



## Studies on the family Fabaceae of Rajshahi district, Bangladesh focusing on important medicinal plants

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### Abstract

The family Fabaceae is found across the Rajshahi district, from January 2024 to December 2024 taxonomic investigations were conducted on this family, collecting and identifying 68 species under 46 genera. Habit analysis of plant shows that herbs, shrubs, climbers and trees are represented by 37, 6, 7 and 18 species, respectively. Out of the recorded species, *Abrus precatorius* L., *Canavalia virosa* (Roxb.) Wight & Arn., *Indigofera tinctoria* L. was very rare species in the study area. Data were obtained through interviews and direct plant collection, identifying 68 plant species used for treating various ailments. The scientific name, local name, flowering season, occurrence status, and therapeutic applications of each species were given. The findings highlight the diversity of Fabaceae family and importance of preserving and promoting sustainable of local uses of medicinal plants, ensuring their participation in conservation strategies.

**Key words:** Checklist, Fabaceae, Medicinal plants, Rajshahi, Bangladesh

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## 1. Introduction

Fabaceae, family of flowering plants (angiosperms), within the order Fabales. Fabaceae, which is the third largest family among the angiosperms after Orchidaceae (orchid family) and Asteraceae (aster family), consists of more than 700 genera and about 20,000 species of trees, shrubs, vines, and herbs and is worldwide in distribution. Some of the most important commercial species include soybeans (*Glycine max*), garden peas (*Pisum sativum*), peanuts (*Arachis hypogaea*), and alfalfa (*Medicago sativa*). Most woody species are tropical; herbaceous (i.e., nonwoody) species occur mainly in temperate regions. Many species of plants belonging to multiple families are cataloged as medicinal plants based on the presence of specific chemical constituents and their effects on the biological systems. In various ethnobotanical and ethnomedicinal plant surveys, it was observed that certain plant families and higher taxa are used more extensively than others. The Fabaceae is the most common family found in tropical rainforests and in dry forests in the Americas and Africa. Recent

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molecular and morphological evidence supports the fact that the Fabaceae are a single monophyletic family. This point of view has been supported not only by the degree of interrelation shown by different groups within the family compared with that found among the Leguminosae and their closest relations, but also by all the recent phylogenetic studies based on DNA sequences. These studies confirm that the Leguminosae are a monophyletic group that is closely related with the Polygonaceae, Surianaceae and Quillajaceae families and that they belong to the order Fabales (Sharma, 2004).

Economic importance: Pulse: *Cajanus cajan* (Pigeon Pea), *Phaseolus vulgaris* (French bean), *Cicer arietinum* (Chick pea), *Vigna mungo* (black gram), *Vigna radiata* (green gram), *Vigna unguiculata* (cow pea), *Glycine max* (soya bean), *Macrotyloma uniflorum* (Horse gram) are used which are sources of protein and starch of our food. Food plants: *Lablab purpureus* (field bean) are used as vegetables. *Sesbania grandiflora* (agathi, vegetable humming bird) which leaves are used as greens. *Cyamopsis tetragonoloba* (cluster bean) which tender fruits are used as vegetable. Oil Plants: *Arachis hypogea* (Ground nut) is used in oil extracted from the seeds is edible and used for cooking. *Pongamia pinnata* (Pungam) which pongam oil has medicinal value and is used in the preparation of soap. Timber Plants: *Dalbergia latifolia* (rose wood), *Pterocarpus santalinus* (red sandalwood) which timber are used for making furniture, cabinet articles and as building materials. Medicinal Plants: *Crotalaria albida*, which roots are used as purgative. *Psoralea corylifolia*-seeds are used in leprosy and leucoderma. *Glycyrrhiza glabra*-Roots used in immuno modulator. *Mucuna pruriens*-Seeds are used in neurological remedy. Fibre Plants: *Crotalaria juncea*, *Sesbania sesban* (aegyptiaca) stem fibres (Bast) used for making ropes (Sharma, 2004).

Similar research was carried out in Bangladesh by Uddin *et al.* (2013), Arefin *et al.* (2011), Tutul *et al.* (2010), Rahman and Alam (2013), Rahman and Uddin (1997), Rahman *et al.* (2013a), Rahman *et al.* (2013b), Rahman and Hassan (1995), Moniruzzaman *et al.* (2012), Islam *et al.* (2009), Khan and Huq (2001), Khan and Afza (1968), Khan and Banu (1972) and Khan and Hassan (1984). The aim of the present research was to explore and assesses the diversity and medicinal uses of Fabaceae family in Rajshahi district, Bangladesh.

## 2. Materials and methods

The research is based on fresh materials collected during twenty two field visits to Rajshahi district, Bangladesh from January 2024 to December 2024 to cover the seasonal variations. The visits covered all types of habitats, particular river bank; char land area, slope, village grove, fruit gardens, fallow lands, crop fields, roadsides of the study area. Plant parts with either flowers or fruits were collected using traditional herbarium techniques to make voucher specimens for documentation. Collected angiosperms were identified with the help of various literature (Ahmed *et al.*, 2008; Hooker, 1877; Prain, 1903). For the current name and up-to-date nomenclature Huq (1986) and Pasha and Uddin (2013) were also consulted.

## 3. Results and discussion

Diversity of Fabaceae family in Rajshahi was carried out from January 2024 to December 2024. A total of 68 species under 46 genera were recorded and identified. There are 68 plant species with exceptional therapeutic uses. There are around thirty diseases for which medicinal plants have been used. The scientific name, local name, flowering season, occurrence status, and therapeutic applications of each species were given. Out of the recorded species, 17.65% were very common, 42.65% were common, 35.29% were rare and 4.41% were very rare species in the study area (Table 1 and Figure 1).

Out of 68 species, 37 species were herb species like *Aeschynomene indica* L., *Alysicarpus vaginalis* DC., *Baptisia australis* (L.) R.Br., *Christia vespertilionis* (L.f.) Bakh.f., *Cicer arietinum* L., *Clitoria ternatea* L., *Crotalaria juncea* L., *Crotalaria retusa* L., *Crotalaria spectabilis* Roth., *Crotalaria verrucosa* L., *Cullen corylifolium* (L.) Medic., *Desmodium heterophyllum* (Willd.) DC., *Desmodium triflorum* (L.) DC., *Glycine max* (L.) Merr., *Lablab purpureus* (L.) Sweet., *Lathyrus aphaca* L., *Lathyrus sativus* L., *Lens culinaris* Medic., *Lupinus albus* L., *Lupinus hirsutus* L., *Medicago lupulina* L., *Medicago sativa* L., *Melilotus alba* Desr., *Melilotus indica* (L.) All, *Mimosa pudica* L., *Mucuna pruriens* (L.) DC., *Pisum sativum* L., *Senna tora* (L.) Roxb., *Sesbania bispinosa* (Jacq.) Wight., *Tephrosia purpurea* (L.) Pers., *Trigonella foenum-graecum* L., *Uraria picta* (Jacq.) Desv. ex DC., *Vicia tetrasperma* (L.) Schreb., *igna mungo* (L.) Hepper, *Vigna radiata* (L.) Wilczek and *Vigna unguiculata* (L.) Walp. Out of the recorded species 6 species were shrubs like *Cajanus cajan* (L.) Millsp., *Crotalaria pallida* Ait., *Desmodium gangeticum* (L.) DC., *Desmodium triquetrum* (L.) DC., *Indigofera tinctoria* L. and *Senna sophera* (L.) Roxb. and *Abrus precatorius* L., *Canavalia virosa* (Roxb.)

**Table 1: Species diversity on the family Fabaceae of Rajshahi district**

S. No.	Scientific name	Tribe name	Local name	Status of occurrence	Flowering time	Voucher number
01.	<i>Abrus precatorius</i> L.	Abreae	Kuch	Very Rare	August-October	RK 05
02	<i>Acacia auriculiformis</i> A.Cunn. ex Benth	Acacieae	Aakashmni	Very common	February-March	RK 01
03.	<i>Aeschynomene indica</i> L.	Dalbergieae	Katsola	Rare	September-October	RK 02
04	<i>Albizia lebbeck</i> (L.) Benth	Ingeae	Sirish	Common	July-October	RK 03
05	<i>Alysicarpus vaginalis</i> DC.	Desmodieae	Buffalo clover	Rare	July-December	RK 10
06	<i>Arachis hypogaea</i> L.	Dalbergieae	Chinabadam	Common	November-February	RK 23
07	<i>Baptisia australis</i> (L.) R.Br.	Sophoreae	Bluewild indigo	Very common	May-July	RK 25
08	<i>Bauhinia × blakeana</i> Dunn	Bauhinieae	Khancho	Common	June-December	RK 13
09	<i>Butea monosperma</i> (Lamk.) Taub	Phaseoleae	Palash	Common	January-March	RK 15
10	<i>Cajanus cajan</i> (L.) Millsp	Phaseoleae	Arhar	Rare	July-August	RK 56
11	<i>Canavalia virosa</i> (Roxb.) Wight & Arn.	Diocleae	Asian beach jackbean	Very rare	June-July	RK 50
12	<i>Caesalpinia pulcherrima</i> (L.) Sw	Caesalpinieae	Radhachura	Common	November-January	RK 40
13	<i>Cassia fistula</i> L.	Cassieae	Sonalu	Common	April-June	RK 51
14	<i>Cassia javanica</i> L.	Cassieae	Pink shower	Rare	October-December	RK 27
15	<i>Christia vespertilionis</i> (L.f.) (Bakh.f.	Desmodieae	Red butterfly	Rare	May-July	RK 28
16	<i>Cicer arietinum</i> L.	Cicereae	Chick pea	Common	January-March	RK 35
17	<i>Clitoria ternatea</i> L.	Phaseoleae	Aparajita	Very common	March-May	RK 07
18	<i>Crotalaria juncea</i> L.	Crotalarieae	Sunn pat	Rare	November-February	RK 36
19	<i>Crotalaria pallida</i> Ait.	Crotalarieae	Jhunijhuni	Common	November-February	RK 52
20	<i>Crotalaria retusa</i> L.	Crotalarieae	Atoshi	Common	November-February	RK 43
21	<i>Crotalaria spectabilis</i> Roth	Crotalarieae	Pipuli Jhunjhun	Common	November-February	RK 47
22	<i>Crotalaria verrucosa</i> L.	Crotalarieae	Blue rattlepod	Rare	November-February	RK 09
23	<i>Cullen corylifolium</i> (L.) Medic.		Lal mouri	Common	January-March	RK 04
24	<i>Dalbergia sissoo</i> Roxb.	Dalbergieae	Sishu	Very common	May-June	RK 37
25	<i>Delonix regia</i> (Boj. ex Hook.) Raf	Poinciana	Krishnochura	Very common	April-June	RK 68

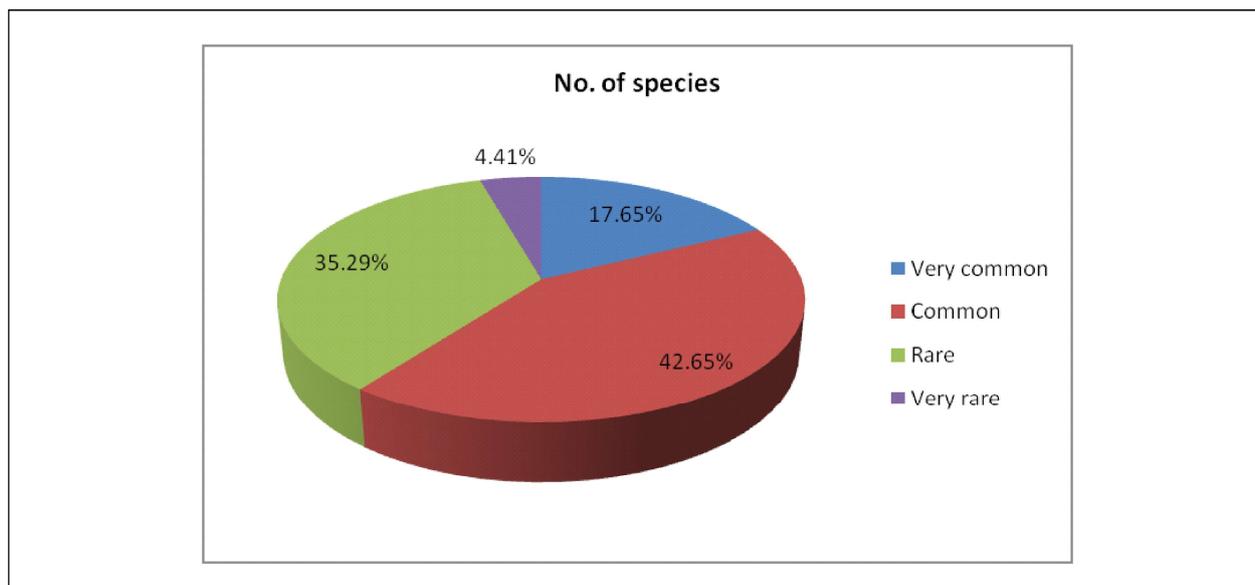
26	<i>Desmodium gangeticum</i> (L.) DC.	Desmodieae	Shalporni	Rare	March-August	RK 30
27	<i>Desmodium heterophyllum</i> (Willd.) DC.	Desmodieae	Ban motor	Common	July-September	RK 22
28	<i>Desmodium triflorum</i> (L.) DC	Desmodieae	Kudaliya	Rare	Jan-December	RK 06
29	<i>Desmodium triquetrum</i> (L.) DC	Desmodieae	Ulucha	Common	October-December	RK 24
30	<i>Erythrina variegata</i> L.	Phaseoleae	Parijat	Rare	February-May	RK 45
31	<i>Glycine max</i> (L.) Merr.	Phaseoleae	Soyabean	Common	July-September	RK 66
32	<i>Indigofera tinctoria</i> L.	Indigofereae	Neel	Very rare	July-August	RK 39
33	<i>Lablab purpureus</i> (L.) Sweet	Phaseoleae	Seim	Very common	November-February	RK 21
34	<i>Lathyrus aphaca</i> L.	Fabaeae	Yellow pea	Rare	April-August	RK 57
35	<i>Lathyrus sativus</i> L.	Fabaeae	Khesari	Common	January-February	RK 08
36	<i>Lens culinaris</i> Medic.	Fabaeae	Lentil	Common	March-May	RK 38
37	<i>Lupinus albus</i> L.	Genisteeae	Guli	Rare	March-May	RK 29
38	<i>Lupinus hirsutus</i> L.	Genisteeae	Blue lupin	Rare	March-May	RK 33
39	<i>Medicago lupulina</i> L.	Trifoleae	Blach meddic	Common	April-August	RK 58
40	<i>Medicago sativa</i> L.	Trifoleae	Alphapha	Common	June September	RK 42
41	<i>Melilotus alba</i> Desr.	Trifoleae	Honey clover	Common	February April	RK 55
42	<i>Melilotus indica</i> (L.) All.	Trifoleae	Kullaruki	Rare	April-October	RK 62
43	<i>Mimosa pudica</i> L.		Lozzaboti	Very common	November-March	RK 26
44	<i>Mucuna pruriens</i> (L.) DC.	Phaseoleae	Alkushi	Rare	August-April	RK 14
45	<i>Phaseolus vulgaris</i> L.	Phaseoleae	Common bean	Very common	October-January	RK 59
46	<i>Piptadenia gonoacantha</i> (Mart.) J.F.Macbr.		Guli	Common	September-October	RK 49
47	<i>Pisum sativum</i> L.	Vicieae	Motorshuti	Common	February-May	RK 17
48	<i>Pongamia pinnata</i> (L.) Pierre.	Millettieae	Karanj	Common	February-June	RK 32
49	<i>Robinia pseudoacacia</i> L.	Robinieae	Pangapal tree	Rare	April-June	RK 31
50	<i>Samanea saman</i> (Jacq.) Merr	Ingeae	Rain tree	Very common	February-March	RK 13
51	<i>Senna sophora</i> (L.) Rox	Cassieae	Kalkasunda	Very common	November-February	RK 54

Sl. No.	Species	Family	Local Name	Rarity	Flowering Period	RK
52	<i>Senna tora</i> (L.) Roxb	Cassieae	Chakunda	Very common	May-November	RK 34
53	<i>Sesbania bispinosa</i> (Jacq.) Wight.	Sesbanieae	Dhunchi	Common	November-January	RK 53
54	<i>Sesbania cannabina</i> (Retz.) Poir.	Sesbanieae	Yellow pea bash	Rare	March-October	RK 11
55	<i>Sesbania grandiflora</i> (L.) Poir.	Sesbanieae	Bagful	Common	November-January	RK 60
56	<i>Sesbania sesban</i> (L.) Merr.	Sesbanieae	Joyonti	Rare	September-December	RK 18
57	<i>Tephrosia purpurea</i> (L.) Pers.	Millettieae	Jongli neel	Rare	September-October	RK 20
58	<i>Trigonella foenum-graecum</i> L.	Trifoleae	Methi	Common	June-July	RK 67
59	<i>Uraria picta</i> (Jacq.) Desv. ex DC.	Desmodieae	Prisniparni	Rare	July-September	RK 12
60	<i>Vachellia nilotica</i> (L.) P.J.H. Hurter & Mabb.	Acacieae	Babla	Very common	June-February	RK 41
61	<i>Vicia angustifolia</i> L.	Fabeae	Narrow leaved vetch	Common	March-June	RK 63
62	<i>Vicia faba</i> L.	Fabeae	Faba bean	Rare	May-July	RK 46
63	<i>Vicia hirsuta</i> (L.) S.F. Gray.	Fabeae	Tiny vetch	Common	April-June	RK 61
64	<i>Vicia sativa</i> L.	Fabeae	Ankari	Rare	August-January	RK16
65	<i>Vicia tetrasperma</i> (L.) Schreb	Fabeae	Hetki	Common	April-June	RK 64
66	<i>Vigna mungo</i> (L.) Hepper.	Phaseoleae	Kalosola	Rare	March-May	RK 44
67	<i>Vigna radiata</i> (L.) Wilczek.	Phaseoleae	Mung bean	Very common	March-May	RK 65
68	<i>Vigna unguiculata</i> (L.) Walp.	Phaseoleae	Cowpea	Very common	September-March	RK 19

Wight & Arn., *Phaseolus vulgaris* L., *Vicia angustifolia* L., *Vicia faba* L., *Vicia hirsuta* (L.) S.F. Gray. and *Vicia sativa* L. were climber species in the study area (Table 1).

Out of the recorded species, 18 species were tree species like *Acacia auriculiformis* A.Cunn. ex Benth., *Albizia lebbek* (L.) Benth., *Bauhinia acuminata* L., *Bauhinia purpurea* L., *Butea monosperma* (Lamk.) Taub., *Caesalpinia pulcherrima* (L.) Sw., *Cassia fistula* L., *Cassia javanica* L., *Dalbergia sissoo* Roxb., *Delonix regia* (Boj. ex Hook.) Raf., *Erythrina variegata* L., *Piptadenia gonoacantha* (Mart.) J.F. Macbr., *Pongamia pinnata* (L.) Pierre., *Robinia pseudoacacia* L., *Samanea saman* (Jacq.) Merr., *Sesbania cannabina* (Retz.) Poir., *Sesbania grandiflora* (L.) Poir., *Sesbania sesban* (L.) Merr. and *Vachellia nilotica* (L.) P.J.H. Hurter & Mabb. Rare species were observed like *Abrus precatorius* L., *Aeschynomene indica* L., *Alysicarpus vaginalis* DC., *Baptisia australis* (L.) R.Br., *Canavalia virosa* (Roxb.) Wight & Arn., *Cassia javanica* L., *Christia vespertilionis* (L.f.) Bakh.f., *Crotalaria juncea* L., *Crotalaria verrucosa* L., *Desmodium gangeticum* (L.) DC., *Desmodium triflorum* (L.) DC., *Erythrina variegata* L., *Indigofera tinctoria* L., *Lathyrus aphaca* L., *Lupinus albus* L., *Lupinus hirsutus* L., *Melilotus indica* (L.) All, *Mucuna pruriens* (L.) DC., *Robinia pseudoacacia* L., *Sesbania cannabina* (Retz.) Poir., *Sesbania sesban* (L.) Merr., *Tephrosia purpurea* (L.) Pers., *Uraria picta* (Jacq.) Desv. ex DC., *Vicia faba* L., *Vicia sativa* L. and *Vigna mungo* (L.) Hepper (Table 1).

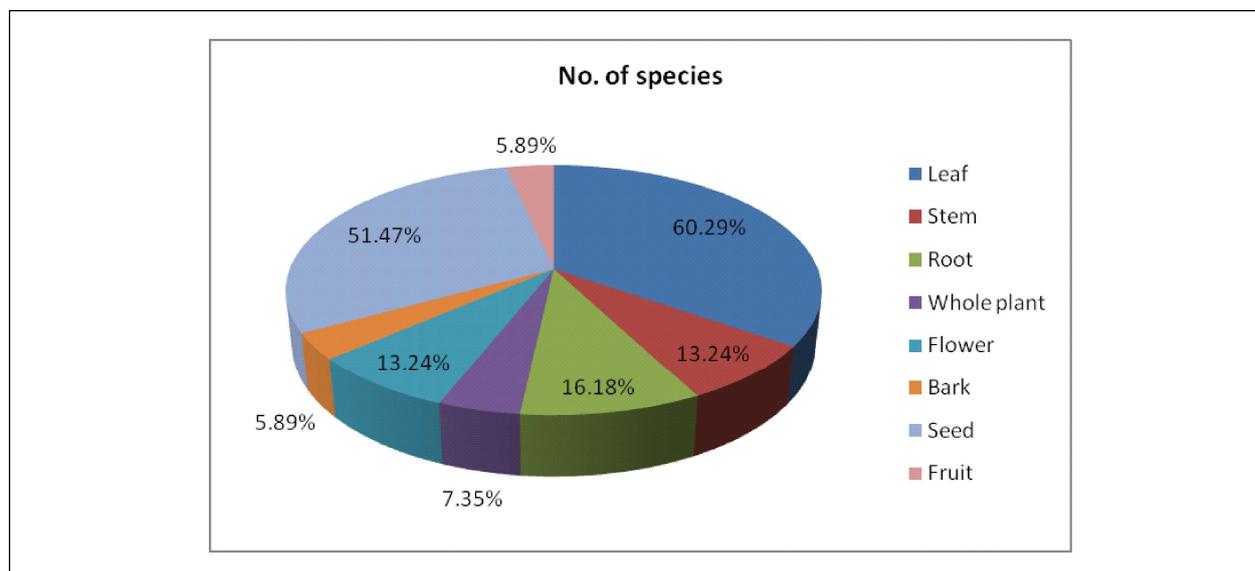
Based on the study, a preliminary study of diversity of Fabaceae family of Rajshahi district, Bangladesh



**Figure 1: Recorded status of occurrence**

conducted and analysis on January 2024 to December 2024. A total of 68 species were collected (Table 1). The collected information were comparable with the result of other studies area in different district in Bangladesh. A total of 38 species was recorded in Teknaf Wildlife Sanctuary (Uddin *et al.*, 2013). A total of 10 species was recorded in sadar upazila of Munsiganj district, Bangladesh (Rahman, 2013). A total of 16 species was recorded in Khagrachari district, Bangladesh (Islam *et al.*, 2009). Nine (9) species was recorded in Gobindaganj Upazila of Gaibandha district, Bangladesh (Sarker and Rahman, 2019) and 11 species was recorded in sadar upazila of Gaibandha district, Bangladesh (Akter and Rahman, 2025). No published information recorded on the diversity of Fabaceae family of Rajshahi district, Bangladesh.

The important medicinal plants on the family Fabaceae in Rajshahi district were carried out. A total of 68 medicinal plant species were collected and recorded for their use in various ailments. The local people use these medicinal plants to treat the following diseases: headache, heart disease, itches, jaundice, menstrual disease, paralysis, small pox, constipation, dysentery, diarrhea, diabetes, snake bite, toothache, vomiting, worm, wound, eczema, abscess, asthma, abortion, cough, cold, fever, fracture of bone, piles, skin diseases and others (Table 2). Different plant parts of different spp. are used as medicine for treating various diseases Leaves, barks, seeds, stem, flower, rhizome, fruits, whole plants, roots, petiole and others were used as medicine (Table 2 and Figure 2). There are scientific names, local name, habits, families, medicinal uses and plant part(s)



**Figure 2: Recorded plant parts used as medicine**

Table 2: Medicinal plants are used by the local people in Rajshahi district					
S. No.	Scientific name	Local name	Habit	Parts used	Ailments
01.	<i>Abrus precatorius</i> L.	Kuch	Climber	Seed, root	Tetanus, rabies, scratches, wound and sores.
02.	<i>Acacia auriculiformis</i> A.Cunn. ex Benth	Aakashmoni	Tree	Leaves, flower	Rheumatism, antihelminthic, antimalarial and aches, pain and sore eyes.
03.	<i>Aeschynomene indica</i> L.	Kat sola	Herb	Leaves, aerial parts	Hepatitis, enteritis, nyctalopia, utricularia, furuncle, conjunctivitis.
04.	<i>Albizia lebeck</i> (L.) Benth.	Sirish	Tree	All parts of the plant	Cough, flue, lung problem, pectoral problems, abdominal tumors.
05.	<i>Alysicarpus vaginalis</i> DC.	Buffalo clover	Herb	Vegetative aerial parts, leaves, stem and roots.	Kidney disorder, leprosy, Pulmonary disorders.
06.	<i>Arachis hypogaea</i> L.	Chinabadam	Herb	Seed	Heart disease, cholesterol reducing.
07	<i>Baptisia australis</i> (L.) R.Br.	Blue wild indigo	Herb	Seed	Antiinflammatory, detoxicant, antifebrile.
08	<i>Bauhinia × blakeana</i> Dunn	Kanchon	Tree	Bark, flower, leaves	Glandular disease, curries and pickles, cough.
09.	<i>Butea monosperma</i> (Lamk.) Taub.	Palash	Tree	Flower, leaves	Anthelmintic, digestive, and laxative effects and for inflammations, piles, and wounds, cold, coughs, diarrhea, dyspepsia, flatulence, gonorrhea, and leprosy.
10.	<i>Cajanus cajan</i> (L.) Millsp	Arhar	Shrub	Seed	Ischemic necrosis of the caput femoris, aphtha, bedsore and wound healing.
11.	<i>Canavalia virosa</i> (Roxb.) Wight & Arn	Asian jackbean	Climber	Seed	Scorpion bite, malaria and splenomegaly, gastric problems.
12.	<i>Caesalpinia pulcherrima</i> (L.) Sw	Radhachura	Tree	Flower, leaves, bark	Astringent, cholera, purgative, abortifecient, febrifuge, bronchitis and asthma.
13.	<i>Cassia fistula</i> L.	Sonalu	Tree	Seed, flower	Antifungal, anticancer, anti-inflammatory, antidiabetic, antioxidant.
14.	<i>Cassia javanica</i> L.	Pink shower	Tree	Leaves, bark and root	Constipation, colic, urinary disorders.
15.	<i>Christia vespertilionis</i> (L.f.) Bakh.f.	Red butterfly	Herb	Whole plant	Tuberculosis, snake bites, bone fractures, antiproliferative, antidiabetic, antioxidant, antitumor, antiplasmodial, and anticancer.

16.	<i>Cicer arietinum</i> L.	Chickpea	Herb	Seed	Menstruation, urination, kidney stone, antimicrobials, antihepatoprotective, antidiarrheal, anticonvulsion.
17.	<i>Clitoria ternatea</i> L.	Aparajita	Herb		Antimicrobial, antipyretic, anti-inflammatory, analgesic, diuretic, local anesthetic, antidiabetic, insecticidal, blood platelet aggregation-inhibiting.
18.	<i>Crotalaria juncea</i> L.	Sunn pat	Herb	Leaves, seed, fibre	Refrigerant, demulcent, emetic, purgative, emmenagogue and abortifacient, gastric and bilious fevers accompanied by skin diseases such as impetigo and psoriasis.
19.	<i>Crotalaria pallida</i> Ait.	Jhunjhuni	Shrub	Leaves, root, stem.	Urinary problems, intestinal worms, swelling of joint, anti-inflammatory, antifungal and antimicrobials.
20.	<i>Crotalaria retusa</i> L.	Atoshi	Herb	Whole plant	Fever, cough, dyspepsia, cardiac disorders, stomatitis, diarrhea, scabies, impetigo, and several other disorders.
21.	<i>Crotalaria spectabilis</i> Roth.	Pipuli jhunjhun	Herb	Leaves, seed	Antiseptic, treatment in scabies, to treat in intestinal worms, impetigo, Pulmonary hypertension.
22.	<i>Crotalaria verrucosa</i> L.	Blue rattlepod	Herb	Leaves	Biliousness, dyspepsia, fever, throat and mouth diseases and heart complaints.
23.	<i>Cullen corylifolium</i> (L.) Medic.	Lata mouri	Herb	Whole part	Alopecia, psoriasis, vitiligo and menorrhagia, psoriasis, vitiligo and mycosis fungoides.
24.	<i>Dalbergia sissoo</i> Roxb.	Sisshu	Tree	Leaf	Dysentery, gonorrhoea, urination, astringent, menorrhagia, abscesses, bleeding piles.
25.	<i>Delonix regia</i> (Boj. ex Hook.) Raf	Krisnochura	Tree	Leaves, seeds	Constipation, inflammation, rheumatoid arthritis, diabetes, pneumonia, and malaria
26.	<i>Desmodium gangeticum</i> (L.) DC.	Shalporni	Shrub	Roots	Antiinflammatory, analgesic, headache, muscle pain, tonic, anthelmintic, asthma, bronchitis, aphrodisiac, astringent, etc.
27.	<i>Desmodium heterophyllum</i> (Willd.) DC.	Banmotor	Herb	Leaves	Anticancer, anti-inflammatory, antipyretic, antidepressant, antioxidants, analgesic activities. Menstrual problems, asthma, ulcer, wound healing, etc.

28.	<i>Desmodium triflorum</i> (L.) DC.	Kudaliya	Herb	Whole plants	Laxative, diuretic, cough, asthma, spleen complaints, stomachs trouble, breast pain, eye disease, sores, menorrhagia.
29.	<i>Desmodium triquetrum</i> (L.) DC.	Ulucha	Herb	Leaves, stem	Antioxidants, treat piles, inflammation, asthma, headache, muscle pain.
30.	<i>Erythrina variegata</i> L.	Parijat	Tree	Bark, leaves	Antibacterial, antioxidant, anti-inflammatory, cardiovascular effect, antiosteoporotic effect.
31.	<i>Glycine max</i> (L.) Merr.	Soyabean	Herb	Seed	Oxidative stress - associated conditions, like cancer, diabetes, Alzheimer's disease, obesity, CVD, and osteoporosis.
32.	<i>Indogofera tinctoria</i> L.	Neel	Shrub	Leaves, seed	Epilepsy, nervous disorders, asthma, bronchitis, fever, stomach pain, liver diseases, kidney and spleen diseases, skin conditions, wounds sores, hemorrhoids, gonorrhoea, syphilis, snake bites, etc.
33.	<i>Lablab purpureus</i> (L.) Sweet.	Seim	Herb	Fruit, seed, leaves	Vomiting, weakness, shortness of breath, twitching, stupor, and convulsions.
34.	<i>Lathyrus aphaca</i> L.	Yellow pea	Herb	Seed, leaves	Antioxidants, anti-inflammatory, diabetes, heart disease.
35.	<i>Lathyrus sativus</i> L.	Khesari	Herb	Seed, leaves	Antioxidants, anti-inflammatory, diabetes, heart disease.
36.	<i>Lens culinaris</i> Medic.	Lentil	Herb	Seed	Heart disease, constipation, gastric trouble, antispasmodic, antidiarrheal and bronchodilator.
37.	<i>Lupinus albus</i> L.	Guli	Herb	Seed	Antihypertensive, hypoglycemic, and antihypercholesteremic.
38.	<i>Lupinus hirsutus</i> L.	Blue lupin	Herb	Seed	High blood pressure, intestinal infection, kidney disorders.
39.	<i>Medicago lupulina</i> L.	Black medic	Herb	Whole plant	Colds, diabetes, and skin infections, antimicrobials, blood coagulating.
40.	<i>Medicago sativa</i> L.	alfalfa	Herb	Leaves, seeds	Digestive system, the central nervous system, diabetes, asthma, inflammation, gallstones, kidney disease, and microbiological.
41.	<i>Melilotus alba</i> Desr.	Honey clover	Herb	Flower, leaves	Anticoagulant, Anticlotting, ulcers, diuretic agent.

42.	<i>Melilotus indica</i> (L.) All.	Kullaruki	Herb	Flower leaves	Antioxidant properties, diabetes, antispasmodic, emollient, analgesic, and astringent activities.
43.	<i>Mimosa pudica</i> L.	Lojjaboti	Herb	Seed, leaves and flowers	Anti-inflammatory, wound healing, cancer, diabetes, hepatitis, obesity, and urinary infections.
44.	<i>Mucuna pruriens</i> (L.) DC.	Alkushi	Herb	Seed	Aphrodisiac, male infertility, blood pressure, heart problems, parkinson's disease, anxiety and depression, disorders.
45.	<i>Phaseolus vulgaris</i> L.	Common bean	Herb	Flowers, leaves and unripe fruits	Obesity, diabetes, colon cancer, high cholesterol, kidney stones, etc.
46.	<i>Piptadenia gonoacantha</i> (Mart.) J.F. Macbr.	Guli	Tree	Seed, woods and leaves	Therapeutic agents.
47.	<i>Pisum sativum</i> L.	Motorshuti	Herb	Seed	Cancer, diabetes and heart disease, refrigerant, appetizer, laxatives, etc.
48.	<i>Pongamia pinnata</i> (L.) Pierre.	Karanj	Tree	Root, leaves	Gonorrhoea, ulcer and skin diseases.
49.	<i>Robinia pseudoacacia</i> L.	Pangopal tree	Tree	Bark, wood	Frontal headache, healing wounds, hyperacidity.
50.	<i>Samanea saman</i> (Jacq.) Merr	Rain tree	Tree	Bark, wood	Diarrhoea and stomachs.
51.	<i>Senna sophora</i> (L.) Rox.	Kalkasunda	Shrub or tree	Leaves, seed	Bronchial asthma, dyspepsia.
52.	<i>Senna tora</i> (L.) Roxb	Chakunda	Herb	Seed, flower	Eye inflammatory, abnormal sensitivity, skin disease.
53.	<i>Sesbania bispinosa</i> (Jacq.) Wight.	Dhunchi	Herb	Flower, leaves, and seeds	Antiinflammntory activity, treat skin disease, ringworm.
54.	<i>Sesbania cannabina</i> (Retz.) Poir.	Yellow pea bush	Herb	Leaves, seeds	Antioxidants, cardio-proactive, diabetes, breast cancer, wound-healing, anti-diuretic.
55.	<i>Sesbania grandiflora</i> (L.) Poir.	Bagful	Tree	Flower, seeds and leaves	Diarrhoea, antimicrobial, antiinflammatory, thrombosis.
56.	<i>Sesbania sesban</i> (L.) Merr.	Joyonti	Tree	Leaves, wood and tender branches	Antioxidants, antimicrobials, wound healing, cardiovascular proactive.
57.	<i>Tephrosia purpurea</i> (L.) Pers.	Jongli neel	Herb	Seeds, leaves, flower	Antimicrobial, antibacterial, asthma, allergy, hepato-disease.
58.	<i>Trigonella foenum-graecum</i> L.	Methi	Herb	Seed, leaves	Anti-inflammatory, antidiabetic, antihyperlipidemic, antiobesity, anticancer.

59.	<i>Uraria picta</i> (Jacq.) Desv. ex DC.	Prisniparni	Herb	Leaves, stem, seed	Anticancer, antimicrobials, antidiabetic, anti-inflammatory properties.
60.	<i>Vachellia nilotica</i> (L.) P.J.H. Hurter & Mabb.	Babla	Tree	Leaves, fruits	Anti-inflammatory, antimicrobial, burn and wound.
61.	<i>Vicia angustifolia</i> L.	Narrow leaved vetch	Herb	Leaves, fruits	Anemia, malaria, parkinson's disease, antidiuretic.
62.	<i>Vicia faba</i> L.	Faba bean	Herb	Seeds	Antidiabetic, anti-inflammatory, antioxidant activity and hypertensive.
63.	<i>Vicia hirsuta</i> (L.) S.F. Gray.	Tiny vetch	Herb	Leaves	Spider bites, anti-inflammatory capacity, and different types of sores.
64.	<i>Vicia sativa</i> L.	Ankari	Herb	Leaves, fruits	Antianxiety activity, anticonvulsant activity, parkinson's disease, cholinesterase inhibitor.
65.	<i>Vicia tetrasperma</i> (L.) Schreb	Hetki	Herb	Leaves	Spider bites, anti-inflammatory capacity, and different types of sores.
66.	<i>Vigna mungo</i> (L.) Hepper.	Kalosola	Herb	Edible seeds	Manage cholesterol level, digestion process.
67.	<i>Vigna radiata</i> (L.) Wilczek.	Mung bean	Herb	Edible seeds	Heart disease risk, LDL cholesterol level, blood pressure.
68.	<i>Vigna unguiculata</i> (L.) Walp.	Cowpea	Herb	Leaves, seed	Diabetes, hypocholesterol.

used for each species. The study also recommended that the current information on local people's medicinal use of plants could be utilized in future botanical and pharmacological research to find new herbal drug development. This findings are comparable with the results of other studies in Bangladesh like Alam (1992), Alam *et al.* (1996), Anisuzzaman *et al.* (2007), Chakma *et al.* (2003), Choudhury and Rahmatullah (2012), Rahman *et al.* (2013a, 2013b, 2013c and 2013d), Rahman *et al.* (2008, 2010 and 2012), Sabana and Rahman (2024), Rahman (2021), Ghani (2003), Faruque and Uddin (2014), Uddin *et al.* (2006, 2008 and 2012) and Yusuf *et al.* (2006 and 2009).

#### 4. Conclusion

The present research focused on the family Fabaceae growing throughout the Rajshahi district, Bangladesh was carried out from January 2024 to December 2024. A total of 68 species under 35 genera of the family Fabaceae were collected and identified. Sixty eight (68) medicinal plants have been documented with their uses for the treatment of various diseases. The present research documented that the study area has a rich diversity of Fabaceae species using for different diseases. The conservation status shows that some Fabaceae species of the study area is going to be extinct due to environmental factors. This research aims to bring awareness among the local people, save this indigenous knowledge and protect these threatened species, for the next generation.

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