</i> L.	Nata	L, w	Na	M, N	Rare	LC	M	SSS 5725
<i>Indigofera tinctoria</i> L.	Nil	H, pl	Na	M	Rare	NA	Dy	SSS 5668
<i>Lablab purpureus</i> (L.) Sweet	Sheem	H, pl	Ex	All districts	Common	NA	Vg	SSS 5670
<i>Lathyrus aphaca</i> L.	Jangli motor	H, w	Na	J, M	Occasional	NA	Fo, Vg	SSS 5721
<i>L. sativus</i> L.	Khesari	H, cv	Ex	J, M	Occasional	NA	Pu, Vg	SSS 5737
<i>Leptospron adenanthum</i> (G.Mey.) A.Delgado	Ban barboti	H, w	Na	S, M	Occasional	NA	Fo, M	SSS 5722
<i>Leucaena leucocephala</i> (Lam.) de Wit	Ipil-ipil	T, w	Ex	All districts	Common	NA	Fw, Gm	SSS 5732
<i>Melilotus albus</i> Medik.	Sada methi	H, w	Na	J, M, S	Common	NA	M, Sp	SSS 5715
<i>M. indicus</i> (L.) All.	Bon methi	H, w	Na	J, M	Common	NA	Fo, M	SSS 5717
<i>Mezoneuron cucullatum</i> (Roxb.) Wight & Arn.	Kutum kanta	L, w	Na	M, S	Occasional	LC	M	SSS 5807
<i>Millettia peguensis</i> Ali	Gauj	T, pl	Na	M	Rare	NA	M, O	SSS 5977
<i>Mimosa diplotricha</i> C. Wright	Bara lajjaboti	S, w	Ex	M, S	Occasional	NA	Gm, M	SSS 5845
<i>M. pudica</i> L.	Lajjabati	H, w	Ex	All districts	Common	NA	M	SSS 5816
<i>M. rubicaulis</i> Lam.	Himalayan mimosa	S, w	Na	M, S	Occasional	NA	M	DACB 10360
<i>Mucuna monosperma</i> Roxb. ex Wight	Soash guri	H, w	Na	M, N	Rare	VU	M	SSS 5718
<i>M. pruriens</i> (L.) DC.	Al-kushi	H, w	Na	All districts	Common	NA	M	SSS 5811
<i>Moullava digyna</i> (Rottler) Gagnon & G.P. Lewis	Umul kuchi	L, w	Na	S, N	Rare	NA	M	SSS 5954
<i>Neptunia oleracea</i> Lour.	Paninajak	H, w	Na	M	Rare	NA	M	SSS 5808
<i>Neustanthus phaseoloides</i> (Roxb.) Benth.	NK	H, w	Na	M, S	Common	LC	Fo, Gm	DACB 27584
<i>Pachyrhizus erosus</i> (L.) Urb.	Keshur	H, cv	Ex	J, M	Occasional	NA	Vg	SSS 5814

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Scientific name	Bangla name	Habit	Origin	Distribution	Occurrence	Red List status	Use	RSE
<i>Peltophorum pterocarpum</i> (DC.) Backer ex K. Heyne	Halud krishnachura	T, pl	Ex	All districts	Occasional	NA	Fw, O	SSS 5949
<i>Phanera scandens</i> (L.) Lour. ex Raf.	Nagpat	L, w	Na	S	Occasional	LC	M	SSS 5759
<i>P. sirindhorniae</i> (K. Larsen & S.S. Larsen) Mackinder & R. Clark	Agni-kanchai	S, pl	Ex	M	Rare	NA	O	SSS 5819
<i>P. vahlii</i> (Wight & Arn.) Benth.	Kanchan lata	L, w	Na	M, S	Occasional	NA	Fb, M	SSS 5742
<i>Phaseolus vulgaris</i> L.	Farash bean	H, cv	Ex	J, M, S	Occasional	NA	Vg	SSS 5762
<i>Phyllodium pulchellum</i> (L.) Desv.	Jata salpani	S, pl	Na	M, S	Occasional	NA	M, O	SSS 5983
<i>Piliostigma malabaricum</i> (Roxb.) Benth.	Ban-kanchan	T, w	Na	S	Rare	VU	M	SSS 5765
<i>Pithecellobium dulce</i> (Roxb.) Benth.	Khai-babla	T, pl	Ex	J, M, S	Occasional	NA	M	SSS 5987
<i>Pleurolobus gangeticus</i> (L.) J.St.-Hil. ex H. Ohashi & K. Ohashi	Salpani	S, w	Na	All districts	Common	NA	M	SSS 5767
<i>Pongamia pinnata</i> (L.) Pierre	Karanja	T, pl	Na	M	Occasional	LC	M	SSS 5812
<i>Pseudalbizzia niopoides</i> var. <i>niopoides</i>	Gagan siris	T, pl	Ex	All districts	Common	NA	Tm	SSS 5648
<i>Psophocarpus tetragonolobus</i> (L.) DC.	Kamranga shim	H, cv	Ex	All districts	Occasional	NA	Vg	SSS 5751
<i>Pterocarpus indicus</i> Willd.	Rakto chandan	T, pl	Ex	M	Occasional	NA	M	SSS 5847
<i>P. santalinus</i> L.f.	Lal chandan	T, pl	Ex	M	Occasional	NA	M	SSS 5746
<i>Pueraria candollei</i> Wall. ex Benth.	Kunch	H, w	Na	M, S	Rare	NA	M	SSS 5850
<i>Rhynchosia minima</i> (L.) DC.	NK	H, w	Na	M, S	Occasional	NA	Fp, M	SSS 5854
<i>Samanea saman</i> (Jacq.) Merr.	Randi-koroi	T, pl	Ex	All districts	Common	NA	Tm, Fw	SSS 5753
<i>Saraca asoca</i> (Roxb.) W.J. de Wilde	Ashok	T, pl	Na	All districts	Common	LC	O, M	SSS 5689
<i>S. cauliflora</i> Baker	Sharna ashok	T, pl	Ex	M	Rare	NA	O, M	SSS 5754
<i>S. indica</i> L.	Ashok	T, pl	Ex	M	Rare	LC	O, M	SSS 5748
<i>Senegalia caesia</i> (L.) Maslin, Seigler & Ebinger.	Aila	S, pl	Na	M, S	Occasional	NA	M	SSS 5843

Table 1. List of species of the family Fabaceae found in Mymensingh Division

Scientific name	Bangla name	Habit	Origin	Distribution	Occurrence	Red List status	Use	RSE
<i>S. catechu</i> (L.f.) P.J.H. Hurter & Mabb.	Khair	T, pl	Na	J, M	Rare	LC	Dy, M	SSS 5942
<i>S. pennata</i> (L.) Maslin	Bon siris	T, w	Na	J, M, S	Occasional	NA	M	DACB 10149
<i>S. rugata</i> (Lam.) Britton & Rose	Bon ritha	T, w	Na	M	Occasional	NA	M	SSS 5806
<i>Senna alata</i> (L.) Roxb.	Dadmardan	S, w	Ex	All districts	Occasional	NA	M	SSS 5713
<i>S. occidentalis</i> (L.) Link	Bara chalkesunda	S, w	Ex	All districts	Occasional	NA	M	SSS 5671
<i>S. siamea</i> (Lam.) H.S. Irwin & Barneby	Minjiri	T, pl	Ex	All districts	Occasional	NA	M, O	SSS 5672
<i>S. sophora</i> (L.) Roxb.	Kalkesunda	S, w	Ex	All districts	Common	NA	M	SSS 5662
<i>S. tora</i> (L.) Roxb.	Chakunda	H, w	Ex	All districts	Common	NA	M	SSS 5667
<i>Sesbania bispinosa</i> (Jacq.) W.Wight	Dhaincha	H, cv	Na	All districts	Common	NA	Fw, Gm	SSS 5714
<i>S. cannabina</i> (Retz.) Poir.	NK	H, cv	Na	J, M	Occasional	NA	Fw, Gm	SSS 5663
<i>S. grandiflora</i> (L.) Poir.	Bakful	T, pl	Ex	All districts	Common	NA	Vg	SSS 5675
<i>S. sesban</i> (L.) Merr.	Jyonti	H, w	Na	All districts	Occasional	NA	Gm	SSS 5665
<i>Smithia blanda</i> Wall. ex Wight & Arn.	Bat-shakuria	H, w	Na	N, S,	Rare	NA	Fo, Gm	SSS 5712
<i>Sohmaea laxiflora</i> (DC.) H. Ohashi & K. Ohashi	NK	H, w	Na	M, N, S	Rare	NA	M	SSS 5661
<i>Spatholobus</i> <i>parviflorus</i> (Roxb. ex G.Don) Kuntze	Goalia lata	L, w	Na	M, N, S	Common	LC	M	SSS 5716
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	NK	H, w	Na	M	Occasional	NA	M	SSS 5711
<i>Tamarindus indica</i> L.	Tentul	T, w	Ex	All districts	Common	NA	Fr, Fw	SSS 5659
<i>Tephrosia candida</i> DC.	Bilakshani	H, w	Na	M	Occasional	NA	M	DACB 9844
<i>T. purpurea</i> (L.) Pers.	Bon-neel	H, w	Na	All districts	Common	NA	M	SSS 5658
<i>Trigonella foenum- graecum</i> L.	Methi	H, cv	Ex	All districts	Occasional	NA	M, Sp	SSS 5657
<i>Ticanto crista</i> (L.) R.Clark & Gagnon	Kutumkata	L, w	Na	S, N	Occasional	VU	M	SSS 5684
<i>Uraria crinita</i> (L.) Desv. ex DC.	Diangleja	H, w	Na	S	Occasional	LC	M	DACB 9900
<i>U. lagopodioides</i> (L.) DC.	Chakulia	H, w	Na	M, S	Occasional	NA	M	SSS 5710

Table 1. List of species of the family Fabaceae found in Mymensingh Division

Scientific name	Bangla name	Habit	Origin	Distribution	Occurrence	Red List status	Use	RSE
<i>U. picta</i> (Jacq.) Desv. ex DC.	Shankar jata	H, w	Na	M, S	Occasional	NA	M	SSS 5709
<i>Vachellia farnesiana</i> (L.) Wight & Arn.	Belati babla	T, pl	Ex	J, M	Occasional	NA	M	DACB 10091
<i>V. nilotica</i> (L.) P.J.H. Hurter & Mabb.	Babla	T, pl	Na	J, M	Occasional	NA	M	SSS 5693
<i>Vicia hirsuta</i> (L.) Gray	Masurechana	H, w	Na	J, M, S	Occasional	NA	Gm	SSS 5676
<i>V. lens</i> (L.) Coss. & Germ.	Masur	H, cv	Ex	J, M	Occasional	NA	Pu	SSS 5835
<i>V. sativa</i> L.	Ankari	H, w	Na	J, M	Occasional	NA	Gm	SSS 5678
<i>Vigna mungo</i> (L.) Hepper	Mashkalai	H, cv	Ex	All districts	Occasional	NA	Gm, Pu	SSS 5679
<i>V. radiata</i> (L.) R.Wilczek	Moog	H, cv	Na	All districts	Occasional	NA	Pu	SSS 5740
<i>V. unguiculata</i> (L.) Walp.	Borboti	H, cv	Ex	All districts	Common	NA	Vg	SSS 5683
<i>Xylia xylocarpa</i> (Roxb.) W.Theob.	Lohakath	T, pl	Na	All districts	Occasional	NA	Tm	SSS 5736
<i>Zapoteca portoricensis</i> (Jacq.) H.M. Hern.	Shada calliandra	T, pl	Ex	M	Rare	NA	M, O	SSS 5755

Notes: **Habit:** H-Herb, S-Shrub, T-Tree, L-Liana, cv-cultivated, pl-Planted; **Origin:** Ex-Exotic, Na-Native; **Distribution:** J-Jamalpur, M-Mymensingh, N-Netrokona, S- Sherpur; **Red List status:** VU- Vulnerable, LC- Least Concern, NA-Not Assessed; **Use:** Dy-Dye yielding, Fb-Fibre yielding, Fo-Fodder, Fp-Fish poison, Fr-Fruit, Fw-Fuel wood, Gm-Green manure, Lf-Living fence, M- Medicine, N-Nut, O- Ornamental, Oy-Oil Yielding, Pu-Pulse, Sb-Soil binder, Sp-Spice, Tm-Timber, Vg-Vegetable; **RSE**-Representative Specimen Examined, **DACB**- Bangladesh National Herbarium, **SSS**-Shayla Sharmin Shetu.

This study provides baseline information on the taxonomy, ethnobotanical uses, and conservation status of Fabaceae in the study area. The findings contribute to the assessment of the socioeconomic importance of the family and provide valuable information for future IUCN Red List assessments of threatened species. The documented taxonomic and ethnobotanical data will also serve as a useful reference for future studies on plant genetic resources, biodiversity assessment, and conservation of Fabaceae in Bangladesh. Furthermore, these findings will assist resource managers, conservation planners, and policymakers in formulating appropriate conservation and sustainable management strategies.

However, several distinct anthropogenic and natural threats, including habitat degradation and encroachment, overexploitation, environmental pollution, the proliferation of invasive alien species, hill clearing, climate change, flash floods, riverbank erosion, seasonal flooding, and waterlogging, are adversely affecting the division's plant diversity. Therefore, the development and implementation of an integrated conservation and management plan are essential for the sustainable utilisation and conservation of the

region's plant resources. Increasing public awareness, reducing anthropogenic disturbances, preventing indiscriminate hill clearing, protecting natural habitats, and strengthening both in situ and ex situ conservation measures are recommended to ensure the long-term conservation of Fabaceae and the associated flora of the study area.

Conclusion: The present study provides the first comprehensive taxonomic assessment of Fabaceae in the Mymensingh Division of Bangladesh, documenting 141 species under 79 genera with ecological, economic, agricultural, and ethnobotanical significance. The recorded 55 species across all four districts of the division demonstrate wide habitat adaptability and contribute significantly to ecosystem functioning, sustainable agriculture, and local livelihoods through their medicinal, ornamental, nutritional, and resource-based values. The dominance of native species (66.67%) and wild species (48.94%) highlights the importance of the Mymensingh Division as an important locality of Fabaceae flora.

The study also reveals the conservation need of the recorded species, especially IUCN's seven threatened species, viz., *Alysicarpus rugosus*, *Bauhinia variegata*, *Dendrolobium triangulare*, *Mucuna monosperma*, *Piliostigma malabaricum*, *Dalbergia rimosa*, and *Ticanto crista*. The baseline taxonomic information generated through this research will support future biodiversity assessments, genetic resource studies, ethnobotanical investigations, IUCN's Red List assessment and conservation initiatives for Fabaceae in Bangladesh.

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