

Inventory of Medicinal Plants at Mahadebpur Upazila of Naogaon District, Bangladesh

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Abstract The present paper documented 159 medicinal plants at Mahadebpur Upazila of Naogaon district, Bangladesh belonging to 135 genera and 69 families were used by the local health healers for the treatment of different diseases. These plants are mostly used for curing some common diseases such as diarrhea, dysentery, gastric ulcer, intestinal worms, abdomen pain, fever, malaria, cough, bronchitis, asthma, headache, toothache, wounds and sores, skin diseases, snake bite and some other diseases. The most important medicinal plant families were Acanthaceae, Amaranthaceae, Asteraceae, Apocynaceae, Araceae, Combretaceae, Cucurbitaceae, Euphorbiaceae, Fabaceae, Lamiaceae, Malvaceae, Piperaceae, Poaceae, Rubiaceae, Rutaceae, Solanaceae and Verbenaceae. This study further strengthened the relationship between indigenous knowledge medico-botanical practices and pharmacology.

Keywords: medicinal plants, indigenous uses, Naogaon district, Bangladesh

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1. Introduction

Medicinal plants have been under the constant vigilance of botanists and ethno-botanists to analyze its germplasm for pharmaceutical purposes as a remedy of different common diseases under different environmental regimes throughout the world. It is a never ending process and botanists have to continue their effort constantly to reveal actual ingredients and the usefulness of medicinal flora to mankind on global basis. They have a strong linkage with human health. Not only, the old ayurvedic and unani system of medicinal treatment depend on herbal drugs but the other systems including allopathic and homeopathic directly or indirectly depend upon the herbal drug plants for the preparation of certain synthetic drugs [6,8]. The World Health Organization, it is estimated that 80 percent of the population of developing countries relies on traditional plant based medicines for their health requirements [59].

Medicinal and aromatic plants constitute a major segment of the flora, which provides raw materials for use in the pharmaceuticals, cosmetics, and drug industries. There are many medicinally valued plant resources, which provide various kinds of drugs and medicines for various ailments in Bangladesh. Several medicinal plants and ethno-botanical studies in Bangladesh have been carried out. Alam [2] documented the ethno-botanical information and medicinal plant use by Marma. Several work also done by [4,17-66] and [7]. The aim of the present study was to first record of medicinal plants used by the local people living in Mahadebpur Upazila of Naogaon district, Bangladesh.

2. Materials and Methods

Study area: Mahadebpur is an upazila of Naogaon District in the Division of Rajshahi, Bangladesh. Mahadebpur is located at 24.918890°N 88.748455°E. It has 46642 units of house hold and total area 397.67km² and its bounded by Patnitala on the north, Manda and Naogaon Sadar upazilas on the south, Badalgachi and Naogaon Sadar upazilas on the east and Niamatpur and Porsha upazila on the west. Main rivers are Atrai, Chatra Beel and Bachnakhariae noted. The climate of Mahadebpur upazila is characterized by hot, humid summers and generally mild winters and rainfall. The summer season commerce 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. Relative humidity percentage ranged from 55.69% with annual average of 78.89% [5].

Methods of the study: Inventory of medicinal plants at Mahadebpur Upazila of Naogaon District, Bangladesh was carried out from December 2013 to June 2015. A total of 159 medicinal plant species belonging to 135 genera and 69 families were collected and identified. A total of 156 local people having an age range 18-75 years were interviewed using semi-structured interviewed method [3]. Professionally they were peasant, day labor, farmer, betel leaf cultivators, house wives, medicine men, small shop

keepers etc. Among them 76 were female and rest 80 were male. Regular field studies were made in the study area during the period. The information about the plants used for various diseases was gathered through interviews and discussion with the elderly people, medicine men and traditional medical practitioners were also consulted.

Identification: The plant specimens were identified by consulting different Floras and literatures, viz, [1,10,13,15], and by comparing with the herbarium specimens available at the Herbarium, Department of Botany, Rajshahi University. For updated nomenclature of the species [1,11] and [14]. Voucher specimens are deposited in the Herbarium, Department of Botany, Rajshahi University, Bangladesh.

3. Results and Discussion

The important medicinal plants at Mahadebpur upazila of Naogaon district were carried out. A total of 159 medicinal plant species belonging to 135 genera and 69 families were collected and recorded for their use in 152 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 1). Habit analysis shows that herbs, shrubs, climbers and trees are represented by 43.77%, 18.11%, 11.32% and 26.79% species, respectively (Figure 1). Different plant parts of different spp. are used as medicine for treating various diseases. Leaves of 26.27%, fruit of 18.56%, whole plant of 17.4%, root of 10.28%, bark of 9.03%, seed of 4.77%, stem of 3.4%, flower of 3.45%, rhizome of 2.11%, Petiole of 1.3% and others of 3.43% species were used as medicine (Table 1, Figure 2). For each species scientific name, local name, family, medicinal use and part(s) used are provided. The collected medicinal information of those plant species is in agreement with the result of other studies done in Bangladesh [4,7,9,12,64,65,66]. The study also suggested that the present information on medicinal use of plants by the local people may be used for botanical and pharmacological research in future for the discovery of new sources of drugs. All these plants need to be evaluated through phyto and pharmacochemical investigations to discover their potentiality and may help in developing effective drugs for human health care.

Table 1. List of medicinal plants and their use in different ailments by the local people at Mahadebpur Upazila of Naogaon District, Bangladesh

Family	Scientific name	Local name	Part(s) used	Medicinal use
Acanthaceae	<i>Andrographis paniculata</i>	Kalomegh	Whole plant	Bleeding piles.
Acanthaceae	<i>Justicia adhatoda</i>	Basak	Whole plant	General debility dysentery and certain forms of dyspepsia.
Acanthaceae	<i>Justicia gendarusa</i>	Jagathmadan	Leafs	Insecticidal, chest pain.
Aloeaceae	<i>Aloe vera</i>	Ghritakumari	Whole plant	Inflamed or irritated skin.
Amatanthaceae	<i>Achyranthes aspera</i>	Apang	Whole plant	Diarrhea, urinary disease and pregnancy.
Amaranthaceae	<i>Alternanthera lividus</i>	Noteyshak	Leaves	Scorpion sting and snake bite.
Amaranthaceae	<i>Alternanthera sessilis</i>	Sachisak	Whole Plant	Blood vomiting.
Amaranthaceae	<i>Amaranthus spinosus</i>	Kantanotey	Whole Plant	Appetite, burning sensation, hallucination, leprosy, piles, bronchitis, leucorrhoea, constipation and flatulence.
Amaranthaceae	<i>Amaranthus viridis</i>	Shaknotey	Whole Plant	Burning sensation, hallucination, leprosy, bronchitis, piles, leucorrhoea and constipation.
Amaranthaceae	<i>Celosia cristata</i>	Morogphul	Whole Plant, Flower	Dysentery, diarrhea and excessive menstrual discharges.
Annonaceae	<i>Annona squamosa</i>	Ata	Root, Bark	Drastic purgative, diarrhea.
Annonaceae	<i>Polyalthia longifolia</i>	Debdaru	Bark, Leaves	Fever, against wide range of pathogens.
Anacardiaceae	<i>Lannea coromandelica</i>	Jiga	Bark	Impetigenous eruptions, leprosy and obstinate ulcers.
Anacardiaceae	<i>Mangifera indica</i>	Am	Unripe fruit	Dysentery and urinary discharges; ophthalmia and eruption.
Anacardiaceae	<i>Spondius pinnata</i>	Amra	Bark	Dysentery, diarrhea and vomiting.
Apiaceae	<i>Centella asiatica</i>	Thankuni	Whole Plant	Improves appetite, voice and memory; dysentery, leucoderma, urinary discharges, bronchitis, inflammations, fevers, convulsive disorders, insanity and syphilitic skin disease.
Apiaceae	<i>Coriandrum sativum</i>	Dhoney	Fruit	Improves appetite.
Apocynaceae	<i>Alstonia scholaris</i>	Chatim	Latex, roots	Cancer.
Apocynaceae	<i>Catharanthus roseus</i>	Nayantara	Whole Plant, Leaves	Diabetes, wasp-sting, menorrhagia.
Apocynaceae	<i>Nerium indicum</i>	Korobi	Root, root bark	Cancers and ulcers on the penis, chronic pain in the abdomen and pain in the joints.
Apocynaceae	<i>Tabernaemontana divaricata</i>	Tagarphul	Roots	Tonic to the brains, liver and spleen.
Apocynaceae	<i>Carissa carandas</i>	Koromcha	Fruit	The fruit has been used remedy for diabetes.
Asclepiadaceae	<i>Calotropis gigantea</i>	Boroakanda	Leaves	Paralyzes parts.
Asclepiadaceae	<i>Calotropis procera</i>	Akanda	Root bark	Dyspepsia, flatulence, constipation, loss of appetite, indigestion and mucus in stool.

Araceae	<i>Typhonium trilobatum</i>	Ghetkochu	Petiole	Poisonous insect bite.
Asparagaceae	<i>Asparagus racemosus</i>	Satamuli	Roots	Diseases of the kidney and the liver, scalding urine and gleet; promotes lactation.
Asteraceae	<i>Tagetes erecta</i>	Genda	Leaves	Indigestion colic cough and dysentery.
Asteraceae	<i>Eclipta alba</i>	Kalokeshi	Whole Plant	Inflammations, hernias, eye diseases, bronchitis and asthma.
Asteraceae	<i>Helianthus annuus</i>	Surjamuki	Leaves	Lumber pain, malaria.
Asteraceae	<i>Tagetes patula</i>	Gadhaphul	Whole Plant, Leaves	Rheumatism, cold and bronchitis, Kidney troubles, muscular pains.
Asteraceae	<i>Xanthium indicum</i>	Ghagra	Whole Plant	Urinary and renal complaints in gleet, leucorrhoea and menorrhagia.
Averrhoaceae	<i>Averrhoa carambola</i>	Kamrangha	Fruit	Influenza fever.
Bignoniaceae	<i>Spathodea campanulata</i>	Spathodea	Bark	Wound in healing specially burn healing.
Bignoniaceae	<i>Tabebuia aurea</i>	Tobebia	Whole plant	Treat stomach ulcers.
Boraginaceae	<i>Heliotropium indicum</i>	Hatisur	Whole Plant	Ulcers, sores, wounds, gum boils, skin affections, stings of insects and rheumatism.
Bromeliaceae	<i>Ananas sativus</i>	Anaros	Fruits	Antifungal, anti-inflammatory, Obesity, constipation.
Caesalpiniaceae	<i>Senna alata</i>	Dadmordan	Bark	Cough, Asthma, Ringworm, and Skin disease.
Caesalpiniaceae	<i>Cassia fistula</i>	Badarlathi	Bark	Piles.
Caesalpiniaceae	<i>Senna sophera</i>	Kolkesundha	Seed	Diabetes.
Caesalpiniaceae	<i>Tamarindus indica</i>	Tetul	Pulp of the ripe fruit	Fever, dyspepsia, gastritis, dysentery and diarrhea; diseases supposed to cause by deranged bile, such as burning of the body and costiveness.
Cannaceae	<i>Canna indica</i>	Kolabati	Whole plant	Gonorrhoea, amenorrhoea, demulcent, diaphoretic.
Cannabinaceae	<i>Cannabis sativa</i>	Ganja	Leaves, Inflorescence	Soporific, abortifacient.
Caryophyllaceae	<i>Polycarpon prostratum</i>	Gimashak	Whole plant	Useful for diabetic patient.
Chenopodiaceae	<i>Chenopodium ambrosioides</i>	Bonbatua	Leaves	Eczema.
Crassulaceae	<i>Bryophyllum pinnatum</i>	Patharkuchi	Leaves	Blood dysentery.
Crassulaceae	<i>Kalanchoe lacinata</i>	Patharkuchi	Leaves	Chronic, ulcers and sores.
Combretaceae	<i>Terminalia chebula</i>	Haritaki	Dry nut peel	Nagging cough.
Combretaceae	<i>Terminalia arjuna</i>	Arjun	Stem	Heart disease.
Convolvulaceae	<i>Ipomoea fistulosa</i>	Dholkolmi	Root	Treat constipation.
Convolvulaceae	<i>Ipomoea alba</i>	Dudkalmi	Leaves	Filariasis, constipation, boils and wounds.
Convolvulaceae	<i>Ipomoea aquatica</i>	Kolmishak	Whole Plant	Leucoderma, leprosy, fever, jaundice, biliousness, bronchitis and liver complaints.
Convolvulaceae	<i>Ipomoea batatas</i>	Mistialu	Whole Plant, Root	Low fever and skin disease, strangury and diarrhea.
Cucurbitaceae	<i>Benincasa hispida</i>	Chalkumra	Fruits	Haemoptysis and other haemorrhages from internal organs, particularly beneficial in phthisis.
Cucurbitaceae	<i>Cucumis melo</i>	Futi	Pulp of the fruit	Eczema, biliousness, insanity, ascites and allays fatigue.
Cucurbitaceae	<i>Cucumis sativus</i>	Sasha	Fruits	Relieve inflammation, sunburn and eyestrain.
Cucurbitaceae	<i>Cucurbita maxima</i>	Mistikumra	Pulp of the fruit	Burns, inflammations and boils; migraine and neuralgia.
Cucurbitaceae	<i>Lagenaria sicararia</i>	Panilau	Whole Plant, Leaves, Fruit	Powerful laxative, muscular pain and dry cough.
Cucurbitaceae	<i>Luffa acutangula</i>	Jhinga	Leaves	Splenitis, haemorrhoids, ringworms and leprosy.
Cucurbitaceae	<i>Luffa cylindrica</i>	Dhundal	Fruits	Biliousness, spleen diseases, leprosy, piles, fever and bronchitis.
Cucurbitaceae	<i>Mukia maderaspatana</i>	Agmuki	Fruits	Asthma, earache, inflammations, epilepsy and rheumatism; cures hemiparesis, weakness of limbs, ophthalmia and leprosy.
Cucurbitaceae	<i>Trichosanthes dioica</i>	Potol	Leaves	Dysentery, diarrhea, bronchitis and to arrest bleeding from bruises, and for the restoration of hairs.
Cucurbitaceae	<i>Trichosanthes arguina</i>	Chinchinga	Leaves, Stem	Bilious disorders and skin diseases, fever.
Cuscutaceae	<i>Cuscuta reflexa</i>	Sarnalata	Stem	Prevent hair fall.
Cyperaceae	<i>Kyllinga monocephala</i>	Nirbisghas	Root	Fever.
Elatinaceae	<i>Bergia ammannioides</i>	Lalkesuria	Whole plant	Cleaning teeth and broken bones.
Ebenaceae	<i>Diospyros montana</i>	Tamal	Whole plant	Fever.
Elaeocarpaceae	<i>Elaeocarpus robustus</i>	Jolpai	Fruits, Leaves, bark	Dysentery and diarrhea, mouth-wash for inflamed gums.
Euphorbiaceae	<i>Croton bonplandianum</i>	Bonjhal	Leaves, Seed	Cough, eczema and ringworm.

Euphorbiaceae	<i>Euphorbia hirta</i>	Dhudhya	Whole Plant	Abscesses, inflamed glands, ulcers, edemas and phlegmons.
Euphorbiaceae	<i>Phyllanthus urinaria</i>	Hazarmani		Diabetes.
Euphorbiaceae	<i>Jatropha gossypifolia</i>	Lalverenda	Leaves	Gonorrhoea and genito-urinary troubles.
Euphorbiaceae	<i>Ricinus communis</i>	Reri	Root	Inflammations, pains fever.
Fabaceae	<i>Cajanus cajan</i>	Arhar	Leaves	Jaundice and pneumonia.
Fabaceae	<i>Senna tora</i>	Kolkasundha	Leaves	Asthma, bronchitis and hiccup.
Fabaceae	<i>Clitoria ternatea</i>	Aparajita	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>	Sissoo	Bark, Leaves	Haemorrhages, epistaxis, menorrhagia and bleeding piles. Decoction of the leaves is useful in acute stage of gonorrhoea.
Fabaceae	<i>Erythrina variegata</i>	Mandar	Leaves	Pain of the joints and inflammations; earache, toothache.
Fabaceae	<i>Lablab purpureus</i>	Sim	Seed	Inflammations.
Fabaceae	<i>Vigna sinensis</i>	Barboti	Seed	Jaundice, strengthen the stomach and to destroy worms.
Fumariaceae	<i>Fumaria indica</i>	Bansalipha	Whole plant	Aches, diarrhea, Fever, Influenza and pains.
Gentianaceae	<i>Exacum pedunculatum</i>	Kachuri	Whole plant	Chieretta and gentian.
Hydrophyllaceae	<i>Hydrolea zeylanica</i>	Kaschera	Leaves	Callous ulcers.
Lamiaceae	<i>Leonurus sibiricus</i>	Roktodron	Whole Plant	Puerperal and menstrual diseases; useful towards uterus contraction.
Lamiaceae	<i>Leucas aspera</i>	Setodron	Leaves	Chronic rheumatism, psoriasis and other chronic skin eruption.
Lamiaceae	<i>Leucas lavandulifolia</i>	Dron	Leaves and flowers	Cough and cold.
Lamiaceae	<i>Leucas cephalotes</i>	Boro setodron	Leaves and flowers	Cough and cold.
Lamiaceae	<i>Ocimum americanum</i>	Babuitulsi	Leaves	Fever.
Lamiaceae	<i>Ocimum sanctum</i>	Tulsi	Leaves	Coughs, colds, catarrh and bronchitis; gastric disorder, earache, ringworm, leprosy and itches.
Lauraceae	<i>Cinnamomum tamala</i>	Tejpata	Leaves	Prevention of coughing.
Lauraceae	<i>Cinnamomum verum</i>	Daruchini	Bark	Parched mouth, bronchitis, hiccup, piles, diarrhea and heart trouble.
Lauraceae	<i>Litsea monopetala</i>	Kukurchita	Bark	Diarrhea and dysentery.
Lemnaceae	<i>Lemna perpusila</i>	Khudipana	Whole plant	Inflammation, Jaundice and arthritis.
Loranthaceae	<i>Dendrophoe falcata</i>	Loranthus	Whole plant	Tuberculosis, asthma, menstrual disorders.
Liliaceae	<i>Allium cepa</i>	Piaj	Bulb	Cough catarrh, asthma, rheumatism, colic and insect bites.
Liliaceae	<i>Allium sativum</i>	Rosun	Bulb	Fevers, coughs, bronchitis, rheumatism, inflammation, leucoderma, piles, indigestion, heart diseases and wounds; gas formation, painful menstruation and pain in abdomen and ears.
Magnoliaceae	<i>Michelia champaca</i>	Chapaphul	Flower	Cough and rheumatism.
Malvaceae	<i>Abelmoschus esculentus</i>	Dheros	Fruit	Chronic dysentery; gonorrhoea, urinary discharges, strangury and diarrhea.
Malvaceae	<i>Hibiscus rosa-sinensis</i>	Jaba	Flower bud	Burning of the body, urinary discharges, seminal weakness and piles.
Malvaceae	<i>Corchorus capsularis</i>	Pat	Leaves	Dysentery.
Malvaceae	<i>Gossypium herbaceum</i>	Karpastula	Leaves	Dysmenorrhoea and suppression of Menstruation.
Meliaceae	<i>Azadirachta indica</i>	Neem	Bark	Fever, thirst, cough and bad taste in the mouth.
Meliaceae	<i>Swietenia mahagoni</i>	Mahagoni	Seed	Diabetes.
Menispermaceae	<i>Stephania japonica</i>	Akarnandi	Leaves, root	Fever, diarrhea, urinary diseases and dyspepsia.
Menyanthaceae	<i>Nymphoides indicum</i>	Soto Chandmala	Whole plant	Fever and jaundice.
Mimosaceae	<i>Mimosa pudica</i>	Lajjaboti	Whole plant	Snake bites.
Mimosaceae	<i>Acacia nilotica</i>	Babla	Leaves	Chest pain and pneumonia.
Molluginaceae	<i>Glinis oppositifolius</i>	Gimashak	Whole plant	Earache, skin diseases.
Moraceae	<i>Artocarpus heterophyllus</i>	Kathal	Leaves	Skin diseases.
Moraceae	<i>Artocarpus lacucha</i>	Deua	Seed	Constipation.
Moraceae	<i>Ficus benghalensis</i>	Bot	Whole plant	Toothache, dysentery, diarrhea, piles and diabetes.
Moraceae	<i>Ficus racemosa</i>	Jogadumur	Fruit	Menorrhagia, haemoptysis, bronchitis, dry cough, diseases of kidney and spleen.
Moraceae	<i>Ficus religiosa</i>	Pakur	Fruit	Asthma.

Moraceae	<i>Ficus hispida</i>	Khoksha	Whole plant, Fruit	Ulcers, biliousness, psoriasis, anemia, piles, jaundice, haemorrhage of the nose and mouth, diabetes.
Moraceae	<i>Streblus asper</i>	Sheora	Leaves	Urinary inflammation.
Musaceae	<i>Musa sapientum</i>	Kola	Stem	Stop bleeding, source of iron.
Myrtaceae	<i>Psidium guajava</i>	Piyara	Root bark, Root	Diarrhea, dysentery.
Myrtaceae	<i>Syzygium cumini</i>	Kalojam	Bark	Sore throat, bronchitis, asthma and dysentery;
Myrtaceae	<i>Syzygium jambos</i>	Golapjam	Bark, Leaves	Asthma, fatigue, dysentery and sore-eyes.
Nelumbonaceae	<i>Nelumbo nucifera</i>	Poddo	Leaves	Burning sensation and cold potency.
Nymphaeaceae	<i>Nymphaea nouchali</i>	Shapla	Rhizome	Piles, dysentery and dyspepsia.
Oleaceae	<i>Nyctanthes arbor-tristis</i>	Sheuli	Leaves	Fever and rheumatism.
Oleaceae	<i>Jasminum grandiflorum</i>	Beli	Root	In cases of ringworm and herpes.
Onagraceae	<i>Ludwigia adscendens</i>	Kesordam	Leaves	Curing dysentery.
Oxalidaceae	<i>Biophytum sensitivum</i>	Panilajuk	Leaves	Tonic and snake.
Oxalidaceae	<i>Oxalis corniculata</i>	Amrul	Whole plant	Piles, anemia and tympanites.
Oxalidaceae	<i>Argemone mexicana</i>	Sialkanta	Latex	Skin cracks, dropsy, jaundice warts, tumours, cancer, and cutaneous affections.
Papaveraceae	<i>Sesamum indicum</i>	Til	Seed	Piles.
Polygonaceae	<i>Polygonum plebejum</i>	Raniphul	Root	Pneumonia and bowel complains.
Piperaceae	<i>Piper betel</i>	Pan	Leaves	Indigestion, colic, diarrhea, pulmonary catarrh, laryngitis, headache and cough.
Polygonaceae	<i>Polygonum hydropiper</i>	Panimorich	Flower	Gout.
Portulacaceae	<i>Portulaca oleracea</i>	Noniashak	Whole plant	Cardio-vascular diseases, dysuria, hematuria, gonorrhea, dysentery, sore nipples and ulcers of the mouth.
Punicaceae	<i>Punica granatum</i>	Dalim	Stem	Abdominal pain.
Rubiaceae	<i>Anthocephalus chinensis</i>	Kadam	Leaves	Aphthae and stomatitis.
Rubiaceae	<i>Gardenia jasminoides</i>	Gandharaj	Whole plant	Antiseptic.
Rubiaceae	<i>Ixora coccinia</i>	Rangan	Root, Flower	Hiccup, fever, gonorrhoea, diarrhea, dysentery, leucorrhoea, dysmenorrhoea, haemoptysis and catarrhal bronchitis.
Rubiaceae	<i>Morinda citrifolia</i>	Barachand	Fruit	Dysentery.
Rutaceae	<i>Aegle marmelos</i>	Bel	Fruit	Diarrhea, dysentery and ripe fruit for constipation.
Rutaceae	<i>Citrus aurantifolia</i>	Batabilabu	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>	Jambura	Fruit	Influenza, cough, catarrh and asthma.
Rutaceae	<i>Limonia acidissima</i>	Kothbel	Fruit	Tonic to the liver and lungs; cures cough, hiccup and dysentery; good for asthma, consumption, tumors, ophthalmia and leucorrhoea.
Sapindaceae	<i>Litchi chinensis</i>	Lichu	Fruit, Seed	Tonic to the heart, brain and liver, various neuralgic disorders and in orchitis.
Sapotaceae	<i>Mimusops elengi</i>	Bokul	Stem bark	Antidote to bleeding gums and swelling of the mouth and tongue.
Solanaceae	<i>Capsicum frutescens</i>	Morich	Leaves	Headache, night blindness, pain, adenitis, sores, dysuria and bronchitis.
Solanaceae	<i>Datura metel</i>	Dhutra	Seed, Leaves, Root	Insanity, fever with catarrh, diarrhea, skin diseases and cerebral complications.
Solanaceae	<i>Lycopersicon esculentum</i>	Tomato	Fruit	Canker of the mouth.
Solanaceae	<i>Physalis minima</i>	Kapalputki	Leaves, Fruit	Earache, gonorrhoea and spleen disorder.
Solanaceae	<i>Solanum nigrum</i>	Titbegun	Fruit	Fevers.
Solanaceae	<i>Solanum melongena</i>	Begun	Fruit	Appetite and lessens inflammation.
Solanaceae	<i>Solanum torvum</i>	Katabegun	Whole plant	Cough.
Sterculiaceae	<i>Abroma augusta</i>	Ulotkambol	Root bark, Leaves stalk	Irregular menses and pain, dysentery, weakness.
Trapaceae	<i>Trapa bispinosa</i>	Paniphol	Fruit	Diarrhea and bilious affections; nervous and general debility, seminal weakness and leucorrhoea.
Urticaceae	<i>Pouzolzia zeylanica</i>	Pouzolzia	Leaves	Syphilis and Gonorrhoea.
Verbenaceae	<i>Clerodendrum inerme</i>	Vhat	Leaves, Root	Scrofulous and venereal diseases.
Verbenaceae	<i>Clerodendrum viscosum</i>	Bhat	Leaves, Root	Asthma, tumors and certain skin diseases.
Verbenaceae	<i>Gmelina arborea</i>	Gamari	Young Leaves, Flower	Gonorrhoea and cough, leprosy and blood diseases.

Verbenaceae	<i>Vitex negundo</i>	Nishinda	Leaves	Headache.
Verbenaceae	<i>Tectona grandis</i>	Segun	Wood	Piles, leucoderma and dysentery.
Zingiberaceae	<i>Curcuma longa</i>	Holud	Rhizome	Scabies, itches, boils, abscess, eczema, leucoderma, eye diseases, pains, bruises and sprains; internally for cough, cold, fever.
Zingiberaceae	<i>Zingiber officinale</i>	Ada	Rhizome	Constipation, dysentery, vomiting, headache, earache, sprain joints, in sore throats and voice loss.

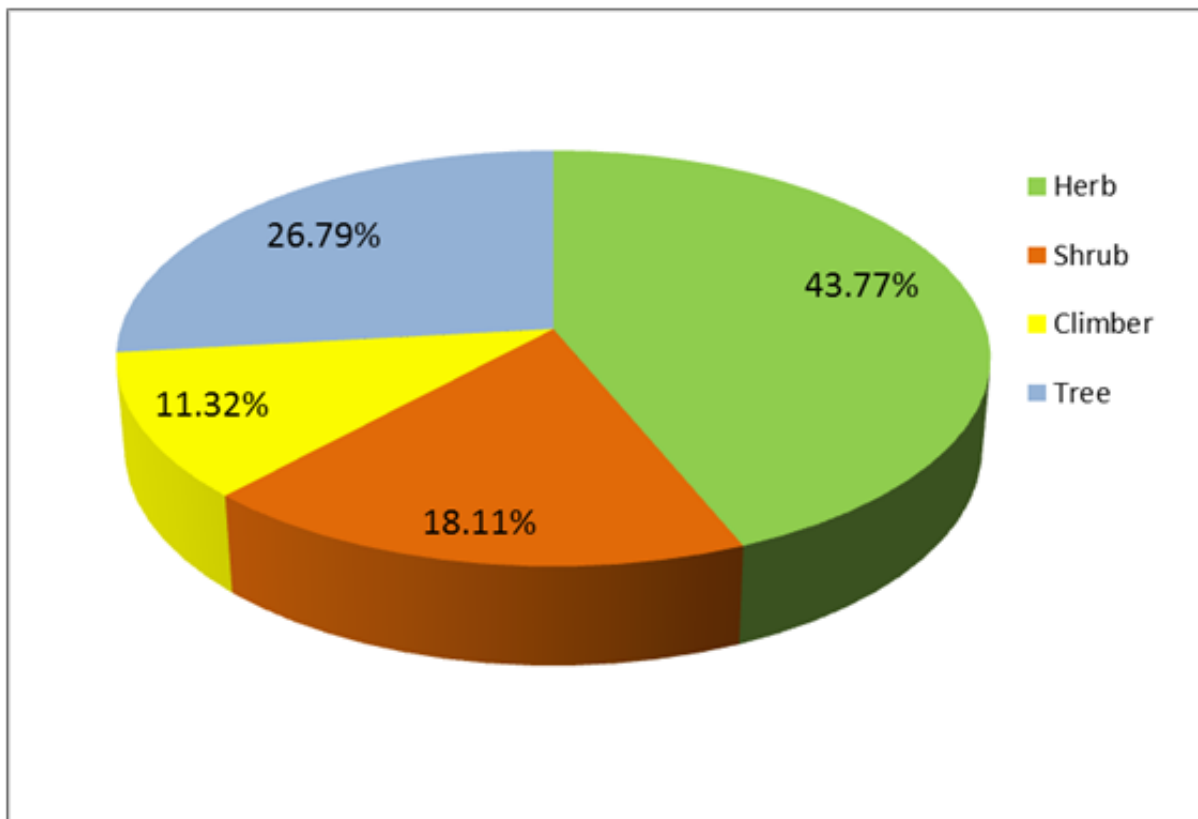


Figure 1. Habit diversity of the recorded species

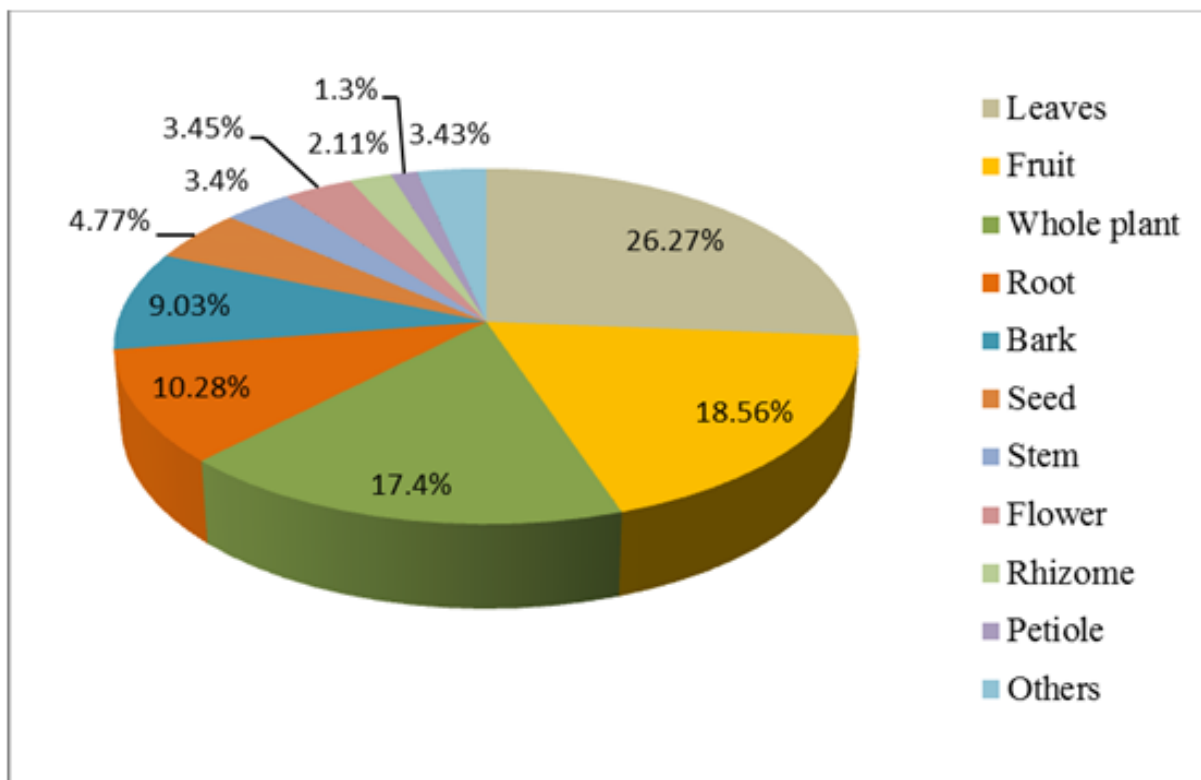


Figure 2. Number of Plant parts used for medicinal purpose

PHOTOGRAPH OF IMPORTANT MEDICINAL PLANTS



Aloe vera *Artocarpus heterophyllus* *Argemone mexicana* *Ananas sativus* *Averrhoa carambola*



Tagetes patula *Portulaca oleracea* *Cuscuta reflexa* *Carissa carandas* *Calotropis procera*



Psidium guajava *Ocimum sanctum* *Cucurbita maxima* *Terminalia arjuna* *Senna alata*



Hibiscus rosa-sinensis *Helianthus annuus* *Solanum melongena* *Lycopersicon esculentum* *Abroma augusta*



Celosia cristata *Annona squamosa* *Datura metel* *Litchi chinensis* *Capsicum frutescens*



Citrus grandis *Citrus aurantifolia* *Aegle marmelos* *Limonia acidissima* *Punica granatum*

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