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Ethnomedicinal survey of medicinal plants used by local communities in Sadar Upazila, Madaripur District, Bangladesh

Sujit Karati¹  and A.H.M. Mahbubur Rahman^{2*} 

¹Plant Taxonomy Laboratory, Department of Botany, Faculty of Biological Sciences, University of Rajshahi, Rajshahi-6205, Bangladesh. E-mail: ilesanmiob@fuotuoke.edu.ng

²Plant Taxonomy Laboratory, Department of Botany, Faculty of Biological Sciences, University of Rajshahi, Rajshahi-6205, Bangladesh. E-mail: drmahmanahmm@ru.ac.bd

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Abstract

This study presents findings derived from research on medicinally significant plants identified at Sadar Upazila of Madaripur District, Bangladesh. The data presented in this work were collected through field surveys carried out in the study area. Frequent field trips were carried out during November 2024 to April 2026 to recorded data by interviewing local people of various age groups, mostly ranging from 25 to 80 years, including traditional healers (herbalists). A total of 52 medicinal plant species belonging to 32 families and 49 genera were documented, which are used to treat a wide range of ailments such as digestive disorders, fever, asthma, respiratory illnesses, skin diseases, hair disease, headache, heart disease, toothache, ulcer, vomiting, itches, wounds, diabetes, and rheumatism. Local people's deep reliance on these plants reflects rich indigenous knowledge shaped by socio-cultural traditions, economic conditions, and limited access to modern healthcare. However, this valuable knowledge is at risk due to rapid environmental changes, habitat loss, and reduced transmission of traditional practices to younger generations. The study emphasizes the urgent need for documentation, sustainable management, and conservation of medicinal plant resources. The findings provide a baseline for future phytochemical and pharmacological research that may lead to the discovery of novel therapeutic compounds.

Key words: Medicinal plants, Drug discovery, Madaripur district, Bangladesh

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1. Introduction

A plant is said to be a “medicinal plant” if it has the potential to be employed as a pharmaceutical, a healing agent, is a primary component of a pharmaceutical combination. A group of plants known as medicinal plants are those that possess unique properties or traits that turn them into medications or other therapeutic compounds with medical applications. For thousands of years, the majority of people on the planet have used

* Corresponding author: A.H.M. Mahbubur Rahman, Plant Taxonomy Laboratory, Department of Botany, Faculty of Biological Sciences, University of Rajshahi, Rajshahi-6205, Bangladesh. E-mail: drmahmanahmm@ru.ac.bd

traditional medicine (Seifu *et al.*, 2004). Based on information gathered from the World Health Organization (WHO), 80% of people in underdeveloped nations receive their primary medical care from traditionally used medicinal herbs (WHO, 2007).

It is unknown who was the first individual to use a plant for medicine. Many cultures developed by trial and error, gathering information passed down through generations. Men are those who have a strong interest in the therapeutic characteristics of plants and have mastered the art of using their newly acquired knowledge to get a foothold in society. Plants were given to gods and higher forces because of their medicinal virtues. As a result, priests became engaged, and the medicine man began to be related with particular religious doctrines. A wide range of definitions for medicinal plants have been presented.

The word “medicinal plant” refers to a group of plants used in herbal therapy (“herbology or herbal medicine”). It is the practice of employing plants for medical purposes, as well as the research into such practices. A wide range of definitions for medicinal plants have been proposed. “A medicinal plant is those plant which contains chemicals that could be utilized for therapy, and were blue prints for cytotoxic drugs” as defined by the World Health Organization (WHO).

In the past, plants have satisfied every need that humans have had. It meets all of man’s wants, including those for flavor, smell, food, clothes, and shelter. The basis of a traditional medical system based on plants led to the invention of several significant medicines that are still used today. The benefits of herbal therapy, which provides a greater variety of therapies, have been recognized by numerous prehistoric societies. Since the beginning of time, people have utilized plants to treat various ailments.

There is a wealth of information regarding the usage of some plant parts, such leaves, stems, and roots, for therapeutic purposes, even though man’s dependence on plants has not decreased. Decoctions prepared from these herbs are used to treat urinary issues, blood sugar, asthma, stroke, stomach pain, blood pressure, diarrhoea, and sores (Balick, 1994).

In impoverished countries, almost 80% of the population still receives their medical care mostly from traditional medicine. Medicinal herbs have been used for centuries to cure illness all across the world, and they are the foundation for many modern drugs. However, the understanding of medicinal plants is rapidly declining due to the impact of Western civilization. Which is leading to a decline in the number of generations that continue to use plants in traditional medicine. This has generated curiosity throughout the world. Seventy percent of people in numerous countries manage a variety of diseases with traditional medicine, according to the WHO (WHO, 1991).

Similar research work was carried out in Bangladesh by Alam (1992), Alam *et al.* (1996), Rahman *et al.* (2008a and 2008b), Rahman *et al.* (2010), Rahman *et al.* (2012), Rahman (2013a, 2013b, 2013c and 2013d), Rahman and Rahman (2014), Rahman (2014), Rahman *et al.* (2014), Rahman *et al.* (2013a and 2013b) and Uddin *et al.* (2014). The main objective of this study is to identify and assess the indigenous knowledge of the medicinal plants present in sadar upazila of Madaripur district, Bangladesh.

2. Materials and methods

2.1. Study area

Madaripur Sadar is located at 23.1667°N 90.2083°E. It has 74,451 households and total area 283.14 km². It is bounded by Shibchar and Zanjira Upazilas on the north, Kalkini and Kotalipara Upazilas on the south, Shariatpur Sadar Upazila on the east, Rajoir Upazila on the west. Madaripur, Bangladesh, has a tropical monsoon climate with hot, humid summers (March-June), heavy monsoon rains (June-September), and a cooler, drier winter (November-February). Madaripur, Bangladesh, has a tropical climate with temperatures varying significantly, but the average annual range is generally from around 14 °C (57°F) to 34 °C (94°F), with hot, humid summers (May being hottest, around 25-33 °C) and mild, drier winters (December/January cooler, 12-25 °C) (BPC, 2001).

2.2. Methodology

The present work is the outcome of an extensive survey in several sites of Sadar Upazila of Madaripur district, Bangladesh undertaken from November 2024 to April 2026 to collect information on the medicinal uses of

different plant species. A total of 52 species belonging to 49 genera under 32 families were recorded. Medicinal information was obtained through semi-structured interviews with knowledgeable traditional healers. A total of 87 informants having an age range of 25-80 years were interviewed using the semi-structured interviewed method (Alexiades, 1996). Plant parts with either flowers or fruits collected using traditional herbarium techniques to make voucher specimens for documentation and voucher specimens have been preserved at Herbarium of Rajshahi University.

2.3. Identification

Collected specimens have been critically examined, studied and identified. Identifications have been confirmed by consulting standard literature (Hooker, 1977; Prain, 1963) and Ahmed *et al.* (2008-2009). Nomenclature has been updated following recent literatures (Ahmed *et al.*, 2008-2009; Huq, 1986; Pasha and Uddin, 2013).

3. Results and discussion

This study on the medicinal plants used by the local people at Sadar Upazila of Madaripur District, Bangladesh, was carried out during November 2024 to April 2026. A total of 52 medicinal plant species belonging to 32 families and 49 genera were found. From 32 different families, there are 26 herbs, 10 shrubs, 9 trees, and 7 climbers (Table 1). Within each family, there are variations in the abundance of angiosperm species. From 52 species, herbs were 50%, shrubs 19.23%, climber 13.46% and trees 17.30% (Table 2 and Figure 1). In Table 3; Figure 2 shows recorded plant parts used as medicine. In Table 4; Figure 3 shows recorded dominant families in the study area. In Table 5 and Figure 4 shows recorded abundance of medicinal plants in the research area.

This study presents findings derived from research on medicinally significant plants identified at Sadar Upazila of Madaripur District, Bangladesh. The data presented in this work were collected through field surveys carried out in the study area. Frequent field trips were carried out during November 2024 to April 2026 to recorded data by interviewing local people of various age groups, mostly ranging from 25 to 80 years, including traditional healers (herbalists) (Table 1). The most frequently used species for the treatment of different diseases are:

Ocimum sanctum, *Zingiber officinale*, *Rauvolfia serpentina*, *Coccinia grandis*, *Adhatoda vasica*, *Andrographis paniculata*, *Cynodon dactylon*, *Azadirachta indica*, *Tridax procumbens*, *Ficus racemosa*, *Hibiscus rosa-sinensis*, *Heliotropium indicum*, *Lantana camara*, *Leucas aspera*, *Enhydra fluctuans*, *Lawsonia inermis*, *Mikania micrantha*, *Mimosa pudica*, *Momordica charantia*, *Moringa oliefera*, *Musa sapientum*, *Oxalis corniculata*, *Phyllanthus emblica*, *Piper betel*, *Polygonum hydropiper*, *Psidium guajava*, *Swertia chirata*, *Syzygium cumini*, *Tagetes erecta*, *Tamarindus indica*, *Terminalia arjuna*, *Terminalia chebula*, *Tinospora cordifolia*, *Vitex negundo*, *Wedelia chinensis*. This finding of common medicinal plant families in the study is in agreement with Anisuzzaman *et al.* (2007), Ghani (2003), Khan and Huq (1975), Khan (1998), Choudhury and Rahmatullah (2012) and Faruque and Uddin (2014). The leaves of *Achyranthes aspera* L., *Ageratum conyzoides* L., *Aerva sanguinolenta* L., *Amaranthus lividus* L., *Andrographis*

Table 1: Investigated medicinal plants used by the local people at Sadar Upazila of Madaripur District, Bangladesh

S. No.	Scientific Name	Local Name	Family Name	Used Parts	Medicinal Uses
1.	<i>Coccinia grandis</i> (L.) Voigt.	Telakucha	Cucurbitaceae	Leaf juice	a) Toothache: Decoction of the herb is used as a mouth wash for toothache. b) Dysentery: Leaves juice is used for dysentery. c) Burning wounds: Leave paste is given to burning wounds. d) Gonorrhea: The root extracts mixed with 1 cup cold water and 2 of cup sugar is taken to cure gonorrhea.
2.	<i>Tamarindus indica</i> L.	Tetul	Fabaceae	Fruit	a) Used to control high blood pressure. b) Pulp of the ripe fruit is a household remedy for fever, gastritis, dysentery and diarrhea taken until cure.

Table 1 (Cont.)

3.	<i>Adhatoda vasica</i> Nees.	Bashok	Acanthaceae	Leaf juice	a) Juice obtained from macerated leaves of <i>Adhatoda vasica</i> are taken to cure fever. b) Most commonly used for the treatment of cough. c) The extract or juice of plant is used in bleeding piles.
4.	<i>Andrographis paniculata</i> (Burm.f.) Nees.	Kalomegh	Acanthaceae	Leaf	a) Plant extract mixed with water orally treated in morning with empty stomach for three weeks. b) Leaves are boiled in water and the water taken for lung infections. c) Leaf paste is applied externally or infected area until cured leprosy.
5.	<i>Cynodon dactylon</i> (L.) Pers.	Durba Ghash.	Poaceae	Leaf	a) Macerated fresh leaves are used in fresh cuts and wounds to stop bleeding.
6.	<i>Alternanthera philoxeroides</i> (Mart.) Griseb.	Helencha	Amaranthaceae	Whole plant	a) Fever: Plant juice is used for these diseases in 3-4 days. b) Malaria: Plant juice is used for these diseases in 3-4 days.
7.	<i>Terminalia chebula</i> Retz.	Horitoki	Combretaceae	Fruit	a) Powder of the fruits mixed with 1 table spoon sugar is taken orally for indigestion. b) 2 tea spoonful fruits powder mixed with ghee taken to cure gout rheumatism.
8.	<i>Phyllanthus emblica</i> L.	Amloki	Euphorbiaceae	Fruit	a) Stomach problem: Fruit powder, bark juice is taken orally 3 times daily till cure against for stomach problem. b) Skin diseases: Fruits are used for skin diseases. c) Toothache problem: Fruits are also used for mouth- wash and toothache problem.
9.	<i>Zizyphus mauritiana</i> Lam.	Boroi	Rhamnaceae	Fruit	a) Young-fruits are used for cough and improve digestion. b) Young-stem and leaves are also used in mouth cleanser. c) Grinding, decoction of fruits taken orally to cure infantile diarrhea once daily for 2-3 days.
10.	<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Leaf	a) Leave paste mixed in warm water while bathing used for chicken pox. b) About 250 gm of leaves are boiled in 1 litre of water until reduced to 250 ml and is used as a gargle which cures swollen gums pain and pyorrhea. c) The leaf juice is taken orally to cure jaundice. d) Leave paste mixed in warm water while bathing used for skin diseases.
11.	<i>Calotropis procera</i> (Aiton) W.T. Aiton.	Akondo	Asclepiadaceae	Leaf	a) Leaves paste heated and applied paralysis's partb). b) Plant mucus or gums mixed with <i>Brassica napus</i> oil used for rheumatism in every night.
12.	<i>Datura metel</i> L.	Dhutura	Solanaceae	Leaf	a) Skin diseases: Leaf paste with neem leaf paste applied externally daily, twice for 1 week against skin diseases. b) Pains: Pound and applied on the affected area for pains.

Table 1 (Cont.)

13.	<i>Centella asiatica</i> (L.) Urban	Thankuni	Apiaceae	Whole plant	a) Used for the treatment of indigestion. b) Relieve stomach pain.
14.	<i>Curcuma longa</i> L.	Holud	Zingiberaceae	Rhizome	a) Increases blood volume Diabetes: Raw turmeric is made paste and taken to cure above diseases. b) Used as antiseptic.
15.	<i>Ocimum sanctum</i> L.	Tulshi	Lamiaceae	Leaf	Bronchitis, Cold, Cough: Slightly warmed leaf juice is used to treat cold, cough and bronchitis.
16.	<i>Colocasia esculenta</i> (L.) Schott.	Kochu	Araceae	Petiole	Athlete's foot and bleeding: The pressed juice of the petiole is applied externally in athlete's foot and to stop bleeding from cuts.
17.	<i>Ficus racemosa</i> L.	Jagg dumur	Moraceae	Gum	a) Dry cough: Fruits extracts or cooked vegetable are taken orally for dry cough. b) Acidity, Asthma and Diarrhea: Gum is used mixed with water for treatment of acidity, anti-asthmatic, and anti-diarrheal disease.
18.	<i>Momordica charantia</i> L.	Korolla	Cucurbitaceae	Whole plant	a) Root paste is used in head pain. b) The leaves juice is taken orally daily for diabetes. c) Cooked fruits used as stomachic.
19.	<i>Piper betle</i> L.	Pan	Piperaceae	Fruit juice	Fruit juice if taken thrice a day for consecutive three days, helps to reduce fever.
20.	<i>Citrus aurantifolia</i> (Christm.) Swingle	Lebu	Rutaceae	Fruit	Fruits juice is taken orally to cure skin irritation and nausea.
21.	<i>Amaranthus spinosus</i> L.	Katanotey	Amaranthaceae	Whole plant	a) For toothache plant extract used as a beneficial mouth wash. b) Leaves juice used in dysentery. c) Leaves paste can healing burning wounds.
22.	<i>Coriandrum sativum</i> L.	Dhone	Apiaceae	Seed, whole plant	a) Plant extract used orally for 3 weeks to cure asthma. b) Juice made from seeds, ginger, jeera, pepper and milk and taken twice a day to cure sneezing. c) Plant juice used for cold, cough and fever.
23.	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz.	Sarpogandha	Apocynaceae	Root	a) Root powder used as a sedative, febrifuge, and hypertensive remedy on a regular basis. b) It is a suitable treatment for dysentery.
24.	<i>Tagetes erecta</i> L.	Gendaphul	Asteraceae	Whole plant	a) Mashed leaves were applied to the incision sites to stop the bleeding. b) Split leaf paste is applied to the spot to reduce discomfort after a small amount of heating. c) For about a month, it is recommended to take 250 mg of leaf dust twice a day together with a small amount of goat milk to treat tuberculosis. d) Leaf juice is taken three times a day, combining the same amount of sugar with it.

Table 1 (Cont.)

25.	<i>Tridax procumbens</i> L.	Tridhara	Asteraceae	Leaf	a) Decoction of leaves is useful for treating dysentery and diarrhea. b) For bronchitis, pulverized leaf extract mixed with water consumption. c) Dusting bruises and scratches with leaf powder to stop the bleeding.
26.	<i>Bombax ceiba</i> L.	Shimul	Bombacaceae	Gum, Root	a) Gum paste is applied to the body to alleviate burning sensations. b) A tender root infusion made with hot water is administered to men who exhibit sexual weakness. c) Root bark is ground and taken orally to treat rheumatism.
27.	<i>Brassica napus</i> L.	Sorisha	Brassicaceae	Seed	a) Applying it to hair after it has been slightly heated to make it stronger and glossier. b) Applying it to the scalp promote restful sleep. c) Applying it to the skin to avoid skin cracks. d) Applying mustard plaster to treat gout and te applying a small amount of warm oil to treat cough and neuralgia.
28.	<i>Terminalia belerica</i> (Gaertn.) Roxb.	Bahera	Combretaceae	Green fruit	a) Young fruit extract dissolved in hot water used to treat coughs.
29.	<i>Costus speciosus</i> (J. Koenig) Sm.	Buno Ada	Costaceae	Rhizome, stem, tuber	a) Rhizome remedies for menstrual cramps abnormalities as well as irritation in the urine. The paste is ingested when blood is seen in the urine. b) Chutney prepared from the brunt tuber, sugar, and tamarind is used to treat dysentery and other stomach issues. c) Rhizome juice combined with sugar is used as a treatment for eye discomfort.
30.	<i>Kalanchoe pinnata</i> (Lam.) Pers.	Pathorkuchi	Crassulaceae	Leaf	a) Applying leaf paste can effectively halt bleeding. b) For bleeding dysentery, leaf juice is prescribed once every seven days. c) Crushed leaves combined with salt for gastrointestinal discomfort.
31.	<i>Cuscuta reflexa</i> Roxb.	Sarnolata	Cuscutaceae	Stem, leaf	Juice is good for liver disorders, flatulence, constipation, and antioxidants.
32.	<i>Acalypha indica</i> L.	Muktajhuri	Euphorbiaceae	Leaf	a) Children are advised to use leaf paste mixed with lime to treat ringworm. b) A paste prepared from the young parts is applied to the region bitten by a snake to treat it. c) a plant that helps relieve constipation in kids.
33.	<i>Cajanus cajan</i> (L.) Huth.	Arhar	Fabaceae	Leaf, seed	a) Mouth infections and piles are treated with leaves. b) Leaf juice alleviates jaundice and pneumonia. c) Seeds damage the intestines easily. To extract mother milk, utilize decoction of leaves and seeds.

Table 1 (Cont.)

34.	<i>Allium cepa</i> L.	Piaj	Liliaceae	Bulb	a) To treat common colds and coughs. Massage the entire body with warm bulb juice and <i>Brassica napus</i> oil. b) Apply warmed bulb juice and mustered oil on the temples to alleviate headache pain. c) The place where the snakebite occurred is covered in juice. d) You can treat hair loss with juice.
35.	<i>Allium sativum</i> L.	Rasun	Liliaceae	Bulb	a) Extracting the pulp or juice from the bulbs has been used to treat fever and coughs. b) Juice pulp or extract has been used to stop hair from going gray and to stop skin conditions including scabies and eczema. c) When coupled with hot rice, bulb is used to alleviate high blood pressure.
36.	<i>Aloe vera</i> (L.) Burm. f.	Ghritokumari	Liliaceae	Leaf	a) Boiling leaf decoction is used to treat paralysis. b) Leaf juice administered orally twice daily for three days in order to treat viral jaundice. c) Juice consumed with sugar to treat weakness in the body. d) Leaf paste applied topically. e) Leaf juice, which is used to make hair shiny and silky as well as a fall remedy.
37.	<i>Vitex negundo</i> L.	Nishinda	Lamiaceae	Leaf, root	A liquid, diluted vitex extract (40 drops) or 35-40 mg of the corresponding crushed. Dry extract should be taken once day in the morning with some fluids. In order to assess the effectiveness of vitex, it should be taken for a minimum of three menstrual cycles.
38.	<i>Mimosa pudica</i> L.	Lajjaboti	Mimosaceae	Root, leaf	a) Root solution is used to cure diarrhea. b) A month of twice-daily administration of root solution is used to cure piles. c) Drink raw milk soaked plant roots every morning for three days in order to treat snake bites. d) Oral administration of a leaf solution mixed with water for aching muscles.
39.	<i>Moringa oleifera</i> Lam.	Sajna	Moringaceae	Leaf, root, fruit, seed	a) People with elevated blood pressure who consume cooked entire leaves. b) An attempt at murder and abortion made from a paste made of root bark and water. c) For two days, a once-daily infusion of the roots is used to alleviate stomachaches.
40.	<i>Psidium guajava</i> L.	Peyara	Myrtaceae	Leaf, bark	a) For a week, a hot water extract of the stem and leaf bark is given every morning and evening to treat diarrhea. b) A mouthwash made from tender leaves. c) Applying a root mixture and water every day for five weeks to treat diarrhea.

Table 1 (Cont.)

41.	<i>Argemone mexicana</i> L.	Sheyalkata	Papaveraceae	Root, latex	a) Latex is utilized for skin fissures, and root paste is helpful for skin diseases. b) Latex is used to cure jaundice. c) Cancer and tumors are treated with latex. d) Use a 1-2 gram root infusion made with betel leaves twice a day for three days to treat malarial fever.
42.	<i>Saccharum officinarum</i> L.	Aakh	Poaceae	Stem	Juice is the effective medication for jaundice.
43.	<i>Nigella sativa</i> L.	Kalo Jeera	Ranunculaceae	Seed	a) One notable benefit of (a) seed is that it lowers blood pressure. b) Eating the seed every day reduced asthma symptoms. c) Consuming seeds on a regular basis lower blood sugar.
44.	<i>Aegle marmelos</i> (L.) Correa.	Bel	Rutaceae	Fruit, root	a) Young fruit pieces have been used as a remedy for stomachaches. b) Constipation can be treated with ripe fruit juice. c) To cure diarrhea, mix 0.5 grams of root extract with 3 teaspoons of milk and sugar. d) For heart problems, 4 grams of fresh root paste applied twice daily.
45.	<i>Abroma augusta</i> (L.) L.f.	Ulotkambol	Sterculiaceae	Petiole, seed, leaf	a) Petiole pulp can be used to alleviate weakness by soaking the affected area overnight. b) Water mixed with crushed seeds, taken twice day to relieve stomach ache. c) To avoid leucorrhoea for two days, petals pulp and leaf infusion are treated every day with crushed pepper powder.
46.	<i>Clerodendrum viscosum</i> Vent.	Bhat	Verbenaceae	Leaf, root	a) The leaves and roots of plants are used to treat some skin conditions, cancers, and asthma. b) Paste made from leaves applied to the scalp and sometimes left on for two weeks as a hair treatment. c) Juice from young leaves possesses anti-helminthic characteristics.
47.	<i>Zingiber officinale</i> Roscoe	Ada	Zingiberaceae	Rhizome	Until the condition improves, take two grams of powdered plant rhizome with steaming water twice a day for dyspepsia.
48.	<i>Nerium indicum</i> Mill	Korobi	Apocynaceae	Leaf, root, bark	a) A root bark solution is applied topically to treat penile ulcers. b) A root bark mixture administered topically to ease pain in the joints. c) The bites of poisonous insects can be relieved by soaking fresh leaves in water. d) Leaf extract in hot water is frequently used to behave swellings.

Table 1 (Cont.)

49.	<i>Areca catechu</i> L.	Supari	Arecaceae	Seed, root	a) A concentrated seed extract that has been crushed, boiled, and taken orally twice a day for three days. b) A jelly-like concoction made from crushed young seeds (4 gm), boiled, and filtered, and taken twice a day to prevent blood dysentery. c) Ashes made from root powder and dry nut powder in the same proportion is a useful toothache remedy. d) Dry fruit powder utilized on the sore area.
50.	<i>Enhydra fluctuans</i> Lour.	Helencha	Asteraceae	Whole plant	Prepared plant used to restore appetite and food test in patients with fever.
51.	<i>Mikania micrantha</i> Kunth	Asamlota	Asteraccar	Leaf	a) Leaf paste works incredibly well for cutting to stop bleeding right away. b) Leaf paste is applied to the skin once a week, usually at night. It aids in preventing skin darkening on the face.
52.	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Combretaceae	Bark	a) Bark powder may reduce the frequency of anginal attacks and improve exercise tolerance in patients with stable angina pectoris. b) The bark extract may help lower high blood pressure by promoting the relaxation of vascular smooth muscles and enhancing nitric oxide production.

Table 2: Recorded plant habit in the study area

S. No.	Habit	No. of Species	Total No. of Species	Percentage %
01	Herb	26	52	50%
02	Shrub	10	52	19.23%
03	Climber	7	52	13.46%
04	Tree	9	52	17.30%

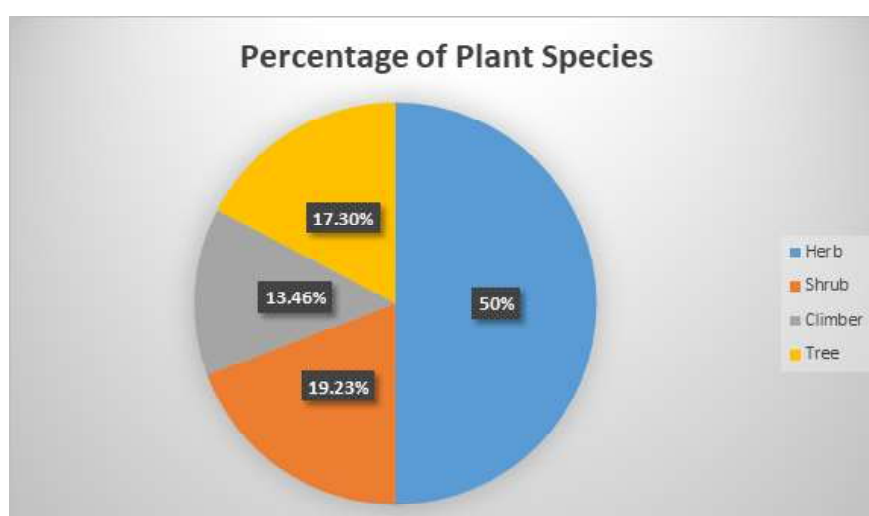
**Figure 1: Recorded plant habit in the study**

Table 3: Recorded used part of plant as medicine

S. No.	Used Plant Part	No. of Species	Percentage %
1	Leaf / Leaves	22	26.19%
2	Root / Roots	12	14.29%
3	Fruit / Fruits	11	13.10%
4	Seed / Seeds	9	10.71%
5	Whole plant	8	9.52%
6	Bark	5	5.95%
7	Rhizome	4	4.76%
8	Stem	4	4.76%
9	Petiole	3	3.57%
10	Bulb	2	2.38%
11	Gum	2	2.38%
12	Latex	1	1.19%
13	Tuber	1	1.19%

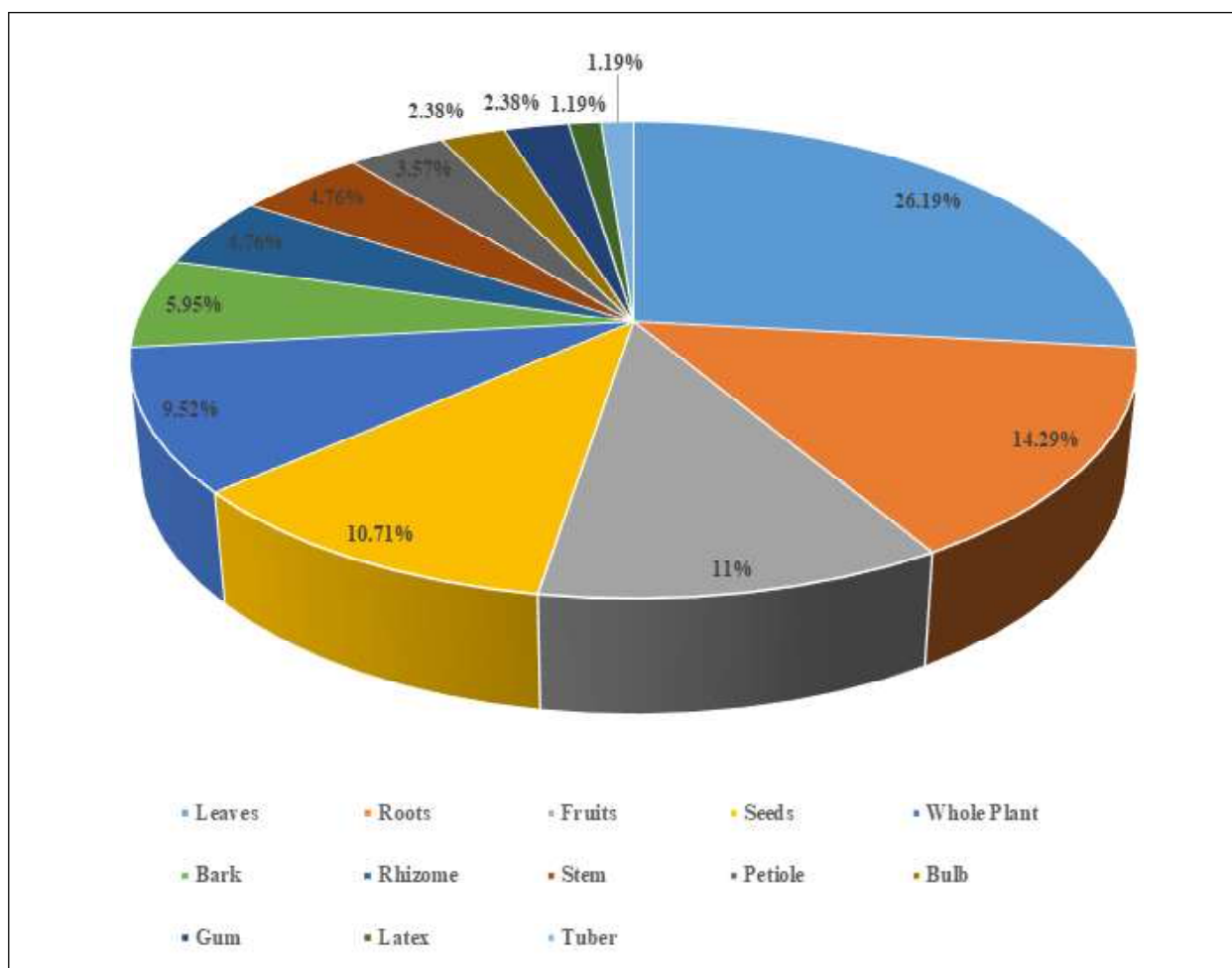
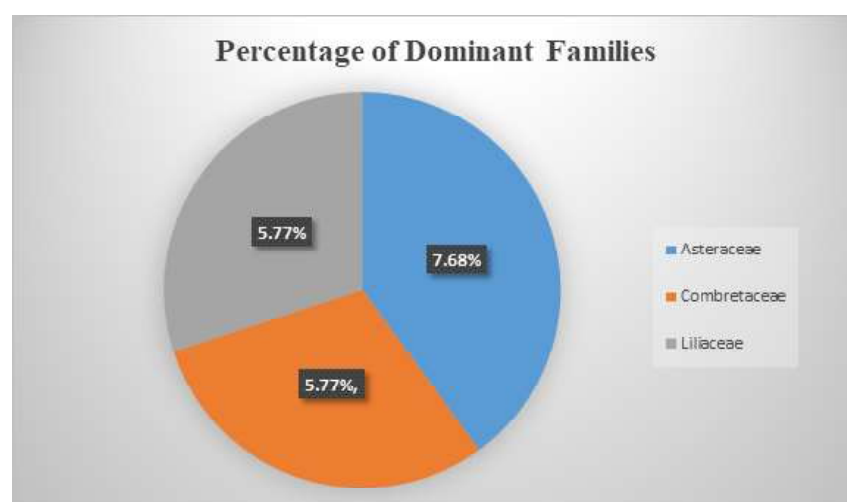
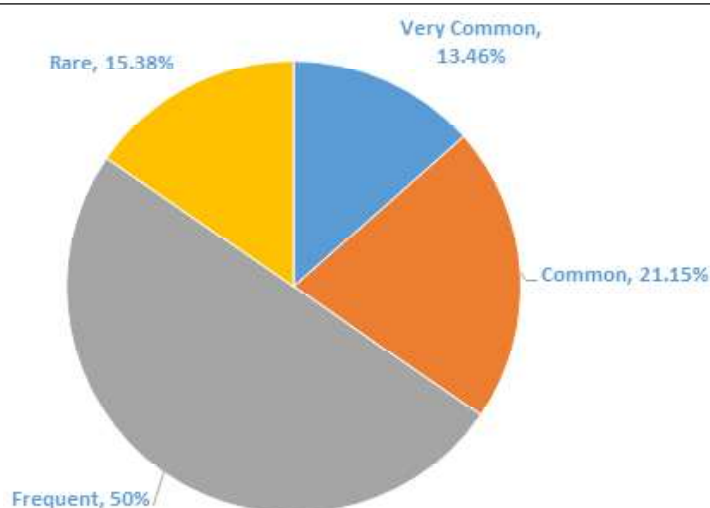
**Figure 2: Recorded used part of plant as medicine**

Table 4: Recorded dominant families in the study area

S. No.	Family	No. of Species	Percentage %
1	Asteraceae	4	7.69%
2	Combretaceae	3	5.77%
3	Liliaceae	3	5.77%

**Figure 3: Recorded Dominant Families in the Study Area****Table 5: Recorded abundance of the medicinal pants**

S. No.	Abundace	No. of Species	Percentage %
1	Very Common	7	13.46%
2	Common	11	21.15%
3	Frequent	26	50.00%
4	Rare	8	15.38%

**Figure 4: Recorded abundance of the medicinal plants**

paniculata (Burm.f.) Wall ex Nees, *Boerhaavia diffusa* L., *Croton bonlandianus* Baill., *Chenopodium ambrosioides* L., *Chromolaena odorata* (L.) King & Robin, *Exacum pedunculatum* L., *Grangea maderaspatana* (L.) Poir., *Hemigraphis hirta* (Vahl.) T. Anderson, *Leucas aspera* (Wild.) Link, *Oxalis corniculata* L., *Portulaca oleracea* L., *Rungia pectinata* (L.) Nees in DC., *Vernonia patula* (Aiton.) Merrill. *Wedelia trilobata* (L.) Hitchc. are used for the treatment of skin disease, cuts, wounds, bronchitis, asthma, jaundice, abscess, boils, bums, leprosy, lung infection, cough, eczema, cold, flu, stomachache, earache, mouth ulcer, chronic rheumatism, fever, influenza, diarrhea, insect-bite, inflammation, smallpox, herpes, ringworm, alopecia, hair disease and vomiting. Similar research were recorded like Rahman and Khanom (2013), Rahman *et al.* (2013), Uddin *et al.* (2014) and Yusuf *et al.* (2009).

4. Conclusion

This study documents the medicinal plants used by the local people at Sadar Upazila of Madaripur District, Bangladesh. The findings reveal that a wide variety of plant species are traditionally used to treat common ailments such as fever, cough, gastrointestinal disorders, skin diseases, diabetes, and inflammation, skin diseases, hair disease, headache, heart disease, toothache, ulcer, vomiting, itches, wounds, diabetes, and rheumatism. Leaves were found to be the most frequently used plant part, and simple preparation methods such as decoction, paste, and juice were commonly practiced.

The study also shows that local communities, particularly elderly people and traditional healers, continue to depend on medicinal plants as an accessible, affordable, and effective form of primary healthcare. However, the gradual loss of traditional knowledge among younger generations, combined with habitat degradation, overharvesting, and land-use changes, poses a serious threat to the sustainability of these valuable plant resources.

Overall, this research provides important baseline information for future ethnobotanical, pharmacological, and conservation studies. The findings emphasize the potential of local medicinal plants in supporting healthcare systems and underline the importance of sustainable utilization for long-term benefits.

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