



Angiosperm Diversity at the Village Sabgram of Bogra, Bangladesh with Emphasis on Medicinal Plants

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Abstract: *Background:* The flowering plants have a number of uses as food, specifically as grains, sugars, vegetables, fruits, oils, nuts, and spices. In addition, plants and their products serve a number of other needs, such as dyes, fibers, timber, fuel, medicines, and ornamentals. The contribution of the angiosperms to biodiversity and habitat is so extremely important that human life is totally dependent on it. *Materials and Methods:* Angiosperm diversity at village Sabgram of Bogra district, Bangladesh conducted during March 2013 to July 2014. All the species were noted and time to time the areas were visited to see when they flowered. For the morphological study, different types of species were examined again and again in order to see if there was any variation or not. They were collected at flowering stages and herbarium specimens were prepared as vouchers. In this practice standard method was followed. *Results:* A total of 196 species belonging to 160 genera under 69 families were recorded. One hundred nineteen (119) medicinal plants have been recorded with their uses for the cure of more than 87 diseases, and some of these are skin disease, diarrhea, dysentery, fever, earache, piles, inflammations, rheumatism, dyspepsia, constipation, diabetes, kidney disease, bronchitis, ulcers, anemia, asthma, ringworm, herpes, jaundice, headache, ophthalmia, cough, eye disease leprosy, menstrual disease and others. *Conclusion:* The present study was made an inventory of the angiosperm diversity in the study area and documentation of long-established knowledge on the medicinal uses of these plants is essential for conservation efforts for the plants resources and new drug development.

Keywords: Diversity, Angiosperm Flora, Medicinal Plants, Bogra, Bangladesh

1. Introduction

Angiosperms are seed-bearing vascular plants. Their reproductive structures are flowers in which the ovules are enclosed in an ovary. Angiosperms are found in almost every habitat from forests and grasslands to sea margins and deserts. Angiosperms display a huge variety of life forms including trees, herbs, submerged aquatics, bulbs and epiphytes. The largest plant families are Orchids, and Compositae (daisies) and Legumes (beans). There are an estimated 352,000 species of flowering plants or angiosperms. The angiosperms provide valuable pharmaceuticals. With the exception of antibiotics, almost all medicinal either are derived directly from compounds produced by angiosperms or, if synthesized, were originally discovered in angiosperms. This includes some vitamins (e.g., vitamin C, originally extracted from fruits); aspirin, originally from the bark of willows (*Salix*; Salicaceae); narcotics (e.g., opium and its derivatives from

the opium poppy, *Papaver somniferum*; Papaveraceae); and quinine from *Cinchona* (Rubiaceae) bark. The contribution of the angiosperms to biodiversity and habitat is so extremely important that human life is totally dependent on it. A significant loss of angiosperms would reduce the variety of food sources and oxygen supply in a habitat and drastically alter the amount and distribution of the world's precipitation. Many sources of food and medicine doubtless remain to be discovered in this group of vascular plants [29], [30].

The importance of studying local floristic diversity and medicinal uses has been realized and carried out in Bangladesh by [2], [3], [4], [5], [6], [19], [20], [21], [22], [23], [24], [25], [26], [31], [32], [33], [34], [35], [36], [37], [38], [39], [40], [41], [42], [43], [44], [45], [46], [47], [48], [49], [50], [51], [52], [53], [54], [55], [56], [57], [58], [59], [60], [61], [62], [63], [64], [65], [66], [67], [68], [69], [70],

[71], [72], [73], [74], [75] and [76]. The present study was made an inventory of the angiosperm diversity and medicinal uses at the village Sabgram of Bogra, Bangladesh.

2. Materials and Methods

Study area: Sabgram village is situated at 24°51'34.7"N and 89°24'01.9"E. The village lies about for 3 Kilometers East of Bogra city. It is situated in the North-East side of Dhaka-Bogra highway road, near the Bogra bypass road-2, South of Matidali bus stand and west side of Gabtoli. The climate of Sabgram village is characterized by hot, humid summers and generally mild winters and rainfall. The summer season commences early in the March with the cessation of the Northerly wind. The winter season (November-January) which is cool and little rainfall; summer season (June-October) which is warm and no rainfall. In terms of temperature variation it appears that average annual temperature is about 26-36. The maximum monthly temperature can reach up to 40.1 during May and minimum monthly temperature 9° C during January [8].

Methodology: Angiosperm diversity at the village of Bogra sadar, Bangladesh was carried out from March 2013 to July 2014. A total of 196 species belonging to 160 genera under 69 families were collected and identified. A survey on the determination of the location of different species was made and a list was prepared to be acquainted with the plants available in the selected area. All the species were noted and time to time the areas were visited to see when they flowered. For the morphological study, different types of species were examined again and again in order to see if there was any variation or not. They were collected at flowering stages and herbarium specimens were prepared as vouchers. In this practice standard method was followed. In this regard different types of plant species were collected from different habitats. All the collected plant specimens were kept in the Herbarium, Department of Botany, and University of Rajshahi, Bangladesh.

Plant Identification: The major collected materials were identified and described up to species with the help of [9], [11], [25], [27] and [1] were consulted. For the current name and up-to-date nomenclature [12] and [28] were also consulted.

3. Results and Discussion

Angiosperm diversity at the village Sabgram under Sadar upazila of Bogra district, Bangladesh conducted during March 2013 to July 2014. A total of 196 species belonging to 160 genera under 69 families were recorded. Of these, Magnoliopsida (Dicotyledones) is represented by 172 species under 138 genera and 61 families while Liliopsida (Monocotyledones) is represented by 24 species under 22 genera and 8 families. Cucurbitaceae is the largest family in Magnoliopsida represented by 13 species and, in Liliopsida, Poaceae is the largest family with 9 species. Habit analysis shows that herbs, shrubs, climbers and trees are represented

by 69, 42, 28 and 57 species, respectively. Amaranthaceae, Asteraceae, Apocynaceae, Caesalpiniaceae, Convolvulaceae, Cucurbitaceae, Euphorbiaceae, Fabaceae, Moraceae, Malvaceae, Mimosaceae, Myrtaceae, Poaceae, Rutaceae and Solanaceae are the dominant families with high species diversity. For each species botanical name, synonyms, local name, habit, habitat, flowering and fruiting time, status of occurrence, voucher number and family were provided. Of 196 species recorded here, herbs are represented by 69 (35.20%), trees by 57 (29.08%), shrubs by 42 (21.43%) and climber by 28 (14.29%) species.

Based on this study, a preliminary list of angiosperm flora at the village Sabgram of Bogra district, Bangladesh conducted during March 2013 to July 2014. A total of 196 species belonging to 160 genera under 69 families were recorded (Table 1). The collected information is comparable with the result of other studies in Bangladesh. A total of 243 species belonging to 195 genera under 95 families were recorded in Khagrachhari district [13]. A total of 374 species belonging to 264 genera under 84 families were recorded in Lawachara National Park [78]. A total of 153 species belonging to 120 genera under 52 families were recorded in Runtia Sal Forest [77]. A total of 245 species belonged to 183 genera and 72 families are documented in Habiganj district [7]. A total of 425 species belonging to 321 genera 108 families are recorded in Rajshahi district [56]. A total of 302 species belonging to 243 genera 84 families are recorded in Bangladesh Police Academy, Rajshahi [57].

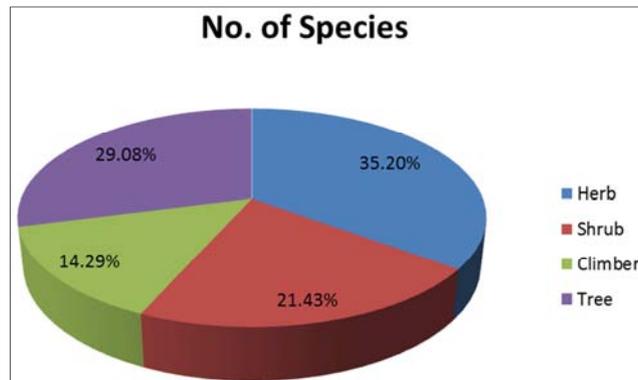


Figure 1. Habit diversity of the recorded species in the study area.

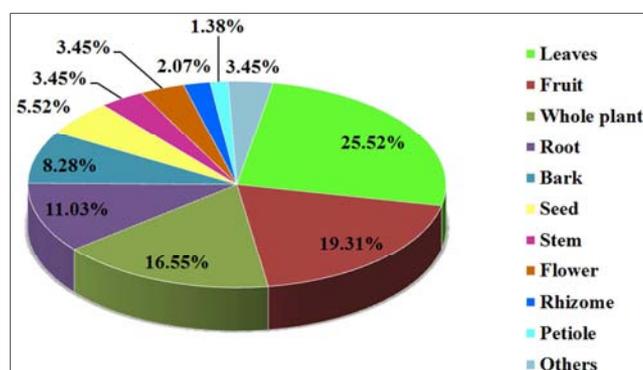


Figure 2. Number of plant parts used for medicinal purpose.

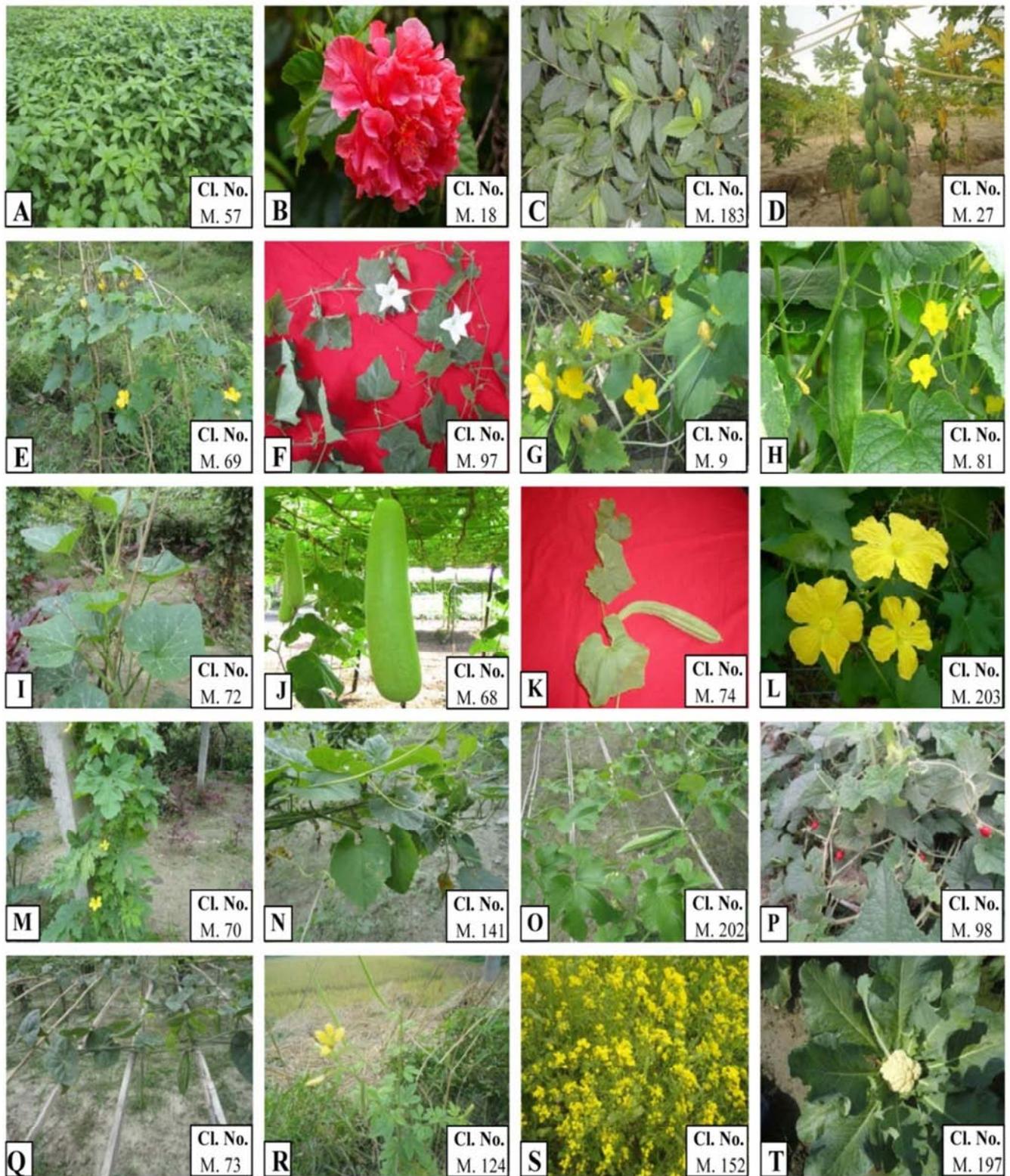


Figure 3. Photographs of Important Angiosperm Plant Species.

A: *Corchorus capsularis*, B: *Hibiscus rosa-sinensis*, C: *Sida cordifolia*, D: *Carica papaya*, E: *Benincasa hispida*, F: *Coccinia cordifolia*, G: *Cucumis melo*, H: *Cucumis sativus*, I: *Cucurbita maxima*, J: *Lagenaria siceraria*, K: *Luffa acutangula*, L: *Luffa cylindrica*, M: *Momordica charantia*, N: *Momordica cochinchinensis*, O: *Trichosanthes anguina*, P: *Mukia maderaspatana*, Q: *Trichosanthes dioica*, R: *Cleome viscosa*, S: *Brassica napus*, T: *Brassica oleracea* L. var. *botrytis*

Table 1. Showing the families of the plant species recorded.

Family name	No. of the Herb species	No. of the Shrub species	No. of the Climber species	No. of the Tree species
Acanthaceae	-	2	-	-
Amaranthaceae	6	1	-	-
Anacardiaceae	-	-	-	4
Annonaceae	-	-	-	2
Apiaceae	2	-	-	-
Apocynaceae	2	3	-	1
Araceae	2	-	1	-
Arecaceae	-	-	-	4
Asclepiadaceae	-	1	-	-
Asteraceae	7	1	-	-
Balsaminaceae	1	-	-	-
Basellaceae	-	-	1	-
Bombaceae	-	-	-	1
Boraginaceae	1	-	-	-
Brassicaceae	4	-	-	-
Caesalpiniaceae	-	-	-	2
Capparaceae	1	-	-	-
Caricaceae	-	-	-	1
Chenopodiaceae	2	-	-	-
Combretaceae	-	-	-	2
Commelinaceae	1	-	-	-
Convolvulaceae	-	-	3	-
Crassulaceae	1	-	-	-
Cucurbitaceae	-	-	13	-
Cuscutaceae	-	-	1	-
Dilleniaceae	-	-	-	1
Ebenaceae	-	-	-	1
Elaeocarpaceae	-	-	-	1
Euphorbiaceae	2	4	-	1
Fabaceae	4	3	2	2
Lamiaceae	4	-	-	-
Lauraceae	-	1	-	2
Liliaceae	2	-	1	-
Lythraceae	-	1	-	1
Malvaceae	2	1	-	-
Meliaceae	-	-	-	3
Menispermaceae	-	-	1	-
Mimosaceae	1	-	-	1
Molluginaceae	1	-	-	-
Moraceae	-	1	-	7
Moringaceae	-	-	-	1
Musaceae	-	1	-	-
Myrtaceae	-	-	-	5
Nyctaginaceae	1	-	2	-
Nymphaeaceae	1	-	-	-
Oleaceae	-	2	-	-
Oxalidaceae	1	-	-	1
Papaveraceae	1	-	-	-
Pedaliaceae	1	-	-	-
Piperaceae	-	-	1	-
Plantaginaceae	1	-	-	-
Poaceae	4	5	-	-
Polygonaceae	2	-	-	-
Pontederiaceae	1	-	-	-
Portulacaceae	1	-	-	-
Punicaceae	-	-	-	1
Rhamnaceae	-	-	-	1
Rosaceae	-	2	-	-

Family name	No. of the Herb species	No. of the Shrub species	No. of the Climber species	No. of the Tree species
Rubiaceae	-	3	-	1
Rutaceae	-	1	-	4
Sapindaceae	-	-	-	1
Sapotaceae	-	-	-	2
Solanaceae	5	5	-	-
Sterculiaceae	-	-	-	1
Tiliaceae	-	1	-	-
Trapaceae	1	-	-	-
Verbenaceae	1	3	-	2
Vitaceae	-	-	2	-
Zingiberaceae	2	-	-	-
Total	69	42	28	57

Medicinally important Plants

The important medicinal plants at the village Sabgram under sadar upazila of Bogra district were carried out. A total of 119 medicinal plant species belonging to 109 genera and 50 families were collected and recorded for their use in 142 ailments. Most of the local people in the study area are poor and illiterate. In one hand, these people are out of the reach of modern medicines and on other hand, the market price of most available medicines are very expensive. As a result, these medicinal plants are used by them to cure following the diseases, especially for abscess, asthma, abortion, cough, cold, small pox, constipation, dysentery, diarrhea, diabetes, eczema, fever, and fracture of bone, headache, heart disease, itches, jaundice, menstrual disease, paralysis, piles, skin diseases, snake-bite, toothache, vomiting, worm, wound and

others (Table 2). Different plant parts of different spp. are used as medicine for treating various diseases. Leaves of 37, fruit of 28, whole plant of 24, root of 16, bark of 12, seed of 8, stem of 5, flower of 5, rhizome of 3, Petiole of 2 and others of 5 species were used as medicine (Table 2). For each species scientific name, local name, habit, family, ailments to be treated, mode of treatment and part (s) used are provided. The study also suggested that the present information on medicinal use of plants by tribal people may be used for botanical and pharmacological research in future for the discovery of new sources of drugs. This finding of common medicinal plant families in the study is in agreement with [4], [10], [14], [15], [16], [17], [79], [80], [81], [82], [83], [84], [85], [86] and [87].

Table 2. List of medicinal plants and their use in different ailments by the local people at the village Sabgram of Bogra district, Bangladesh.

Family	Scientific Name	Parts used	Medicinal use
Acanthaceae	<i>Justicia adhatoda</i>	Whole plant	Bleeding piles.
Acanthaceae	<i>Justicia gendarusa</i>	Leafs	Insecticidal, chest pain.
Amaranthaceae	<i>Alternanthera sessilis</i>	Whole Plant	Blood vomiting.
Amaranthaceae	<i>Amaranthus spinosus</i>	Whole Plant	Appetite, burning sensation, hallucination, leprosy, piles, bronchitis, leucorrhoea, constipation and flatulence.
Amaranthaceae	<i>Amaranthus viridis</i>	Whole Plant	Burning sensation, hallucination, leprosy, bronchitis, piles, leucorrhoea and constipation.
Amaranthaceae	<i>Celosia cristata</i>	Whole Plant/Flower	Dysentery, diarrhoea and excessive menstrual discharges.
Annonaceae	<i>Annona squamosa</i>	Root, Bark	Diarrhoea.
Annonaceae	<i>Polyalthia longifolia</i>	Bark, Leaves	Fever.
Anacardiaceae	<i>Lannea coromandelica</i>	Bark	Leprous and obstinate ulcers.
Anacardiaceae	<i>Mangifera indica</i>	Unripe fruit	Dysentery and urinary discharges, ophthalmia and eruption.
Anacardiaceae	<i>Spondius pinnata</i>	Bark	Dysentery, diarrhoea and vomiting.
Apiaceae	<i>Centella asiatica</i>	Whole Plant	Improves appetite, dysentery, leucoderma, urinary discharges, bronchitis, inflammations, fevers, insanity and syphilitic skin diseases.
Apiaceae	<i>Coriandrum sativum</i>	Fruit	Improves appetite.
Apocynaceae	<i>Alstonia scholaris</i>	Sap, gum and roots	Cancer.
Apocynaceae	<i>Catharanthus roseus</i>	Whole Plant, Leaves	Diabetes, wasp-sting, menorrhagia.
Apocynaceae	<i>Nerium indicum</i>	Root and root bark	Cancers and ulcers on the penis, chronic pain in the abdomen and pain in the joints.
Apocynaceae	<i>Tabernaemontana divaricata</i>	Roots	Tonic to the brains, liver and spleen.
Apocynaceae	<i>Carissa carandas</i>	Fruit	The fruit has been used remedy for diabetes.
Araceae	<i>Typhonium trilobatum</i>	Petiole	Poisonous insect bite.
Asparagaceae	<i>Asparagus racemosus</i>	Roots	Diseases of the kidney and the liver, scalding urine and gleans, promotes lactation.
Asteraceae	<i>Eclipta alba</i>	Whole Plant	Inflammations, hernias, eye diseases, bronchitis and asthma.
Asteraceae	<i>Helianthus annuus</i>	Leaves	Lumber pain, malaria.
Asteraceae	<i>Tagetes patula</i>	Whole Plant, Leaves	Rheumatism, cold and bronchitis, Kidney troubles, muscular pains.
Asteraceae	<i>Xanthium indicum</i>	Whole Plant	Urinary and renal complaints in gleans, leucorrhoea and menorrhagia.
Asclepiadaceae	<i>Calotropis procera</i>	Root bark	Dyspepsia, flatulence, constipation, loss of appetite, indigestion and mucus in stool.
Boraginaceae	<i>Heliotropium indicum</i>	Whole Plant	Ulcers, sores, wounds, gum boils, skin affections, stings of insects and rheumatism.
Chenopodiaceae	<i>Chenopodium</i>	Leaves	Eczema.

Family	Scientific Name	Parts used	Medicinal use
	<i>ambrosioides</i>		
Combretaceae	<i>Terminalia arjuna</i>	Stem	Heart disease.
Convolvulaceae	<i>Ipomoea alba</i>	Leaves	Filariasis, constipation, boils and wounds.
Convolvulaceae	<i>Ipomoea aquatica</i>	Whole Plant	Leucoderma, leprosy, fever, jaundice, biliousness, bronchitis and liver complaints.
Convolvulaceae	<i>Ipomoea batatas</i>	Whole Plant, Root	Low fever and skin disease, strangury and diarrhoea.
Caesalpiniaceae	<i>Tamarindus indica</i>	Pulp of the ripe fruit	Fever, dyspepsia, gastritis, dysentery and diarrhoea.
Crassulaceae	<i>Bryophyllum pinnatum</i>	Leaves	Blood dysentery.
Cucurbitaceae	<i>Benincasa hispida</i>	Fruits	Haemoptysis and other haemorrhages from internal organs, particularly beneficial in phthisis.
Cucurbitaceae	<i>Cucumis melo</i>	Pulp of the fruit	Eczema, biliousness, insanity, ascites and allays fatigue.
Cucurbitaceae	<i>Cucumis sativus</i>	Fruits	Relieve inflammation, sunburn and eyestrain.
Cucurbitaceae	<i>Cucurbita maxima</i>	Pulp of the fruit	Burns, inflammations and boils, migraine and neuralgia.
Cucurbitaceae	<i>Lagenaria sicararia</i>	Whole Plant, Leaves, Fruit	Powerful laxative, muscular pain and dry cough.
Cucurbitaceae	<i>Luffa acutangula</i>	Leaves	Splenitis, haemorrhoides, ringworms and leprosy.
Cucurbitaceae	<i>Luffa cylindrica</i>	Fruits	Biliousness, spleen diseases, leprosy, piles, fever and bronchitis.
Cucurbitaceae	<i>Mukia maderaspatana</i>	Fruits	Asthma, earache, inflammations, epilepsy and rheumatism, weakness of limbs, ophthalmia and leprosy.
Cucurbitaceae	<i>Trichosanthes dioica</i>	Leaves	Dysentery, diarrhoea, bronchitis and to arrest bleeding from bruises, and for the restoration of hairs.
Cucurbitaceae	<i>Trichosanthes arguina</i>	Leaves, Stem	Bilious disorders and skin diseases, fever.
Cuscutaceae	<i>Cuscuta reflexa</i>	Whole plant	Prevent hair fall.
Elaeocarpaceae	<i>Elaeocarpus robustus</i>	Fruits, Leaves, bark	Dysentery and diarrhoea, mouth-wash for inflamed gums.
Euphorbiaceae	<i>Croton bonplandianum</i>	Leaves, Seed	Cough, eczema and ringworm
Euphorbiaceae	<i>Euphorbia hirta</i>	Whole Plant	Abscesses, inflamed glands, ulcers.
Euphorbiaceae	<i>Jatropha gossypifolia</i>	Leaves	Diabetes.
Fabaceae	<i>Cajanus cajan</i>	Leaves	Jaundice and pneumonia.
Fabaceae	<i>Senna sophera</i>	Leaves	Asthma, bronchitis and hiccup.
Fabaceae	<i>Clitoria tarnetea</i>	Root	Tonic to the brain, good for ulcers of cornea, tuberculosis glands, elephantiasis and headache, cures leucoderma, burning sensation, pains, biliousness, inflammations and ulcers.
Fabaceae	<i>Dalbergia sissoo</i>	Bark, Leaves	Haemorrhages, epistaxis, menorrhagia and bleeding piles. Decoction of the leaves is useful in acute stage of gonorrhoea.
Fabaceae	<i>Erythrina variegata</i>	Leaves	Pain of the joints and inflammations; earache, toothache.
Fabaceae	<i>Lablab purpureus</i>	Seed	Inflammations.
Fabaceae	<i>Vigna sinensis</i>	Seed	Jaundice, strengthen the stomach and to destroy worms.
Lamiaceae	<i>Leonurus sibiricus</i>	Whole Plant	Puerperal and menstrual diseases, useful towards uterus contraction.
Lamiaceae	<i>Leucas aspera</i>	Leaves	Chronic rheumatism, psoriasis and other chronic skin eruption.
Lamiaceae	<i>Ocimum sanctum</i>	Leaves	Coughs, colds, catarrh and bronchitis, gastric disorder, earache, ringworm, leprosy and itches.
Lauraceae	<i>Cinnamomum tamala</i>	Leaves	Prevention of coughing.
Lauraceae	<i>Cinnamomum verum</i>	Bark	Parched mouth, bronchitis, hiccup, piles, diarrhoea and heart trouble.
Lauraceae	<i>Litsea monopetala</i>	Bark	Diarrhoea and dysentery.
Liliaceae	<i>Allium cepa</i>	Bulb	Cough, catarrh, asthma, rheumatism, colic and insect bites.
Liliaceae	<i>Allium sativum</i>	Bulb	Fever, coughs, bronchitis, rheumatism, inflammation, leucoderma, piles, indigestion, heart diseases and wounds, gas formation, painful menstruation and pain in abdomen and ears.
Malvaceae	<i>Abelmoschus esculentus</i>	Fruit	Chronic dysentery, gonorrhoea, urinary discharges and diarrhoea.
Malvaceae	<i>Hibiscus rosa-sinensis</i>	Flower bud	Burning of the body, urinary discharges, seminal weakness and piles.
Malvaceae	<i>Corchorus capsularis</i>	Leaves	Dysentery.
Meliaceae	<i>Azadirachta indica</i>	Bark	Fever, thirst, cough and bad taste in the mouth.
Meliaceae	<i>Swietenia mahagoni</i>	Seed	Diabetes.
Menispermaceae	<i>Stephania japonica</i>	Leaves, root	Fever, diarrhoea, urinary diseases and dyspepsia.
Mimosaceae	<i>Mimosa pudica</i>	Whole plant	Snake bites.
Molluginaceae	<i>Glinus oppositifolius</i>	Whole plant	Earache, skin diseases.
Moraceae	<i>Artocarpus heterophyllus</i>	Leaves	Skin diseases.
Moraceae	<i>Artocarpus lacucha</i>	Seed	Constipation.
Moraceae	<i>Ficus benghalensis</i>	Whole plant	Toothache, dysentery, diarrhoea, piles and diabetes.
Moraceae	<i>Ficus racemosa</i>	Fruit	Menorrhagia, haemoptysis, bronchitis, dry cough, diseases of kidney and spleen.
Moraceae	<i>Ficus religiosa</i>	Fruit	Asthma.
Moraceae	<i>Ficus hispida</i>	Whole plant, Fruit	Ulcers, biliousness, psoriasis, anaemia, piles, jaundice, haemorrhage of the nose and mouth, diabetes.
Moraceae	<i>Streblus asper</i>	Leaves	Urinary inflammation.

Family	Scientific Name	Parts used	Medicinal use
Musaceae	<i>Musa sapientum</i>	Stem	Stop bleeding, source of iron.
Myrtaceae	<i>Psidium guajava</i>	Root bark, Root	Diarrhoea, dysentery.
Myrtaceae	<i>Syzygium cumini</i>	Bark	Sore throat, bronchitis, asthma and dysentery.
Myrtaceae	<i>Syzygium jambos</i>	Bark, Leaves	Asthma, dysentery and sore-eyes.
Nymphaeaceae	<i>Nymphaea nouchali</i>	Rhizome	Piles, dysentery and dyspepsia.
Oleaceae	<i>Nyctanthes arbor-tristis</i>	Leaves	Fever and rheumatism.
Oleaceae	<i>Jasminum grandiflorum</i>	Root	In cases of ringworm and herpes.
Oxalidaceae	<i>Averrhoa carambola</i>	Fruit	Influenza fever.
Oxalidaceae	<i>Oxalis corniculata</i>	Whole plant	Piles, anaemia and tympanites.
Papaveraceae	<i>Argemone mexicana</i>	Latex	Skin cracks, dropsy, jaundice warts, tumours, cancer, and cutaneous. affections.
Pedaliaceae	<i>Sesamum indicum</i>	Seed	Piles.
Piperaceae	<i>Piper betel</i>	Leaves	Indigestion, colic, diarrhoea, pulmonary catarrh, laryngitis, headache and cough.
Polygonaceae	<i>Polygonum hydropiper</i>	Flower	Gout.
Portulacaceae	<i>Portulaca oleracea</i>	Whole plant	Cardio-vascular diseases, dysuria, hematuria, gonorrhoea, dysentery, sore nipples and ulcers of the mouth.
Punicaceae	<i>Punica granatum</i>	Stem	Abdominal pain.
Rubiaceae	<i>Anthocephalus chinensis</i>	Leaves	Aphthae and stomatitis.
Rubiaceae	<i>Gardenia jasminoides</i>	Whole plant	Antiseptic.
Rubiaceae	<i>Ixora coccinea</i>	Root, Flower	Hiccup, fever, gonorrhoea, diarrhoea, dysentery, leucorrhoea, dysmenorrheal, haemoptysis and catarrhal bronchitis.
Rubiaceae	<i>Morinda citrifolia</i>	Fruit	Dysentery.
Rutaceae	<i>Aegle marmelos</i>	Fruit	Diarrhoea, dysentery and ripe fruit for constipation.
Rutaceae	<i>Citrus aurantifolia</i>	Fruit	Skin irritation and nausea; juice is appetizer, stomachic, antiscorbutic, refrigerant, antiseptic and anthelmintic; used in biliousness, sore throat and eye complaints, relieves vomiting.
Rutaceae	<i>Citrus grandis</i>	Fruit	Influenza, cough, catarrh and asthma.
Rutaceae	<i>Limonia acidissima</i>	Fruit	Tonic to the liver and lungs; cures cough, hiccup and dysentery; good for asthma, consumption, tumours, ophthalmia and leucorrhoea.
Sapindaceae	<i>Litchi chinensis</i>	Fruit, Seed	Tonic to the heart, brain and liver, various neuralgic disorders and in orchitis.
Sapotaceae	<i>Mimusops elengi</i>	Stem bark	Antidote to bleeding gums and swelling of the mouth and tongue.
Solanaceae	<i>Capsicum frutescens</i>	Leaves	Headache, night blindness, pain, adenitis, sores and bronchitis.
Solanaceae	<i>Datura metel</i>	Seed, Leaves, Root	Insanity, fever with catarrh, diarrhoea, skin diseases and cerebral complications.
Solanaceae	<i>Lycopersicon esculentum</i>	Fruit	Canker of the mouth.
Solanaceae	<i>Physalis minima</i>	Leaves, Fruit	Earache, gonorrhoea and spleen disorder.
Solanaceae	<i>Solanum nigrum</i>	Fruit	Fevers.
Solanaceae	<i>Solanum melongena</i>	Fruit	Appetite and lessens inflammation
Solanaceae	<i>Solanum torvum</i>	Whole plant	Cough.
Sterculiaceae	<i>Abroma augusta</i>	Root bark, Leaves stalk	Irregular menses and pain, dysentery, weakness.
Trapaceae	<i>Trapa bispinosa</i>	Fruit	Diarrhoea and bilious affections; nervous and general debility, seminal weakness and leucorrhoea.
Verbenaceae	<i>Clerodendrum inerme</i>	Leaves, Root	Scrofulous and venereal diseases.
Verbenaceae	<i>Clerodendrum viscosum</i>	Leaves, Root	Asthma, tumours and certain skin diseases.
Verbenaceae	<i>Gmelina arborea</i>	Young Leaves, Flower	Gonorrhoea and cough, leprosy and blood diseases.
Verbenaceae	<i>Vitex negundo</i>	Leaves	Headache.
Verbenaceae	<i>Tectona grandis</i>	Wood	Piles, leucoderma and dysentery.
Zingiberaceae	<i>Curcuma longa</i>	Rhizome	Scabies, itches, boils, abscess, eczema, leucoderma, eye diseases, pains, bruises and sprains; internally for cough, cold, fever.
Zingiberaceae	<i>Zingiber officinale</i>	Rhizome	Constipation, dysentery, vomiting, headache, earache, sprain joints, in sore throats and voice loss.

4. Conclusion

Angiosperm diversity at the village Sabgram of Bogra district, Bangladesh conducted during March 2013 to July 2014. A total of 196 species belonging to 160 genera under 69 families were recorded. Amaranthaceae, Asteraceae, Apocynaceae, Caesalpiniaceae, Convolvulaceae,

Cucurbitaceae, Euphorbiaceae, Fabaceae, Moraceae, Malvaceae, Mimosaceae, Myrtaceae, Poaceae, Rutaceae and Solanaceae are the dominant families with high species diversity. A total of 119 medicinal plant species belonging to 109 genera and 50 families were collected and recorded for their use in 142 ailments. Most of the local people in the study area are poor and illiterate. In one hand, these people are out of the reach of modern medicines and on other hand, the market

price of most available medicines are very expensive. As a result, these medicinal plants are used by them to cure following the diseases, especially for asthma, cough, constipation, dysentery, diarrhea, diabetes, earache, fever, headache, jaundice, menstrual disease, piles, skin diseases, vomiting, worm, wound and others. The study also suggested that the present information on medicinal use of plants by tribal people may be used for botanical and pharmacological research in future for the discovery of new sources of drugs.

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