*Review Article*

Commonly used medicinal plants in Bangladesh for treating skin diseases

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ABSTRACT

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| **Background:** Skin diseases represent a prevalent concern globally, impacting people of all ages. In Bangladesh, a country renowned for its diverse flora, local communities have a long-standing tradition of harnessing the therapeutic properties of native plants to address various skin ailments. These natural remedies have been employed for centuries to treat a wide range of conditions, from minor wounds and burns to more complex issues like acne, psoriasis, and dermatitis. The rich biodiversity found in this region provides an array of botanical resources, each with unique healing attributes. It allows local populations to create effective treatments rooted in their cultural heritage.**Aim:** The purpose of this study is to create a comprehensive and detailed catalog of plants traditionally used for preventing skin diseases in Bangladesh. This document compiles essential information about each plant, including the scientific name, local name, family name, and the parts used to alleviate skin conditions. By consolidating this information, the catalog will assist researchers in discovering new skin protective agents.**Results:** A total of 181 different plant species from 71 families are listed for their traditional use in treating skin diseases. Leaves are the most commonly used part of plants for treating dermatological conditions, with 97 species specifically recognized for this purpose. In addition to leaves, whole plants, bark, and fruits are also frequently used. Some common skin diseases that can be treated with these plants include dermatitis, eczema, scabies, abscesses, and chickenpox. |

*Keywords: Medicinal plant; Skin disease; Herbal medicine; Acne; Skin.*

1. INTRODUCTION

The skin is recognized as the largest organ of the human body, comprising approximately 16% of an adult's total body weight (McLafferty et al., 2012). It serves a dual role as both a barrier and a protective shield, safeguarding internal organs from microbial invasion and ultraviolet radiation (Makgobole et al., 2023). The skin's architecture is complex, consisting of epithelial and mesenchymal tissues, including a multilayered stratified outer layer known as the epidermis. Additionally, it features accessory structures such as hair follicles, sweat glands, and sebaceous glands, as well as the dermis, which comprises collagen and elastic fibers supported by a subcutaneous layer of fat (Lai-Cheong & McGrath, 2017). Subcutaneous tissues in the skin are characterized by lobules of adipocytes (fat cells) partitioned by fibrous septa formed from collagen and blood vessels. This tissue is essential for various functions, including thermoregulation, insulation, energy storage, and protection against mechanical injuries (Gilaberte et al., 2016)(Segura & Requena, 2008).

There are over 3,000 recognized skin diseases, both acute and chronic, that can affect individuals across diverse age groups and socioeconomic backgrounds (Richard et al., 2022). The World Health Organization approximates that around 1.8 billion individuals are impacted by skin disorders at any moment. (World Health Organization and others, 2023).

The incidence of skin diseases varies by geographic region and is influenced by factors such as genetic predisposition, race, religion, occupation, nutrition, lifestyle, and environmental conditions. In developing countries, circumstances such as high temperatures, inadequate hygiene, limited access to clean water, overcrowding, and elevated interpersonal contact exacerbate problems such as pyoderma, scabies, and fungal infections (Moniruzzaman Khan, 2019). The skin is continuously exposed to harmful environmental elements, including UV radiation, particulate matter, outdoor air pollutants, heavy metals, and gaseous contaminants, all of which can impair the skin's barrier function and contribute to aging, inflammatory disorders, acne, and potentially skin cancers, including melanoma and squamous cell carcinoma (Belzer & Parker, 2023).

Skin disorders can be categorized into nine primary classifications: rashes, viral infections, bacterial infections, fungal infections, parasitic infections, pigmentation disorders, tumors and malignancies, trauma, and other conditions (Tabassum & Hamdani, 2014). Some of the most common skin diseases include acne, atopic dermatitis, and psoriasis (Barankin & DeKoven, 2002).

Since ancient times, People have looked for natural remedies for health problems. (Bauer Petrovska, 2012). Early humans acknowledged the healing properties of plants, a knowledge that has evolved over time. Presently, numerous treatments for infections, cardiovascular diseases, and cancer are derived from botanical sources. For example, aspirin, an extensively utilized analgesic, is sourced from the bark of the willow tree (Niazi & Monib, 2024). The World Health Organization has emphasized the importance of traditional Indigenous medicines, particularly as many rural populations in developing countries depend on these as their primary healthcare resources. Reports indicate that approximately 85% of all medications employed in primary healthcare originate from plants (Abbasi et al., 2010). The application of medicinal plants for skin care, both in traditional practices and the cosmetic industry, is increasingly recognized, leading to the incorporation of plant extracts in numerous skincare products (Mabona & Van Vuuren, 2013).

The healing of skin diseases often involves the use of medicinal plants that contain bioactive compounds, including flavonoids, quinones, phenolic acids, phenylpropanoids, terpenoids, tannins, and sugars. These compounds primarily provide antimicrobial properties, demonstrate antioxidant effects, and promote cell proliferation, collagen synthesis, and DNA reproduction (Budovsky et al., 2015). Several traditionally used medicinal plants have been scientifically proven to heal skin diseases, including *Curcuma longa* L., *Azadirachta indica* A., and *Cassia tora* L. (Baby et al., 2022; Shamsi & Ahmad, 2019; Vaughn et al., 2016)

Despite Bangladesh's relatively small land area, its fertile soil and favorable climate contribute to a rich diversity of plant life. The country’s traditional healing practices, established over centuries, are deeply integrated into local communities. Approximately 1,000 medicinal plants are acknowledged for their therapeutic properties by traditional healers in Bangladesh (Akhtar, 2022).

This review paper aims to compile a comprehensive inventory of medicinal plants commonly used in Bangladesh for the prevention and treatment of skin diseases, consolidating known plants recognized for their efficacy in combating dermatological disorders into a singular document.

2. material and methods

This review covers a range of plant species, carefully chosen based on reports available until February 2025. To gather pertinent information, a detailed search was performed across multiple electronic databases, including Google Scholar, PubMed, Scopus, Web of Science, and ScienceDirect. The keywords used in this search primarily centered on “skin disease,” “Bangladeshi,” “medicinal plants,” and “traditional medicine.”

The data obtained from the analyzed articles emphasizes important aspects such as the scientific name of each plant, its family classification, the local name used within Bangladeshi culture, and the specific parts of the plant employed for medicinal purposes. Only articles that provided this necessary information were included as references, ensuring a comprehensive and dependable overview of the topic.

3. Traditionally used plants for treating skin diseases

Table 1 presents a comprehensive list of widely recognized plants that have been utilized in traditional medicine in Bangladesh for the prevention and treatment of various skin ailments.

**Table 1:** List of medicinal plants traditionally used to alleviate skin diseases.

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| **Sl.****No.** | ***Scientific Name*** | **Family** | **Local Name** | **Parts used to treat skin diseases** | **Reference** |
| 1 | *Alternanthera sessilis* (L.) R.Br. ex DC. | Amaranthaceae | Chenchi shak | Leaves | (Rahmatullah, Zobaer, et al., 2010) |
| 2 | *Xanthium indicum* J. Koenig ex Roxb. | Asteraceae | Ghagra kanta | Leaves | (Rahmatullah, Zobaer, et al., 2010) |
| 3 | *Abutilon indicum* (L.) Sweet | Malvaceae | Potari | Stems, bark, leaves | (Bardhan et al., 2018) |
| 4 | *Nyctanthes arbor-tristis* L. | Oleaceae | Shefali | Leaves, bark, flowers, stems, seeds | (Bardhan et al., 2018) |
| 5 | *Phyllanthus niruri* (L.) | Phyllanthaceae | Bhui amla or Bhui amloki | Roots, leaves  | (Bardhan et al., 2018) |
| 6 | *Premna esculenta* Roxb. | Verbenaceae | Lalana, Lalong | Leaves, roots | (Bardhan et al., 2018) |
| 7 | *Alternanthera paronychioides* A. St.-Hil. | Amaranthaceae | Jaal-chanchi | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 8 | *Baliospermum polyandrum* Wight | Euphorbiaceae | Bath-raaz | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 9 | *Barleria lupulina* Lindl. | Acanthaceae | Laal-tarokh | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 10 | *Boehmeria macrophylla* Hornem. | Urticaceae | Jangli-chotta | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 11 | *Cassia occidentalis* L. | Fabaceae | Kulka-sundi | Leaves, seeds | (Rahmatullah, Ferdausi, et al., 2010) |
| 12 | *Cedrus deodara* (Roxb. Ex D. Don) G. Don | Pinaceae | Devdaru | Leaves, bark | (Rahmatullah, Ferdausi, et al., 2010) |
| 13 | *Ceriops tagal* (Perr.) C.B.Rob. | Rhizophoraceae | Goran | Leaves, bark | (Rahmatullah, Ferdausi, et al., 2010) |
| 14 | *Desmodium motorium* (Houtt.) Merr. | Fabaceae | Turi-chombol | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 15 | *Excoecaria agallocha* L. | Euphorbiaceae | Geowa | Leaves, bark | (Rahmatullah, Ferdausi, et al., 2010) |
| 16 | *Ficus hispida* L.f. | Moraceae | Kack-dumur | Leaves, seeds | (Rahmatullah, Ferdausi, et al., 2010) |
| 17 | *Richardia scabra* L. | Rubiaceae | Riim-raaz | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 18 | *Sesbania grandiflora* (L.) *Pers.* | Fabaceae | Bock-phool | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 19 | *Typha minima* Funck ex. Hoppe | Typhaceae | Gola-kashia | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 20 | *Veronica officinalis* L. | Scrophulariaceae | Chapta-pata | Whole plant | (Rahmatullah, Ferdausi, et al., 2010) |
| 21 | *Amaranthus spinosus* L. | Amaranthaceae | Kanta notae | Leaves, roots | (Akber et al., 2011) |
| 22 | *Hibiscus abelmoschus* (L.) Moench | Malvaceae | Lota kosturi | Leaves, flowers, seeds | (Akber et al., 2011) |
| 23 | *Wedelia chinensis* (Osbeck) Merr*.* | Asteraceae | Bhringoraaz | Whole plant, leaves, flowers, seeds | (Akber et al., 2011) |
| 24 | *Desmodium pulchellum* (L.) Benth. | Fabaceae | Maichta | Leaves | (Malek et al., 2012) |
| 25 | Physalis minima L. | Solanaceae | Aigadowa | Leaves, roots | (Malek et al., 2012) |
| 26 | *Hydnocarpus kurzii* (King) Warb. | Flacourtiaceae | Chalmugra | Seed oil | (Rana et al., 2010) |
| 27 | *Lawsonia inermis* L. | Piperaceae | Mehedi | Leaves, bark | (Rana et al., 2010) |
| 28 | *Pandanus tectorius* Parkinson ex Du Roi | Pandanaceae | Keya | Fresh green leaves | (Rana et al., 2010) |
| 29 | *Andrographis paniculata* (Burm.f.) Wall. ex Nees | Acanthaceae | Kalomegh | Leaves,whole plant | (Rahman, 2014) |
| 30 | *Centella asiatica* (L.) Urb. | Apiaceae | Thankuni | Leaves,whole plant | (Rahman, 2014) |
| 31 | *Justicia gendarussa* Burm. f. | Acanthaceae | Jagathm adan | Leaves | (Rahman, 2014) |
| 32 | *Momordica charantia* L. | Cucurbitaceae | Korola | Leaves, fruits | (Rahman, 2014) |
| 33 | *Acacia auriculiformis* A. Cunn.ex Benth.  | Fabaceae | Aakash-moni | Leaves, flowers | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 34 | *Amorphophallus campanulatus* (Dennst.) Nicolson | Araceae | Maan-gachh | Roots | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 35 | *Bougainvillea spectabilis* Willd. | Nyctaginaceae | Gate-phool | Leaves, flowers | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 36 | *Clerodendrum indicum* (L.) Kuntze | Verbenaceae | Bamun hati | Leaves | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 37 | *Cocos nucifera* L. | Arecaceae | Narikel-gachh | Fruits | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 38 | *Crinum latifolium* L. | Amaryllidaceae | Dhak-dhoki | Whole plant | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 39 | *Ipomoea aquatica* Forssk. | Convolvulaceae | Kolmhi-shak | Leaves, stems | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 40 | *Mangifera indica* L. | Anacardiaceae | Aam-gachh | Leaves, seeds, fruit, flower buds | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 41 | *Mikania cordata* (Burm.f.) B.L. Rob. | Asteraceae | Boinha-lota | Leaves, flowers | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 42 | *Plumbago indica* L. | Plumbaginaceae | Agni chita | Roots | (Rahmatullah, Ariful Haque Mollik, et al., 2010) |
| 43 | *Dendrophthoe falcata* (L.f.) Ettingsh. | Loranthaceae | Manda | Bark | (Ziaul et al., 2013) |
| 44 | *Gloriosa superba* L. | Liliaceae | Karihari | Rhizomes | (Ziaul et al., 2013) |
| 45 | *Ipomoea batatus* (L.) Lam. | Convolvulaceae | MistiAlu. | Whole plant | (Ziaul et al., 2013) |
| 46 | *Nerium indicum* L. | Apocynaceae | Korobi | Whole plant | (Ziaul et al., 2013) |
| 47 | *Nicotiana tabacum* L. | Solanaceae | Tamak, Tobacco | Leaves | (Ziaul et al., 2013) |
| 48 | *Ocimum tenuiflorum* L. | Lamiaceae. | KaloTulsi | Whole plant | (Ziaul et al., 2013) |
| 49 | *Chenopodium ambrosioides* (L.) | Chenopodiaceae | Banbatua | Leaves | (Rahman & Keya, 2015) |
| 50 | *Croton bonplandianum* Baill. | Euphorbiaceae | Banjhal | Leaves, seeds | (Rahman & Keya, 2015) |
| 51 | *Glinus oppositifolius* (L.) | Molluginaceae | Gimashak | Whole plant | (Rahman & Keya, 2015) |
| 52 | *Trichosanthes arguina* (L.) | Cucurbitaceae | Chicinga | Leaves, stems | (Rahman & Keya, 2015) |
| 53 | *Datura metel* L. | Solanaceae | Shada dhutura | Leaves | (District, Rani Chowdhury, et al., 2010) |
| 54 | *Lathyrus sativus* L. | Fabaceae | Khesari dal | Seeds | (District, Rani Chowdhury, et al., 2010) |
| 55 | *Terminalia chebula* Retz. | Combretaceae | Horitoki | Fruits | (District, Rani Chowdhury, et al., 2010) |
| 56 | *Eclipta alba* (L.) | Asteraceae | Cherry shak | Leaves, stems | (Rahmatullah, Khatun, et al., 2010) |
| 57 | *Eucalyptus citriodora* Hook. | Myrtaceae | Eucalyptus | Roots, oil | (Rahmatullah, Khatun, et al., 2010) |
| 58 | *Leucas aspera* (Willd.) | Lamiaceae | Dondo-kolosh | Leaves | (Rahmatullah, Khatun, et al., 2010) |
| 59 | *Polyalthia longifolia* (Sonn.) Thwaites | Annonaceae | Devdaru | Leaves, bark | (Rahmatullah, Khatun, et al., 2010) |
| 60 | *Spondias pinnata* (L.) | Anacardiaceae | Amra | Bark | (Rahmatullah, Khatun, et al., 2010) |
| 61 | *Amoora cucullata* Roxb. | Meliaceae | Dhandul, Amur | Leaves | (Apu et al., 2012) |
| 62 | *Trichosanthes dioica* Roxb. | Cucurbitaceae | Potol | Fruits | (Apu et al., 2012) |
| 63 | *Barleria prionitis* L. | Acanthaceae | Chotki pata  | Leaves | (Rahmatullah et al., 2011) |
| 64 | *Catunaregam spinosa* (Thunb.) Triveng | Rubiaceae | Mon kata  | Leaves ,fruits | (Rahmatullah et al., 2011) |
| 65 | *Dillenia indica* L*.* | Dilleniaceae | Joina  | Oil | (Rahmatullah et al., 2011) |
| 66 | *Dipterocarpus turbinatus* C.F.Gaertn | Dipterocarpaceae | Gorjon | Oil | (Rahmatullah et al., 2011) |
| 67 | *Mimosa pudica* L. | Fabaceae | Laal lojjaboti | Leaves | (Rahmatullah et al., 2011) |
| 68 | *Sida cordifolia* L. | Malvaceae | Veola kota  | Roots | (Rahmatullah et al., 2011) |
| 69 | *Justicia adhatoda* L. | Acanthaceae (Perennial) | Shada bashok (Malabar nut) | Leaves | (Kabir et al., 2014) |
| 70 | *Pouzolzia zeylanica* (L.) Benn | Urticaceae | Lajon turi | Leaves | (Kabir et al., 2014) |
| 71 | *Citrus aurantiifolia* (Christm.) Swingle | Rutaceae | pati lebu | Leaves, fruits | (Israt Jahan et al., 2011) |
| 72 | *Kalanchoe pinnata* (Lam.) Pers. | Crassulaceae | Pathorkuchi, | Leaves | (Israt Jahan et al., 2011) |
| 73 | *Lawsonia inermis* L. | Lythraceae | Mehedi | Leaves | (Israt Jahan et al., 2011) |
| 74 | *Morinda angustifolia* Roxb. | Rubiaceae | daru horidra | Leaves, bark | (Israt Jahan et al., 2011) |
| 75 | *Murraya koenigii* (L.) Spreng | Rutaceae | Norshing | Leaves, roots, bark, flowers, fruits | (Israt Jahan et al., 2011) |
| 76 | *Polygonum persicaria* L. | Polygonaceae | Red carpet, Acid pata | Leaves | (Israt Jahan et al., 2011) |
| 77 | *Cuphea hyssopifolia* Kunth | Lythraceae | Rani phool | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 78 | *Dracaena fragrans* (L.) Ker Gawl. | Agavaceae | Dracaena | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 79 | *Eupatorium odoratum* L. | Asteraceae | Phooler chori | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 80 | *Glycosmis pentaphylla* (Retz.) Corr. | Rutaceae | Dathon | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 81 | *Lasia spinosa* (L.) Thwaites | Araceae | Kalo kata | Tuber | (District, Ariful Haque Mollik, et al., 2010) |
| 82 | *Myristica fragrans* Houtt. | Myristicaceae | Joifol | Seeds, fruits, skin of fruits | (District, Ariful Haque Mollik, et al., 2010) |
| 83 | *Persicaria odorata* (Lour.) Soj. | Polygonaceae | Bish katal | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 84 | *Putranjiva roxburghii* Wall | Euphorbiaceae | Joiton, Jiyapoti | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 85 | *Quisqualis indica* L. | Combretaceae | Rail lota | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 86 | *Rauwolfia serpentina* (L.) Benth.ex Kurz | Apocynaceae | Shorpogondha | Leaves, roots, flowers, seeds | (District, Ariful Haque Mollik, et al., 2010) |
| 87 | *Saccharum spontaneum* L*.* | Poaceae | Kash phool | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 88 | *Syngonium podophyllum* Schott | Araceae | Kochu | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 89 | *Terminalia arjuna* (Roxb. ex DC.) Wight & Arn. | Combretaceae | Arjun gach | Bark, fruits | (District, Ariful Haque Mollik, et al., 2010) |
| 90 | *Thyrsostachys siamensis* Gamble | Poaceae | Thai bash | Leaves, stems, roots | (District, Ariful Haque Mollik, et al., 2010) |
| 91 | *Trema orientalis* (L.) Blume | Ulmaceae | Jibon | Whole plant | (District, Ariful Haque Mollik, et al., 2010) |
| 92 | *Trewia polycarpa* Benth. & Hook.f. | Euphorbiaceae | M era gach | Stems, bark | (District, Ariful Haque Mollik, et al., 2010) |
| 93 | *Acacia catechu* (L.f.) Willd | Fabaceae | Khair | Heartwood extract | (Islam et al., 2014) |
| 94 | *Aquilaria agallocha* Roxb. | Thymelaeaceae | Agar | Heartwood extract | (Islam et al., 2014) |
| 95 | *Butea monosperma* (Lam.) Taub | Fabaceae | Palash | Leaves paste | (Islam et al., 2014) |
| 96 | *Carica papaya* (L.) | Caricaceae | Madhupha,Pepe | Leaves paste | (Islam et al., 2014) |
| 97 | *Hemidesmus indicus* (L.) R.Br | Asclepiadaceae | Anantamul | Bark paste | (Islam et al., 2014) |
| 98 | *Hyptis suaveolens* (L.) Poit. | Lamiaceae | Tokma,Bilati tulsi | Leaves | (Islam et al., 2014) |
| 99 | *Madhuca indica* J.F.Gmel | Sapotaceae | Mahua | Leaves paste | (Islam et al., 2014) |
| 100 | *Mesua ferrea* (L.) | Clusiaceae | Nageshwar | Seed oil | (Islam et al., 2014) |
| 101 | *Polygonum tomentosum* Willd. | Polygonaceae | Bis kathali | Decoction of leaves | (Islam et al., 2014) |
| 102 | *Cuscuta reflexa* Roxb. | Cuscutaceae | Shorno lota | Whole plant | (Rani Biswas et al., 2011) |
| 103 | *Moringa oleifera* Lam. | Moringaceae | Sojina | Leaves, fruits | (Rani Biswas et al., 2011) |
| 104 | *Tinospora cordifolia* Miers | Menispermaceae | Guloncho | Top of stem | (Rani Biswas et al., 2011) |
| 105 | *Curcuma longa* (L.) | Zingiberaceae | Holud | Rhizomes | (Ahmed Mukul et al., 2007) |
| 106 | *Melia azedarach* (L.) | Meliaceae | Bokain | Green leaves | (Ahmed Mukul et al., 2007) |
| 107 | *Phyllanthus emblica* (L.) | Euphorbiaceae | Amoloki | Fruits | (Ahmed Mukul et al., 2007) |
| 108 | *Cassia tora* (L.) | Caesalpinaceae | Badam gach | Leaves | (Rahmatullah, Rahman, et al., 2010) |
| 109 | *Colocasia esculenta* (L.) Schott | Araceae | Kalo kachu | Whole plant | (Rahmatullah, Rahman, et al., 2010) |
| 110 | *Desmodium gangeticum* Blanco | Fabaceae | Chailani | Leaves | (Rahmatullah, Rahman, et al., 2010) |
| 111 | *Euphorbia thymifolia* L. | Euphorbiaceae | Dudhbon | Whole plant | (Rahmatullah, Rahman, et al., 2010) |
| 112 | *Leucas indica* (L.) R.Br. | Lamiaceae | Dol kolosh | Whole plant, leaves | (Rahmatullah, Rahman, et al., 2010) |
| 113 | *Vernonia cinerea* (L.) Less. | Asteraceae | Hiyal muti | Leaves | (Rahmatullah, Rahman, et al., 2010) |
| 114 | *Basella alba* (L.) | Basellaceae | Pui shak | Leaves, stems | (Rahmatullah, Rezwanul Haque, et al., 2010) |
| 115 | *Solanum surattense* Burm.f. | Solanaceae | Kontikari | Leaves, stems | (Rahmatullah, Rezwanul Haque, et al., 2010) |
| 116 | *Zingiber officinale* Roscoe | Zingiberaceae | Ada | Rhizomes | (Rahmatullah, Rezwanul Haque, et al., 2010) |
| 117 | *Adhatoda vasica* Nees | Acanthaceae | Bashok | Leaves, bark | (Mehedi Hasan et al., 2010) |
| 118 | *Calotropis gigantea* (L.) W.T.Aiton | Asclepiadaceae | Akondo | Leaves, gums | (Mehedi Hasan et al., 2010) |
| 119 | *Capparis spinosa* (L.) | Capparaceae | Kalu kata | Leaves | (Mehedi Hasan et al., 2010) |
| 120 | *Catharanthus roseus* (L.) G.Don | Apocynaceae | Noyon tara | Leaves | (Mehedi Hasan et al., 2010) |
| 121 | *Costus speciosus* (J.Koenig) Sm. | Costaceae | Keow | Roots | (Mehedi Hasan et al., 2010) |
| 122 | *Cyperus rotundus* L. | Cyperaceae | Mutha, Bada | Whole plant (but mainly roots are used) | (Mehedi Hasan et al., 2010) |
| 123 | *Ficus racemosa* L. | Moraceae | Dumur | Leaves, roots, bark, fruits | (Mehedi Hasan et al., 2010) |
| 124 | *Justicia paniculata* Burm.f. | Acanthaceae | Kalomegh | Leaves | (Mehedi Hasan et al., 2010) |
| 125 | *Ocimum basilicum* L. | Lamiaceae | Babui tulshi | Mainly leaves, seeds (occasionally) | (Mehedi Hasan et al., 2010) |
| 126 | *Ocimum sanctum* L. | Lamiaceae | Kalo tulshi | Mainly leaves, occasionally seeds | (Mehedi Hasan et al., 2010) |
| 127 | *Phyllanthus reticulatus* Poir. | Euphorbiaceae | Panishitki | Leaves | (Mehedi Hasan et al., 2010) |
| 128 | *Terminalia bellirica* (Gaertn.) Roxb*.* | Combretaceae | Bohera | Fruits | (Mehedi Hasan et al., 2010) |
| 129 | *Argyreia speciosa* (L.f.) | Convolvulaceae | Bainnajhan | Whole plant | (Rahmatullah et al., 2009) |
| 130 | *Cassia fistula* L. | Fabaceae | Bhandhor-late | Leaves, fruits | (Rahmatullah et al., 2009) |
| 131 | *Citrus grandis* (L.) Osbeck | Rutaceae | Jhambura | Fruits | (Rahmatullah et al., 2009) |
| 132 | *Curcuma zedoaria* (Christm.) Roscoe | Zingiberaceae | Ramane-sham | Tuber | (Rahmatullah et al., 2009) |
| 133 | *Mucuna pruriens* (L.) DC. | Fabaceae | Bilhai-chimte | Leaves | (Rahmatullah et al., 2009) |
| 134 | *Solanum melongena* L. | Solanaceae | Bharhing | Leaves | (Rahmatullah et al., 2009) |
| 135 | *Abroma augusta.* L. | Sterculiaceae | Ulot-kombol | Leaves, stems, bark | (Rahmatullah, Jahan, et al., 2010) |
| 136 | *Aerva sanguinolenta* (L.) Blume | Amaranthaceae | Bish-jon | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 137 | *Anisomeles heyneana* Benth. | Lamiaceae | Gobura | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 138 | *Axonopus compressus* (Sw.) P.Beauv | Poaceae | Chapla-ghas | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 139 | *Cassia alata* L. | Fabaceae | Bhai-chondal | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 140 | *Cayratia trifolia* (L.) Domin | Vitaceae | Ghai-gobla | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 141 | *Clitoria ternatea* L. | Fabaceae | Aparajita | Leaves, roots | (Rahmatullah, Jahan, et al., 2010) |
| 142 | *Tinospora crispa* (L.) Hook.f. & Thomson | Menispermaceae | Bashi-shondori | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 143 | *Tragia involucrata* L. | Euphorbiaceae | Bichuti | Leaves, roots | (Rahmatullah, Jahan, et al., 2010) |
| 144 | *Vitex negundo* L. | Verbenaceae | Nishinda | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 145 | *Vitis latifolia* Roxb. | Vitaceae | Haar-pollob | Whole plant | (Rahmatullah, Jahan, et al., 2010) |
| 146 | *Azadirachta indica* A.Juss. | Meliaceae | Neem | Leaves, seeds, tree | (Dulla & Jahan, 2017) |
| 147 | *Chromolaena odorata*  (L.) R.M.King & H.Rob. | Asteraceae | Germany lata | Leaves | (Dulla & Jahan, 2017) |
| 148 | *Euphorbia hirta* L. | Euphorbiaceae | Sada dudhagach | All parts | (Dulla & Jahan, 2017) |
| 149 | *Acalypha indica* L. | Euphorbiaceae | Muktajhuri | Leaves | (Rahman, 2013) |
| 150 | *Achyranthes aspera* L. | Amaranthaceae | Apang | Leaves | (Rahman, 2013) |
| 151 | *Aegle marmelos* L. | Rutaceae | Bel | Leaves | (Rahman, 2013) |
| 152 | *Ageratum conyzoides* L. | Asteraceae | Ochunti | Leaves, stems | (Rahman, 2013) |
| 153 | *Albizia procera* (Roxb.) Benth*.* | Fabaceae | Koroi | Bark | (Rahman, 2013) |
| 154 | *Annona squamosa* L. | Annonaceae | Ata | Leaves | (Rahman, 2013) |
| 155 | *Argemone mexicana* L. | Papaveraceae | Sialkata | Latex | (Rahman, 2013) |
| 156 | *Aristolochia indica* L. | Aristolochiaceae | Isharmul | Leaves | (Rahman, 2013) |
| 157 | *Coccinia grandis* (L.) Voigt | Cucurbitaceae | Telakucha | Whole plant | (Rahman, 2013) |
| 158 | *Cynodon dactylon* (L.) Pers. | Poaceae | Durbaghas | Whole plant | (Rahman, 2013) |
| 159 | *Dalbergia sissoo* Roxb. ex DC. | Fabaceae | Sissoo | Woods | (Rahman, 2013) |
| 160 | *Ficus benghalensis* L. | Moraceae | Bot | Leaves | (Rahman, 2013) |
| 161 | *Mimosa diplotricha* C.Wright | Fabaceae | Sada lajjabati | Leaves | (Rahman, 2013) |
| 162 | *Oxalis corniculata* L. | Oxalidaceae | Amrul | Whole plant | (Rahman, 2013) |
| 163 | *Phoenix sylvestris* (L.) Roxb. | Arecaceae | Khejur | Spines | (Rahman, 2013) |
| 164 | *Rumex maritimus* L. | Polygonaceae | Junglipalong | Roots | (Rahman, 2013) |
| 165 | *Senna alata* (L.) Roxb. | Fabaceae | Dadmardan | Leaves | (Rahman, 2013) |
| 166 | *Stephania japonica* (Thunb.) Miers | Menispermaceae | Akarnandi | Leaves | (Rahman, 2013) |
| 167 | *Tridax procumbens* L. | Asteraceae | Tridhara | Whole plant | (Rahman, 2013) |
| 168 | *Laportea crenulata* (Miq.) Wedd. | Urticaceae | Damma | Roots | (Rahmatullah, Abdul Momen, et al., 2010) |
| 169 | *Calotropis procera* (Aiton) W.T.Aiton | Asclepiadaecae | Milkweed | Bark | (Ahmed et al., 2021) |
| 170 | *Aloe barbadensis* Mill*.* | Asphodelaceae | Aloe vera | Leaves | (Rahman & Kona, 2016) |
| 171 | *Artocarpus heterophyllus* Lam. | Moraceae | Kathal | Leaves | (Rahman & Kona, 2016) |
| 172 | *Cucumis melo* L. | Curcurbitacea | Futi | Pulp of fruit | (Rahman & Kona, 2016) |
| 173 | *Heliotropium indicum* L. | Boraginaceae | Hatisur | Whole plant | (Rahman & Kona, 2016) |
| 174 | *Jasminum grandiflorum* L. | Oleacea | Beli | Roots | (Rahman & Kona, 2016) |
| 175 | *Luffa cylindrica* M.Roem*.* | Curcurbitacea | Dhundal | Fruits | (Rahman & Kona, 2016) |
| 176 | *Senna sophera* (L.) Roxb*.* | Caesalpiniaceae | Dadmordan | Bark | (Rahman & Kona, 2016) |
| 177 | *Diplazium esculentum* (Retz.) Sw. | Woodsiaceae | Dheki shak | Roots | (Afroz et al., 2011) |
| 178 | *Solanum torvum* Sw*.* | Solanaceae | Tith begun | Fruits | (Afroz et al., 2011) |
| 179 | *Clerodendrum viscosum* Vent. | Verbenaceae | Bhat | Leaves | (Khatun & Mahbubur Rahman AHM, 2018) |
| 180 | *Lablab purpureus* L. | Fabaceae | Shim | Leaves | (Khatun & Mahbubur Rahman AHM, 2018) |
| 181 | *Mangifera indica* L. | Anacardiaceae | Amm | Gums | (Khatun & Mahbubur Rahman AHM, 2018) |

4. The significance of diverse plant families

This review paper lists a total of 181 plant species used for treating skin diseases, which belong to 71 different plant families. Among these families, Fabaceae has the highest number of species, contributing 11% of the total with 19 different plants. Some of the most common plants in the Fabaceae family include *Cassia occidentalis* L., *Desmodium motorium* (Houtt.) Merr., and *Sesbania grandiflora* (L.) Pers.

The second most significant family for traditional skin disorder treatments is Euphorbiaceae, which includes 11 species—constituting 6% of the total plant species. Common plants in this family are *Baliospermum polyandrum* Wight*, Excoecaria agallocha* L., and *Euphorbia thymifolia* L.

Asteraceae is the third most common family, traditionally used for skin diseases, with 9 plant species representing 5% of the total. Notable members of this family include *Xanthium indicum* J., *Wedelia chinensis* (Osbeck) Merr., and *Eclipta alba* (L.) Hassk.

Other important families in this list are Acanthaceae (4%), Lamiaceae (4%), Cucurbitaceae (3%), and Solanaceae (3%).

In conclusion, the Fabaceae family may possess certain chemical constituents that could be beneficial for skin health, as a significant number of plants traditionally used for treating skin diseases belong to this family.

**Fig 1:** Contribution of Various Plant Families to Traditional Remedies for Skin Disorders

**5. FUTURE PERSPECTIVE**

The review paper systematically documents the plants commonly used in Bangladesh to treat skin diseases. Among these plants, the most frequently mentioned are *Curcuma longa* L., *Clerodendrum viscosum* Vent., *Cassia tora* L., and *Azadirachta indica* A. Juss. These plants are abundantly found in various regions throughout Bangladesh and are utilized for dermatological conditions.

The information in this article can help researchers identify plants traditionally used to treat skin diseases, although their effectiveness for these conditions has not yet been scientifically verified providing a foundation for further scientific investigation. Future studies could focus on isolating bioactive compounds, conducting pre-clinical and clinical trials, exploring synergistic effects of plant combinations, and designing skincare diets based on the findings of this review.

For researchers, this paper may serve as a guide to pinpoint key plants for conservation, explore economic opportunities within the herbal industry, and further research on plant-based treatments for skin diseases.

6. Conclusion

This review paper aims to systematically compile a comprehensive list of traditional medicinal plants utilized in the treatment of dermatological conditions, synthesizing findings from various research articles focused on local flora across Bangladesh. The compilation encompasses 181 species distributed among 71 distinct botanical families. While many of these plants warrant further pharmacological investigation, several have already demonstrated verified therapeutic properties that may mitigate skin disorders. This manuscript will assist researchers in identifying underexplored species and encouraging further scientific inquiry into their potential therapeutic efficacy and integration into modern medical practices.

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DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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