



## Journal of Medicinal Plants Studies

### Study of Medical Ethno-botany at the Village Genda under Savar Upazilla of District Dhaka, Bangladesh

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Study of medical ethno-botany by the local people at the village Genda under Savar Upazilla of district Dhaka, Bangladesh was recorded. A total of 73 plant species under 68 genera of 42 families have been documented which are used for the treatment of 37 diseases. The local people of the study area mostly depended on herbal medicine for their primary healthcare. Fifteen recorded medicinal plant species are used for the treatment of fever, 12 for dysentery, 9 each for diuretic and diabetes, 8 for diarrhea, 7 each for cough, rheumatism and worm and other 29 categories of diseases were treated by two to six species. For each species botanical name, local name, family, parts used, name of the diseases and mode of uses have been mentioned.

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*Keyword:* Ethno-botany, Medicinal plants, Drug development, Savar, Dhaka, Bangladesh

#### 1. Introduction

A large portion of the World population, especially in developing countries, depends on traditional medicine for the treatment of diseases and injuries. Hundreds of the plant genera, to mention the most important natural resource of indigenous medicine, are used for that purpose, mainly as herbal preparations, including very potent and powerful drugs which have stood the test of time and could not be replaced by modern medical preparations<sup>[1]</sup>. The World Health Organization reported that 80 % of the world population rely chiefly on indigenous medicine and that the majority of traditional therapies involve the use of plant extracts or of their active constituents<sup>[22]</sup>.

In the recent years interest in herbal medicines has increased considerably both at home and abroad as they are believed to be comparatively less toxic than the synthetics<sup>[24]</sup>. Documentation of the indigenous knowledge through ethno-botanical studies is important for the conservation and utilization of biological resources<sup>[11]</sup>. Therefore, establishment of the local names and

indigenous uses of plants has significant societal benefits<sup>[4]</sup>. Ethnopharmacology has played a significant role in the progress of conventional medicine and is likely to become increasingly important in the years to come. A comparative approach by ethnobotanists, ethnopharmacologists, physicians and phytochemists is thereby essential to spur the progress of medicinal plants research<sup>[6]</sup>.

Over the past two decades several ethno-medicinal and ethno-botanical studies in Bangladesh have been carried out<sup>[2, 8, 9, 12-15, 16, 17-21]</sup>. Currently, traditional knowledge of primary healthcare system of local communities is under great threat because of a number of factors including deforestation, habitat degradation, biodiversity loss and modern civilization<sup>[17]</sup>. For the sake of conservation of local knowledge on medicinal plants, medical ethno-botany in the study area was essential. But none of them was devoted to medical ethno-botany of Genda, Savar, Dhaka. The study was carried out with the aim of preserving knowledge about local use and provides preliminary information aimed at a more

detailed investigation on the bioactive studies. Also, this study identified not only the wild plants collected for medical purposes by local people, but also the uses and local names of these plants.

## 2. Materials and Methods

In the present survey of medical ethno-botany, a total of 73 plant species under 68 genera and 42 families were collected and recorded for their use in various ailments. A total of 150 local people having an age range 20-75 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 70 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. Triangulation methods have been followed for data validation in the field. Plant specimens with flowers and fruits were collected and processed

using standard herbarium techniques. Herbal plants referred by these people were authentically identified with the help of [7] and [10]. The voucher specimens are stored at Rajshahi University Herbarium (RUH) for future reference.

## 3. Results

Study of medical ethno-botany by the local people at the village Genda under Savar Upizilla of district Dhaka, Bangladesh was recorded. A total of 73 plant species under 68 genera of 42 families have been documented which are used for the treatment of 37 diseases (Table 1-37). For each species botanical name, local name, family, parts used, name of the diseases and mode of uses have been mentioned.

By applying survey, interview, collection and identification methods, different ethno-botanical information were accumulated. The well analyzed and check listed information about the plant materials collected from the study area are described below:

Table 1-37: Enumeration of plants and their diversity in use of medical ethno-botany by the local people of Genda, Savar, Dhaka.

### 1. Abortion

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Achyranthes aspera</i> L.	Apang	Amaranthaceae	Herb	Root	Juice of roots is used in abortion.
2	<i>Ananas comosus</i> (L.) Merr.	Anaros	Bromeliaceae	Herb	Fruit	Juice of unripe fruit is used in abortion.
3	<i>Carica papaya</i> L.	Pepe	Caricaceae	Shrub	Fruit	Juice of unripe and ripe fruit is used as abortion.

### 2. Abscess

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Abroma augusta</i> L.	Ulotkambol	Sterculiaceae	Shrub	Root	Paste of root is used to cure abscess.
2	<i>Aegle marmelos</i> (L.) Correa	Bel	Rutaceae	Tree	Leaf	Juice of young leaves is used in abscess.
3	<i>Annona squamosa</i> L.	Ata	Annonaceae	Tree	Leaf	Pastes of leaves are used in abscess.
4	<i>Dalbergia sissoo</i> Roxb.	Sissoo	Fabaceae	Tree	Wood	Paste made from wood is used in abscess.

5	<i>Curcuma longa</i> L.	Holud	Zingiberaceae	Herb	Rhizome	Paste of rhizome is properly used in abscess.
6	<i>Ficus benghalensis</i> L.	Bot	Moraceae	Tree	Leaf	Leaves are useful applied as poultice in abscess.
7	<i>Curcuma longa</i> L.	Holdi	Zingiberaceae	Herb	Rhizome	Rhizome is properly used in abscess.

### 3. Asthma

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Amaranthus spinosus</i> L.	Kantanotey	Amaranthaceae	Herb	Whole plant	Juice made from whole plant is used in asthma.
2	<i>Artocarpus heterophyllus</i> Lamk.	Kathal	Moraceae	Tree	Leaf	Juice made from young leaves is used in asthma.
3	<i>Datura metel</i> L.	Dhutra	Solanaceae	Shrub	Leaf	Cigarette made from it leaves are smoked in asthma.
4	<i>Justicia gendarussa</i> L.	Jagathmadan	Acanthaceae	Herb	Leaf	Juice made from leaves is used in asthma.
5	<i>Justicia adhatoda</i> Nees.	Basak	Acanthaceae	Herb	Leaf	Juice made from young leaves is used in asthma.

### 4. Anaema

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Citrus grandis</i> (L.) Osb.	Jambura	Rutaceae	Tree	Fruit	Juice made from ripe fruit is used in anaemia.
2	<i>Oxalis corniculata</i> L.	Amrul	Oxalidaceae	Herb	Leaf	Juice made from leaves is used in anaemia.
3	<i>Punica granatum</i> L.	Dalim	Punicaceae	Shrub	Fruit	Juice of fruits is used in anaemia.

### 5. Bone fracture

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Justicia gendarussa</i> L.	Jagathmadan	Acanthaceae	Herb	Leaf	Paste made from leaves is used in fracture.
2	<i>Kalanchoe pinnata</i> (Lamk.) Pers.	Patharkuchi	Crassulaceae	Herb	Leaf	Paste of leaves is used in fracture.
3	<i>Cissus quadrangularis</i> Wall.	Harzora	Vitaceae	Climber	Stem	Paste made from the stem barks are used in bone fracture.

**6. Blood pressure**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Musa paradisiaca</i> L.	Kala	Musaceae	Shrub	Stem	Sap of the central cylindrical stem of the fruited plants is used in blood pressure.
2	<i>Rauvolfia serpentina</i> Benth.	Sarpagandha	Apocynaceae	Herb	Root	Juice made from roots is used in blood pressure.
3	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Combretaceae	Tree	Bark	Juice made from bark mixed with water used in blood pressure.

**7. Burning sensation**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Lawsonia inermis</i> L.	Mehedi	Lythraceae	Shrub	Leaf	Paste made from leaves is used in burning sensation.
2	<i>Phyllanthus emblica</i> L.	Amlaki	Euphorbiaceae	Tree	Fruit	Ripe fruits are used in burning sensation.
3	<i>Tamarindus indica</i> L.	Tentul	Fabaceae	Tree	Fruit	Ripe fruit pulps are used in burning sensation.
4	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Combretaceae	Tree	Leaf	Leaf soaked in water over night in burning sensation.
5	<i>Terminalia bellerica</i> Roxb.	Bohera	Combretaceae	Tree	Fruit	Fruits are used in burning sensation.

**8. Cough**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Allium cepa</i> L.	Piaj	Liliaceae	Herb	Bulb	Juice of bulb is used in cough.
2	<i>Ananas comosus</i> (L.) Merr.	Anaros	Bromeliaceae	Herb	Fruit	Ripe fruit is used cough.
3	<i>Justicia adhatoda</i> Nees.	Basak	Acanthaceae	Herb	Leaf	Juice made from young leaves is used in cough.
4	<i>Kalanchoe pinnata</i> (Lamk.) Pers.	Patharkuchi	Crassulaceae	Herb	Leaf	Juice made from young leaves is used in cough.

5	<i>Oxalis corniculata</i> L.	Amrul	Oxalidaceae	Herb	Leaf	Vegetable made from young leaves are used in cough.
6	<i>Ocimum sanctum</i> L.	Tulsi	Lamiaceae	Herb	Leaf	Juice made from young leaves is used in cough.
7	<i>Phyllanthus emblica</i> L.	Amloki	Euphorbiaceae	Tree	Fruit	Ripe fruits are used in cough

## 9. Constipation

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Carica papaya</i> L.	Papaya	Caricaceae	Shrub	Fruit	Fruit juice is used in constipation.
2	<i>Terminalia chebula</i> Retz.	Haritaki	Combretaceae	Tree	Fruit	Ripe fruits are used in constipation.

## 10. Chicken pox

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Tree	Leaf	Leaves are used in chickenpox.
2	<i>Moringa oleifera</i> Lamk.	Sogina	Moringaceae	Tree	Fruit	Fruits are used in chickenpox.
3	<i>Momordica charantia</i> L.	Korola	Cucurbitaceae	Climber	Leaf	Juice made from leaves is used in chickenpox.

## 11. Dysentery

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Aegle marmelos</i> (L.) Correa	Bel	Rutaceae	Tree	Fruit	Decoction of immature fruits is used in baby's dysentery.
2	<i>Alstonia scholaris</i> (L.) R.Br.	Chatim	Apocynaceae	Tree	Bark	Juice made from bark is used in dysentery.
3	<i>Andrographis paniculata</i> Nees.	Kalomegh	Acanthaceae	Herb	Whole plant	Juice made from whole plants is used in dysentery.
4	<i>Annona squamosa</i> L.	Ata	Annonaceae	Tree	Root	Juice of roots is used in dysentery.

5	<i>Bombax ceiba</i> L.	Shimul	Bombacaceae	Tree	Bark	Juice made from barks is used in dysentery.
6	<i>Centella asiatica</i> (L.) Urban	Thankuni	Apiaceae	Herb	Whole plant	Vegetable of whole plants are used in dysentery.
7	<i>Glycosmis pentaphylla</i> Corr.	Datmajan	Rutaceae	Shrub	Fruit	Juice of ripe fruit is used in dysentery.
8	<i>Kalanchoe pinnata</i> (Lamk.) Pers.	Patharkuchi	Crassulaceae	Herb	Leaf	Juice made from young leaves is used in dysentery.
9	<i>Punica granatum</i> L.	Dalim	Punicaceae	Shrub	Fruit	Immature fruit juice is used in dysentery.
10	<i>Psidium guajava</i> (L.) Bat.	Piyara	Myrtaceae	Tree	Bark	Juice made from the stem bark is used in blood dysentery.
11	<i>Rauwolfia serpentina</i> Benth.	Sarpagandha	Apocynaceae	Herb	Root	Decoction of roots is used in dysentery.
12	<i>Syzygium cumini</i> Skiel.	Kalojam	Myrtaceae	Tree	Bark	Paste made from the bark is used in dysentery.

## 12. Diarrhea

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Andrographis paniculata</i> Nees.	Kalomegh	Acanthaceae	Herb	Whole plant	Juice made from whole plants is used in diarrhea.
2	<i>Artocarpus heterophyllus</i> Lamk.	Kathal	Moraceae	Tree	Root	Juice made from young roots is used in diarrhea.
3	<i>Asparagus racemosus</i> L.	Satamuli	Liliaceae	Climber	Root	Juice made from the tuberous roots is used in diarrhea.
4	<i>Cocos nucifera</i> L.	Narikel	Arecaceae	Tree	Fruit	Green coconut water is commonly used as dehydrating agent in diarrhea.
5	<i>Carica papaya</i> L.	Papaya	Caricaceae	Shrub	Fruit	Ripe fruits are used in diarrhea.
6	<i>Punica granatum</i> L.	Dalim	Punicaceae	Shrub	Fruit	Ripe fruits are used in diarrhea.
7	<i>Psidium guajava</i> (L.) Bat.	Piyara	Myrtaceae	Tree	Fruit	Fruits are used in diarrhea.
8	<i>Rauwolfia serpentina</i> Benth.	Sarpagandha	Apocynaceae	Herb	Root	Decoction of roots is used in dysentery and diarrhea.

**13. Diuretic**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Achyranthes aspera</i> L.	Apang	Amaranthaceae	Herb	Root	Juice of root is used in diuretic.
2	<i>Ananas comosus</i> (L.) Merr.	Anaros	Bromeliaceae	Herb	Fruit	Ripe fruit is used diuretic.
3	<i>Argemone mexicana</i> L.	Sialkanta	Papaveraceae	Herb	Root	Juice made from roots is used in diuretic.
4	<i>Borassus flabellifer</i> L.	Tal	Arecaceae	Tree	Fruit	Pulp of unripe fruit is used in diuretic.
5	<i>Cocos nucifera</i> L.	Narikel	Arecaceae	Tree	Root	Juice of roots is used in diuretic.
6	<i>Feronia limonia</i> (L.) Swingle	Kathbel	Rutaceae	Tree	Fruit	Fruit pulp is used in diuretic.
7	<i>Kalanchoe pinnata</i> (Lamk.) Pers.	Patharkuchi	Crassulaceae	Herb	Leaf	Juice made from young leaves is used in diuretic.
8	<i>Physalis minima</i> L.	Kapalphutki	Solanaceae	Herb	Root	Juice made from roots is used in diuretic.
9	<i>Solanum nigrum</i> L.	Kakmachi	Solanaceae	Herb	Fruit	Juice made from green fruits is used in diuretic.

**14. Diabetes**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Argemone mexicana</i> L.	Sialkanta	Papaveraceae	Herb	Stem	Curry made from of stems is used in diabetes.
2	<i>Cajanus cajan</i> (L.) Millsp.	Arhar	Fabaceae	Shrub	Root	Juice made from roots is used in diabetes.
3	<i>Asparagus racemosus</i> L.	Satamuli	Liliaceae	Climber	Root	Juice made from the tuberous roots is used in diabetes.
4	<i>Bombax ceiba</i> L.	Shimul	Bombacaceae	Tree	Root	Juice made from immature plant roots are used in diabetes.
5	<i>Coccinia cordifolia</i> (L.) Cogn.	Telakucha	Cucurbitaceae	Climber	Leaf	Vegetable made from young leaves are used in diabetes.
6	<i>Ficus racemosa</i> L.	Jogadumur	Moraceae	Tree	Fruit	Curry made from unripe fruit is used as diabetes.
7	<i>Kalanchoe pinnata</i> (Lamk.) Pers.	Patharkuchi	Crassulaceae	Herb	Leaf	Juice made from young leaves is used in diabetes.

8	<i>Momordica charantia</i> L.	Korola	Cucurbitaceae	Climber	Fruit	Curry made from unripe fruit is used as diabetes.
9	<i>Syzygium cumini</i> Skiel.	Kalojam	Myrtaceae	Tree	Seed	Dry seed dust mixed with normal water used in diabetes.

### 15. Dyspepsia

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Clerodendrum viscosum</i> Vent.	Bhant	Verbenaceae	Herb	Leaf	Juices made from leaves are used in dyspepsia.
2	<i>Cajanus cajan</i> (L.) Millsp.	Arhar	Fabaceae	Shrub	Leaf	Decoction of leaves is used in cattle dyspepsia.
3	<i>Senna sophera</i> L.	Kalkasunda	Fabaceae	Herb	Leaf, root	Decoction of leaves and roots are used in dyspepsia.

### 16. Eczema

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Achyranthes aspera</i> L.	Apang	Amaranthaceae	Herb	Leaf	Paste of leaves is used in eczema.
2	<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Tree	Leaf	Paste of leaves is used in eczema.
3	<i>Curcuma longa</i> L.	Holdi	Zingiberaceae	Herb	Rhizome	Paste made from rhizome is used in eczema.
4	<i>Centella asiatica</i> (L.) Urban	Thankuni	Apiaceae	Herb	Leaf	Paste made from young leaves is used in eczema.
5	<i>Senna alata</i> L.	Dadmardan	Fabaceae	Shrub	Leaf	Decoction of leaves is used in eczema.

### 17. Fever

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Aegle marmelos</i> (L.) Correa	Bel	Rutaceae	Tree	Leaf	Juice of young leaves is used in fever.
2	<i>Alstonia scholaris</i> (L.) R.Br.	Chatim	Apocynaceae	Tree	Bark	Juice made from bark is used in fever.
3	<i>Amaranthus spinosus</i> L.	Kantanotey	Amaranthaceae	Herb	Whole plant	Juice made from whole plant is used in asthma and fever.
4	<i>Andrographis paniculata</i> Nees.	Kalomegh	Acanthaceae	Herb	Whole plant	Juice made from whole plants is used in fever.
5	<i>Ananas comosus</i> (L.) Merr.	Anaros	Bromeliaceae	Herb	Fruit	Ripe fruit is used fever.
6	<i>Averrhoa carambola</i> L.	Kamranga	Averrhoaceae	Tree	Fruit	Fruits are used in fever.



7	<i>Coccinia cordifolia</i> (L.) Cogn.	Telakucha	Cucurbitaceae	Climber	Leaf	Vegetable made from young leaves are used in fever.
8	<i>Dillenia indica</i> L.	Chalta	Dilleniaceae	Tree	Fruit	Fruit juice mixed with sugar and water is used as cooling beverage in fever.
9	<i>Erythrina variegata</i> L.	Madar	Fabaceae	Tree	Bark	Juice of bark is used in fever.
10	<i>Heliotropium indicum</i> L.	Hatisur	Boraginaceae	Herb	Leaf	Decoction of leaves is used in fever.
11	<i>Leucas lavendulifolia</i> Sm.	Setadron	Lamiaceae	Herb	Leaf	Juice made from young leaves is used in fever.
12	<i>Moringa oleifera</i> Lamk.	Sogina	Moringaceae	Tree	Root	Decoction of roots is used in fever.
13	<i>Mimosa pudica</i> L.	Lajjabati	Fabaceae	Climber	Root	Decoction of roots is used in fever.
14	<i>Ocimum sanctum</i> L.	Tulsi	Lamiaceae	Herb	Root	Juice of roots is used in fever.
15	<i>Vitex negundo</i> L.	Neshinda	Lamiaceae	Shrub	Root	Juice of roots is used in fever.

### 18. Helminthiasis

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Andrographis paniculata</i> Nees.	Kalomegh	Acanthaceae	Herb	Leaf	Juice of leaves mixed with salt and water used in helminthiasis.
2	<i>Ananas comosus</i> (L.) Merr.	Anaros	Bromeliaceae	Herb	Fruit	Ripe fruit is used helminthiasis.
3	<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Tree	Leaf	Juice made from young leaves mixed with salt and water used in helminthiasis.

### 19. Headache

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Allium cepa</i> L.	Piaj	Liliaceae	Herb	Bulb	Juice of bulb is used in headache.
2	<i>Centella asiatica</i> (L.) Urban	Thankuni	Apiaceae	Herb	Leaf	Paste made from young leaves is used in headache.
3	<i>Ricinus communis</i> L.	Rendri	Euphorbiaceae	Shrub	Leaf	Paste made from leaves is used in headache.
4	<i>Zizyphus mauritiana</i> Lamk.	Boroi	Rhamnaceae	Tree	Leaf	Paste made from young leaves is used in headache.

**20. Heart disease**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Rauvolfia serpentina</i> Benth.	Sarpagandha	Apocynaceae	Herb	Root	Juice made from roots is used in heart disease.
2	<i>Solanum nigrum</i> L.	Kakmachi	Solanaceae	Herb	Fruit	Juice made from green fruits is used in heart disease.
3	<i>Tamarindus indica</i> L.	Tentul	Fabaceae	Tree	Leaf	Juice of leaves is used in heart disease.
4	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Combretaceae	Tree	Bark	Dust made from dry shoot bark mixed with water used in heart disease.

**21. Itches**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Andrographis paniculata</i> Nees.	Kalomegh	Acanthaceae	Herb	Leaf	Paste of leaves is used in itches.
2	<i>Artocarpus heterophyllus</i> Lamk.	Kathal	Moraceae	Tree	Leaf	Juice made from young leaves is used in itches.
3	<i>Argemone mexicana</i> L.	Sialkanta	Papaveraceae	Herb	Latex	Latex is used in itches.
4	<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Tree	Leaf	Paste of leaves is used in itches.
5	<i>Carica papaya</i> L.	Papaya	Caricaceae	Shrub	Latex	Latex is used in itches.
6	<i>Justicia gendarussa</i> L.	Jagathmadan	Acanthaceae	Herb	Leaf	Paste made from leaves is used in itches.

**22. Indigestion**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Aegle marmelos</i> (L.) Correa	Bel	Rutaceae	Tree	Fruit	Ripe fruits are used in indigestion.
2	<i>Carica papaya</i> L.	Papaya	Caricaceae	Shrub	Fruit	Ripe fruits are used in indigestion.
3	<i>Phyllanthus emblica</i> L.	Amlaki	Euphorbiaceae	Tree	Fruit	Ripe fruits are used in indigestion.
4	<i>Terminalia chebula</i> Retz.	Haritaki	Combretaceae	Tree	Fruit	Ripe fruits are used in indigestion.

**23. Jaundice**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Argemone mexicana</i> L.	Sialkanta	Papaveraceae	Herb	Stem	Curry made from of stems is used in jaundice.
2	<i>Asparagus racemosus</i> L.	Satamuli	Liliaceae	Climber	Root	Juice made from the tuberous roots is used in jaundice.
3	<i>Averrhoa carambola</i> L.	Kamranga	Averrhoaceae	Tree	Fruit	Fruits are used in jaundice.
4	<i>Cajanus cajan</i> (L.) Millsp.	Arhar	Fabaceae	Shrub	Leaf	Juice made from young leaves is used in jaundice.
5	<i>Glycosmis pentaphylla</i> Corr.	Datmajan	Rutaceae	Shrub	Leaf	Juice of leaves is used in jaundice.
6	<i>Phyllanthus emblica</i> L.	Amloki	Euphorbiaceae	Tree	Fruit	Dried fruits are used in jaundice.

**24. Liver disease**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Cuscuta reflexa</i> Roxb.	Sarnalata	Cuscutaceae	Climber	Whole plant	Decoction of whole plant is used in liver disease.
2	<i>Carica papaya</i> L.	Papaya	Caricaceae	Shrub	Fruit	Ripe fruits are used in liver disease.

**25. Menstrual disease**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Aloe vera</i> L.	Ghritakumari	Aloeaceae	Climber	Leaf	Juice made from leaves is used in menstrual disease.
2	<i>Amaranthus lividus</i> L.	Noteysak	Amaranthaceae	Herb	Root	Roots are act as reduce menstrual flow.
3	<i>Artocarpus heterophyllus</i> Lamk.	Kathal	Moraceae	Tree	Bark	Juice made from bark is used in excessive menstrual discharge.
4	<i>Bombax ceiba</i> L.	Shimul	Bombacaceae	Tree	Bark	Juice made from barks is used in excessive menstrual discharge.
5	<i>Cocos nucifera</i> L.	Narikel	Arecaceae	Tree	Root	Juice of roots is used in menstrual disease.
6	<i>Erythrina variegata</i> L.	Madar	Fabaceae	Tree	Root	Juice made from roots are used the flow of menstrual period when this is absent.

**26. Piles**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Aloe vera</i> L.	Ghritakumari	Aloeaceae	Climber	Leaf	It leaf mucilage is used in piles.
2	<i>Allium sativum</i> L.	Rashun	Liliaceae	Herb	Bulb	Bulb is used in piles.
3	<i>Calotropis procera</i> R.Br.	Akanda	Asclepiadaceae	Shrub	Leaf	Extract of leaves is used in piles.
4	<i>Averrhoa carambola</i> L.	Kamranga	Averrhoaceae	Tree	Fruit	Fruit is also eaten a good remedy for bleeding piles.
5	<i>Ficus recemosa</i> L.	Jogadumur	Moraceae	Tree	Latex	Latex is used in piles.

**27. Paralysis**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Abrus precatorius</i> L.	Kuch	Fabaceae	Climber	Seed	Paste made from seeds is used in paralysis.
2	<i>Moringa oleifera</i> Lamk.	Sogina	Moringaceae	Tree	Fruit	Fruits are used in chickenpox and paralysis.

**28. Rheumatism**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Allium sativum</i> L.	Rashun	Liliaceae	Herb	Bulb	Juice of bulb is used in rheumatism.
2	<i>Datura metel</i> L.	Dhutra	Solanaceae	Shrub	Leaf	Pastes made from leaves are used in rheumatism.
3	<i>Momordica charantia</i> L.	Korola	Cucurbitaceae	Climber	Leaf	Juice made from leaves is used in chickenpox and rheumatism.
4	<i>Ricinus communis</i> L.	Rendri	Euphorbiaceae	Shrub	Seed	The oil extracted from the seeds is used in rheumatism.
5	<i>Terminalia belerica</i> Roxb.	Bohera	Combretaceae	Tree	Seed	The oil extracted from the seeds is used in rheumatism.
6	<i>Terminalia chebula</i> Retz.	Haritaki	Combretaceae	Tree	Fruit	Unripe fruits are used in rheumatism.
7	<i>Vitex negundo</i> L.	Neshinda	Lamiaceae	Shrub	Leaf	Paste of leaves is used in rheumatism.

**29. Snake-bite**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Mimosa pudica</i> L.	Lajjabati	Fabaceae	Climber	Root	Juice of root is used in snake-bite.
2	<i>Scoparia dulcis</i> L.	Talmisri	Scrophulariaceae	Herb	Root	Juice made from roots is used in snake-bite.

**30. Skin disease**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Acalypha indica</i> L.	Muktajhuri	Euphorbiaceae	Herb	Leaf	Fresh leaf juice is used in skin disease.
2	<i>Heliotropium indicum</i> L.	Hatisur	Boraginaceae	Herb	Leaf	Paste made from leaves is used in skin disease.
3	<i>Argemone mexicana</i> L.	Sialkanta	Papaveraceae	Herb	Latex	Latex is used in skin disease.
4	<i>Cynodon dactylon</i> Pers.	Durba	Poaceae	Herb	Leaf	Paste made from young leaves is used in skin disease.
5	<i>Eclipta alba</i> (L.) Hassk.	Kalokeshi	Asteraceae	Herb	Leaf	Paste made from young leaves is used in skin disease.

**31. Stop bleeding**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Cynodon dactylon</i> Pers	Durba	Poaceae	Herb	Whole plant	Paste made from whole plant is used in stop bleeding.
2	<i>Mikania cordata</i> (Burm. f.) Robinson	Assamlata	Asteraceae	Climber	Leaf	Juice of leaves is used as stop bleeding.

**32. Sex problems**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Aloe vera</i> L.	Ghritakumari	Aloeaceae	Climber	Leaf	Juice made from leaves is used in sexual problems.
2	<i>Bombax ceiba</i> L.	Shimul	Bombacaceae	Tree	Root	Juice made from immature plant roots are used in sexual problems.

**33. Toothache**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Erythrina variegata</i> L.	Madar	Fabaceae	Tree	leaf	Juice made from leaves is used in toothache.
2	<i>Mangifera indica</i> L.	Am	Anacardiaceae	Tree	Leaf	Decoction of young leaves is used in toothache.
3	<i>Psidium guajava</i> (L.) Bat.	Piyara	Myrtaceae	Tree	Leaf	Decoction of leaves is used in toothache.

**34. Urinary disease**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Asparagus racemosus</i> L.	Satamuli	Liliaceae	Climber	Whole plant	Juice of whole plant is used in urinary disease.
2	<i>Terminalia chebula</i> Retz.	Haritaki	Combretaceae	Tree	Fruit	Unripe fruits are used in urinary disease.

**35. Vomiting**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Clerodendrum viscosum</i> Vent.	Bhant	Verbenaceae	Herb	Leaf	Juices made from leaves are used in vomiting.
2	<i>Feronia limonia</i> (L.) Swingle	Kathbel	Rutaceae	Tree	Leaf	Juice made from leaves is used in vomiting.
3	<i>Justicia adhatoda</i> Nees.	Basak	Acanthaceae	Herb	Leaf, bark	Juice made from bark and leaves are used in vomiting.
4	<i>Phyllanthus emblica</i> L.	Amlaki	Euphorbiaceae	Tree	Fruit	Ripe fruits are used in burning vomiting.

**36. Wound**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Andrographis paniculata</i> Nees.	Kalomegh	Acanthaceae	Herb	Leaf	Paste of leaves is used in wound.
2	<i>Cynodon dactylon</i> Pers.	Durba	Poaceae	Herb	Whole plant	Paste made from whole plant is used in wound.
3	<i>Eclipta alba</i> (L.) Hassk.	Kalokeshi	Asteraceae	Herb	Leaf	Paste made from young leaves is used in wound.
4	<i>Justicia gendarussa</i> L.	Jagathmadan	Acanthaceae	Herb	Leaf	Paste made from leaves is used in wound.
5	<i>Lawsonia inermis</i> L.	Mehendi	Lythraceae	Shrub	Leaf	Paste made from leaves is used in wound.
6	<i>Syzygium cumini</i> Skiel.	Kalojam	Myrtaceae	Tree	Bark	Paste made from the bark is used in wound.

**37. Worm**

S/N	Scientific name	Local name	Family name	Habit	Parts used	Mode of use
1	<i>Ananas comosus</i> (L.) Merr.	Anaros	Bromeliaceae	Herb	Fruit	Ripe fruit is used in worm.
2	<i>Azadirachta indica</i> A. Juss.	Neem	Meliaceae	Tree	Leaf	Juice made from young leaves mixed with water of boil rice used in worm.
3	<i>Clerodendrum viscosum</i> Vent.	Bhant	Verbenaceae	Herb	Leaf	Juices made from leaves are used in worm.
4	<i>Justicia adhatoda</i> Nees.	Basak	Acanthaceae	Herb	Leaf, bark	Juice made from bark and leaves are used in worm.
5	<i>Leucas lavendulifolia</i> Sm.	Setadron	Lamiaceae	Herb	Leaf	Juice made from young leaves is used in worm.
6	<i>Psidium guajava</i> (L.) Bat.	Piyara	Myrtaceae	Tree	Fruit	Young fruits are used in worm.
7	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Combretaceae	Tree	Fruit	Unripe fruits are used in worm.

**4. Discussion**

Study of medical ethno-botany by the local people at the village Genda under Savar Upizilla of district Dhaka, Bangladesh was recorded. A total of 73 plant species under 68 genera of 42 families have been documented which are used for the treatment of 37 diseases (Table 1-37). Out of these plants species, 28 belonged to herbs, 27 trees, 11 shrubs, and 7 climbers. The local people of the study area mostly depended on herbal medicine for their primary healthcare. Fifteen recorded medicinal plant species are used for the treatment of fever, 12 for dysentery, 9 each for diuretic and diabetes, 8 for diarrhea, 7 each for cough, rheumatism and worm and other 29 categories of diseases were treated by two to six species. For each species botanical name, local name, parts used, name of the diseases and mode of uses have been mentioned. Use of plant parts as medicine shows variation. Leaves (38) are the leading part used in a majority of medicinal plants followed by 21 fruits, 18 roots, 8 bark, 6 whole plant, 2 stem, 3 latex, 2 bulb, 1 rhizomes, 3 seed and 1 wood (Table 1-37).

Distribution of medicinal plant species in the families shows variation (Table 1-37). Fabaceae is represented by eight species, Rutaceae is represented by 4 species and each Euphorbiaceae, Solanaceae, Amaranthaceae, Acanthaceae, Liliaceae, Lamiaceae and Combretaceae is represented by three species. Two species in each was recorded by five families. A single species in

each was recorded by 28 families while two species in each was recorded by five families. The survey indicated that the common medicinal plant families in the study area are Acanthaceae, Asclepiadaceae, Asteraceae, Bombacaceae, Caricaceae, Combretaceae, Cucurbitaceae, Liliaceae, Meliaceae, Moringaceae, Moraceae and Rutaceae. These findings of common medicinal plant families in the study is in agreement with Yusuf<sup>[23]</sup> and Ghani<sup>[5]</sup>.

The most frequently used species for the treatment of different diseases are *Abrus precatorius* L., *Achyranthes aspera* L., *Aloe vera* L., *Allium sativum* L., *Ananas comosus* (L.) Merr., *Andrographis paniculata* (Burm.f.) Wall. ex Nees., *Argemone mexicana* L., *Asparagus racemosus* L., *Azadirachta indica* A. Juss., *Carica papaya* L., *Cynodon dactylon* Pers., *Eclipta alba* (L.) Hassk., *Justicia adhatoda* Nees., *Justicia gendarussa* L., *Kalanchoe pinnata* (Lamk.) Pers., *Lawsonia inermis* L., *Mimosa pudica* L., *Moringa oleifera* Lamk., *Phyllanthus emblica* L., *Syzygium cumini* Skiel., *Terminalia arjuna* Bedd., *Terminalia chebula* Retz. and *Vitex negundo* L. Among the medicinal use of plants, the survey reported a good number of new uses those were not mentioned in the previous literatures<sup>[23][5]</sup>.

**5. Conclusion**

The present findings are probably the first record of medical ethno-botany at the village Genda

under Savar Upazilla of Dhaka district using standard research protocols. A total of 73 plant species under 68 genera of 42 families have been documented which are used for the treatment of 37 diseases. The present study may be a preliminary contribution to the medical ethnobotany of this area using standard research methods, focusing on medicinal plants and their local uses for the healthcare. This healthcare knowledge transmitted orally from one generation to generation. This detailed information will be helpful for the pharmacognosist, botanist and pharmacologist for the collection and identification of the plant for their research work. The study also suggested that the present information on medicinal use of plants by local people may be used for botanical and pharmacological research in future for the development of new sources of drugs.

## 6. Acknowledgements

The authors are grateful to the local people of the village Genda under Savar Upazilla of Dhaka district for their co-operation and help during the study of medical-ethno-botany.

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