



## Traditional uses of medical plants for common diseases in Saidabad Block

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### Abstract

The utilization of traditional medicinal plants in primary healthcare is an important component in rural and semi-urban area of India. In Saidabad block of Telangana, the local communities are treating common ailments like respiratory infection, gastrointestinal, skin diseases, fever, diabetes, hypertension and musculoskeletal diseases with different medicinal plants. The study records are of commonly used species like *Azadirachta indica*, *Ocimum sanctum*, *Curcuma longa*, *Tinospora cordifolia*, and *Zingiber officinale* that are used as decoctions, pastes, powders and juices. Healers, elders and women in the households are the main custodians of traditional knowledge. The study emphasizes the need of medicinal plants as low-cost and culturally-appropriate means of healthcare and the challenges of urbanization, loss of habitat and traditional knowledge amongst the younger generation. To preserve this ethnomedicinal tradition, there is a need for conservation, scientific validation and incorporation of safe and appropriate use of herbs in the public healthcare system.

**Keywords:** Ethnomedicine, medicinal plants, traditional healthcare, herbal remedies, community healthcare

### Introduction

The importance of traditional medicine has not been lost in the healthcare system in many rural and semi-urban areas of India, especially when it comes to treating common non-emergency ailments. In the villages like Saidabad block of Hyderabad, Telangana, traditional ethnomedicinal knowledge is still available with the elders, people from local households and traditional healers who use locally available medicinal plants to provide primary health care for local communities. It has evolved over centuries of observation, cultural use and experience and is closely tied to local traditions, beliefs and environmental resources. Ethnobotanical research conducted throughout India and other countries have shown that medicinal plants are used for treatment of various common diseases including diabetes, blood pressure, skin disorders, respiratory infection, digestive problems, fever, etc., and joint pain (Singla *et al.*, 2025). Commonly, herbal remedies are made as either a poultice, a powder, a juice, an oil or a paste from various parts of the plant including leaves, roots, bark, rhizomes, seeds, and fruits. Many medicinal plants are used in many homes as a cheap and accessible solution to the health issues faced in day-to-day life, e.g. neem (*Azadirachta indica*), tulsi (*Ocimum sanctum*), ginger (*Zingiber officinale*), turmeric (*Curcuma longa*), amla (*Emblica officinalis*), and fenugreek (*Trigonella foenum-graecum*) (Ralte *et al.*, 2024). Several reasons, such as cultural acceptance, low cost, easy availability of medicinal plants, and the lack of side effects of using herbal medicines as compared to synthetic drugs, affect the continued use of medicinal plants in Saidabad-type localities. Traditional healers like vaidhyans, hakeems and folk practitioners may have specific knowledge of plant identification, preparation techniques, dosages and specific disease treatments. Women inside the domestic circle also have a great deal of influence in the preservation and transmission of ethnomedicines, particularly in the treatment of children, old people and minor ailments (Mandal & Das, 2021) [14]. Yet, traditional medicinal knowledge is losing its strength and continuity with rapid urbanization and degradation of habitats, and

with the loss of interest in traditional medicine amongst the younger generation. The drift in diversity of medicinal plants and the decreasing knowledge of these plants by the local communities indicate the need to document, protect and scientifically validate traditional uses of medicinal plants (Latif *et al.*, 2025) [3]. Therefore, the study of the traditional uses of medicinal plants in Saidabad block is not only important for conserving the cultural heritage of the local communities but also for the identification of healthcare resources which are locally relevant, low cost and sustainable that can contribute to the well-being of local communities and future medicinal use as well.

### Materials and Methods

#### 1. Study area

Saidabad block was identified as a representative semi-urban and peripheral rural area with a heterogeneous landscape with residential settlements, small agricultural fields, roadside vegetation, temple gardens and home gardens in the context of the present study. The area has a socio-cultural diversity with different lifestyles, and still has communities relying on traditional plant-based products for primary health care management. The information was suggested to be gathered using semi-structured interview with traditional healers (vaidhyans, hakeem, nattuvaithiar etc) and elderly population and women of households who had knowledge of herbal medicines. To locate the common medicinal plant species, home gardens, temple premises and nearby vacant lands were visited in the fields. Structured questionnaires were developed to capture data related to local and scientific name of plants, parts used, methods of preparation, dosage, diseases treated, and modes of administration (oral, topical, and inhalation).

#### 2. Data analysis

The data gathered are presented in a plant use list. Common diseases are classified in categories (Respiratory, Digestive, Skin, Musculoskeletal, Metabolic etc.). Brief descriptions of each of the plants including the local name, family and cited uses. The information is analyzed based on the available ethnobotanical literature.

## Traditional Medicinal Plants and Common Diseases

### 1. Respiratory illnesses

Many respiratory infections and seasonal respiratory disorders are prevalent health issues among many communities in India, especially during climatic changes. Traditional medicinal plants are commonly utilized as expectorants, anti-inflammatory and immune supporting drugs for cough, cold, bronchitis, throat irritation and asthma. The leaf decoctions with honey/sugar are commonly used to treat cough, bronchitis and asthmatic symptoms as it has expectorant, bronchodilatory and anti-inflammatory properties (Latif *et al.*, 2025) [3]. The juice of *Zingiber officinale* rhizome is used extensively in the treatment of throat irritation, cough and cold as it has antimicrobial, anti-inflammatory and immune stimulating properties and can also be taken with honey. *Piper longum* dried fruits are traditionally used in chronic cough and bronchial asthma due to its expectorant and respiratory stimulant property in combination with honey/warm milk. In a similar way, stem decoction of *Tinospora cordifolia* (Guduchi/Giloy) is used for recurrent fever, respiratory infections and is highly beneficial in immunomodulatory and antipyretic effects. Many of these treatments are used in the home to treat early stages of respiratory illness (Kaundal *et al.*, 2025) [2].

### 2. Diarrhea, dysentery, indigestion and acidity

Diarrhea, dysentery, indigestion, bloating and acidity are the most common gastrointestinal disorders found in communities. The traditional healthcare system utilizes medicinal plants with astringent, antimicrobial, carminative and digestive stimulant properties to control these diseases. *Moringa oleifera* (drum stick) leaf powder or decoction is used traditionally to aid digestion and decrease diarrhea because of its antidiarrheal, anti-inflammatory, and nutrient content. The antimicrobial and astringent properties of *Psidium guajava* (guava) leaf decoctions make them effective in treating diarrhea and dysentery. The seeds of *Foeniculum vulgare* (fennel) are used as a carminative and digestive stimulant and are commonly chewed or as a decoction to relieve bloating, flatulence and indigestion (Salomé *et al.*, 2020) [13]. *Emblica officinalis* (amla) are used as medicine to promote digestion, liver and stomach health and are also consumed fresh, dried or in juice form due to their antioxidant, hepatoprotective and gastroprotective properties.

### 3. Skin diseases and wounds

Traditional treatment of locally available medicinal plants is very common in the treatment of skin infections, insect bites, minor wounds, burns, and inflammatory skin conditions in traditional healthcare systems. The antimicrobial and anti-inflammatory properties of *A. indica* are being used for treatment of boils, eczema and insect bites, while the antimicrobial and antifungal properties of leaf decoctions are used for bathing in case of skin infections. The rhizomes of *Curcuma longa* (turmeric) have been traditionally applied to wounds, burns and inflamed skin where they exhibit antimicrobial, anti-inflammatory and wound healing activity, when used fresh or powdered and mixed with water or milk cream (Garcia *et al.*, 2024) [12]. The leaves of *Calotropis gigantea*/Aak/Madar is used locally on boils and skin ulcers, but with care due to the toxicity of the plant. Neem baths and herbal paste made

from turmeric are still used as home remedies in Saidabad-type localities for treating injuries and skin infections.

### 4. Fever, malaria like symptoms and general weakness

In traditional healing practice, medicinal plants known as 'cooling agents', purifiers of blood or immune supportive plants are used to treat fever and fever-like illnesses. The aqueous decoction of the dried whole plant of *Andrographis paniculata* (Kalmegh) is used extensively as tonic in large doses for fever and upper respiratory infections, as well as for weakness, due to its antipyretic, immunomodulatory and antimicrobial activities. *Tinospora cordifolia* (Guduchi/Giloy) stem decoctions are frequently used for chronic fever, fatigue and weakness after illness and are regarded as immune supportive restorative tonic (Ralte *et al.*, 2024). The *O. sanctum* (tulsi) leaf decoction combined with black pepper and honey is traditionally consumed to treat fever, cold and respiratory discomfort due to its antipyretic, anti-inflammatory and immune supporting properties. These medicinal plants are also found growing in home gardens, temple area and community gardens of Saidabad type localities and have therapeutic, cultural and religious significance (Moreau *et al.*, 2024) [11].

### 5. Diabetes and metabolic disorders

Diabetes ("sugar disease") is a condition which is traditionally treated in many Indian communities by managing their diet, changing their lifestyle and using herbs. *Trigonella foenum-graecum* (fenugreek) seeds have a hypoglycemic and lipid-modulating effect and they are soaked overnight and taken on an empty stomach or added to chapatti dough. *Gymnema sylvestri* (Gudmar) leaf powder or decoction is used in traditional medicine to help get rid of sugar cravings and maintain a balance in the blood sugar level because of its reported antidiabetic and insulin secretagogue properties. Juice of *Momordica charantia* (bitter melon) or cooked fruits are frequently taken for its hypoglycemic and insulin-mimetics properties (Lailaty *et al.*, 2024) [10]. Traditional diabetes management includes consumption of the leaves of *Costus igneus* (insulin plant/Malabar spinach), which are also consumed raw or in soups and salads.

### 6. Hypertension and cardiovascular related problems

*Rauvolfia serpentina* (Sarpagandha) roots have been used traditionally in small controlled doses as powders to treat hypertension and nervous disorders. The plant has reserpine which has an antihypertensive effect. *Allium sativum* (garlic), is used directly as a food or part of food, being recognized for its mild antihypertensive, anti-atherosclerotic and antiplatelet activity, and therefore is recommended for cardiovascular health and to reduce blood pressure (Singh *et al.*, 2024) [9].

### 7. Musculoskeletal and pain related complaints

Labouring workers, farmers and older people in traditional communities are prone to musculoskeletal disorders like joint pain, backache, muscle fatigue and inflammatory disorders. Medicinal pastes, oils and oral tonics are commonly used to alleviate pain and to recover from being physically exhausted and exhausted, using herbal remedies (Kaundal *et al.*, 2025) [2]. Rhizome paste of *Zingiber officinale* (ginger) is used traditionally for its anti-inflammatory and analgesic effect on painful joints and

muscles, whereas *Curcuma longa* (turmeric) paste combined with oil or milk is traditionally used on swollen or inflamed joints. Because of its adaptogenic and anti-inflammatory properties, *Withania somnifera* (Ashwagandha) root powder is taken with milk to enhance strength, build endurance and aid recovery from lassitude. Women are key in the conservation and utilization of ethnomedicinal knowledge, especially for the use of *Curcuma longa* (turmeric), *Azadirachta indica* (neem), *Ocimum sanctum* (tulsi) and

*Zingiber officinale* (ginger) in curing minor ailments and family health care (Beura *et al.*, 2024)<sup>[8]</sup>. Traditional healers like vaidhyan, hakeem and nattuvaiithiar have special knowledge in the medications combinations and methods, dosage control and treatment of chronic diseases. There are also small herbs gardens in many temples, household courtyards and community areas with tulsi, neem and other culturally significant plants, where healthcare is intertwined with religion and culture (Choudhury *et al.*, 2012)<sup>[17]</sup>.

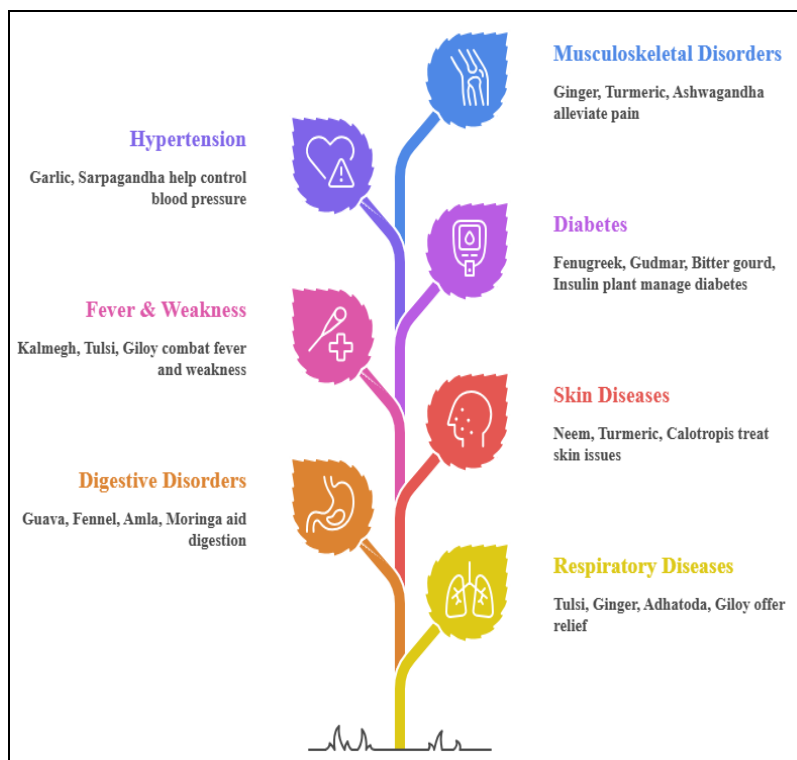


Fig 1: Disease Categories and Associated Medicinal Plants in Saidabad Block

### Medicinal Plants commonly reported in Saidabad-type settings

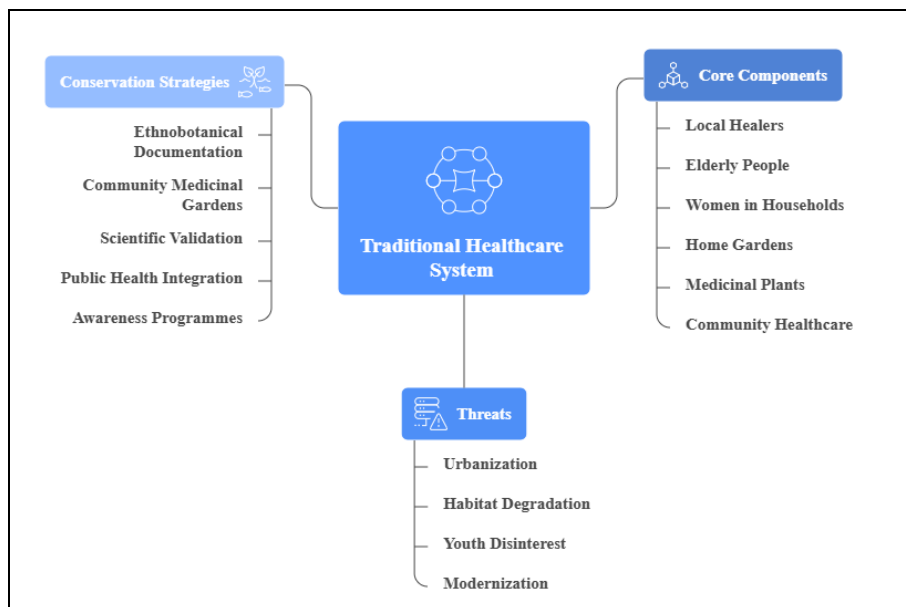
The table below summarizes a representative set of plants that would be expected in an ethnobotanical survey of Saidabad block, based on pan-Indian patterns.

Plant	Family	Common diseases treated	Mode of use
<i>Azadirachta indica</i> (Neem)	Meliaceae	Skin infections, boils, eczema, insect bites	Leaf paste, decoction for bathing
<i>Curcuma longa</i> (Turmeric)	Zingiberaceae	Wounds, burns, joint pain, skin infections	Paste (external), powder in food
<i>Tinospora cordifolia</i> (Guduchi)	Menispermaceae	Fever, respiratory infections, general weakness	Stem decoction orally
<i>Andrographis paniculata</i> (Kalmegh)	Acanthaceae	Fever, cold, infections	Aqueous decoction
<i>Adhatoda vasica</i> (Adulsa)	Acanthaceae	Cough, bronchitis, asthma	Leaf decoction with honey
<i>Moringa oleifera</i> (Drumstick)	Moringaceae	Diarrhea, indigestion, malnutrition	Leaf powder or decoction
<i>Psidium guajava</i> (Guava)	Myrtaceae	Diarrhea, dysentery	Leaf decoction
<i>Foeniculum vulgare</i> (Fennel)	Apiaceae	Indigestion, flatulence	Seeds chewed or decoction
<i>Emblca officinalis</i> (Amla)	Phyllanthaceae	Digestive weakness, liver health	Fruit eaten or juice
<i>Ocimum sanctum</i> (Tulsi)	Lamiaceae	Fever, cold, cough	Leaf decoction with honey/pepper
<i>Trigonella foenum-graecum</i> (Fenugreek)	Fabaceae	Diabetes	Seeds soaked and

### Conservation and Threats to Medicinal Plant Knowledge

As a result of rapid urbanization and of changes in land use, there is a decline of wild medicinal plant species in semi-urban localities like Saidabad block due to the expansion of roads, residential areas and commercial infrastructure. Concurrently, younger generations have become more dependent on modern allopathic medicines, resulting in the transference of traditional ethnomedicinal knowledge of the

old generation to the young ones being reduced. The indiscriminate collection and commercialization of valuable medicinal plants from forests and uncultivated areas also pose a threat to the species in the wild. Though these are the challenges, the conservation programmes are initiated by Krishi Vigyan Kendras (KVKs), research institutions and medicinal plant demonstration gardens in Telangana that promote the cultivation and awareness of these species (Datta *et al.*, 2014)<sup>[16]</sup>.



**Fig 2:** Traditional Health Care Systems: Components, Threats and Conservations

### Public Health and Modern Medicine (PHMM) Connection.

Traditional medicine is valued by the World Health Organization (WHO) and national health agencies as an important part of primary healthcare because of its significance in low- and middle-income countries where the availability of modern medical facilities is lack. The integration of Ayurveda, Unani, Siddha and folk medicine into mainstream health care system in India is in progress. Utilization of traditional knowledge in combination with the modern medical system can be used in the treatment of common ailments in Saidabad-type localities without being expensive or culturally non-feasible. Community-based health education programmes can be used to train ASHA workers, nurses, anganwadi workers to record and popularize safe evidence-based herbal medicines like neem, tulsi, ginger and amla and to discourage unsafe practices. Knowledge about herb-drug interactions is also necessary; particularly, when the patient consumes plants like Fenugreek, Giloy, Garlic and Sarpagandha with hypoglycemic and/or antihypertensive drugs. The local colleges, research institutes, and health care institutions can continue to contribute to pharmacovigilance and scientific validation by conducting toxicity studies, phytochemical screening and small-scale clinical studies on the commonly used medicinal plants (Sagar *et al.*, 2025, Rahaman & Karmakar, 2015) [7, 15]. If not used properly and with the right scientific advice, there can be a risk of using toxic or not correctly prepared herbal remedies. Therefore, integration of traditional medicine with modern healthcare with good balance is needed for safe and effective community healthcare.

### Sociocultural aspects of plant healing

In Saidabad-type localities, plant-based healing is strongly related to cultural and religious beliefs besides medicinal use. The association of tulsi (*Ocimum sanctum*) and neem (*Azadirachta indica*) with purity, protection and spirituality enhances their importance in the context of home remedies (Chashike *et al.*, 2025) [6]. Tulsi plants are usually cultivated in temples and home courtyards, and neem is thought to ward off skin ailments and evil spirits. Women are

important participants in household herbal healthcare particularly in relation to children, elderly, and minor ailments. Ethnomedicinal knowledge is predominantly transmitted to the next generation through women, thus, women's involvement is crucial in documentation programmes, health education programmes and medicinal plant conservation programmes at the community level (Belete & Beyna, 2025) [5].

### Conclusions and Policy Implications

Saidabad block's traditional plant-based health care system is a living health system, which fits in the formal health care system and has been practiced in the community. The local communities have several resources for treating respiratory disorders, digestive disorders, skin infections, fever, diabetes, hypertension and musculoskeletal disorders using decoctions, pastes, powders and fresh juice extracts from medicinal plants. These remedies deliver affordable and available healthcare, especially in areas where there is not a lot of medical facilities. This traditional knowledge system is now at risk due to urbanization and modernization, loss of systematic documentation, and change of cultural values that reduces intergenerational transfer of ethnomedicinal knowledge. To safeguard this heritage, ethnobotanical survey involving local healers, elders and women should be carried out to develop inventories of medicinal plants at the village level. Promotion of medicinal plant community gardens and home gardens for sustainable availability of neem, tulsi, amla, fenugreek, ashwagandha and bryophyllum should also be encouraged. Safe traditional medicines can be integrated into public health care, increasing community health care. All ASHA's and health practitioners should be trained to recognize evidence-based herbal practices and also unsafe or toxic remedies that need medical supervision. Cooperation of the colleges, research institutes, health departments for the pharmacological evaluation, toxicity and scientific validation of commonly used medicinal plants is also required. In general, promoting the documentation, conservation and responsible incorporation of traditional medicinal knowledge can contribute to a more sustainable, affordable and people-centred health care system.

## References

1. alte L, Lalramnghinglova H, Jha LK. Ethnobotanical survey of medicinal plants used by various ethnic tribes of Mizoram, India. *PLOS ONE*,2024;19(5):e0302792. <https://doi.org/10.1371/journal.pone.0302792>
2. Kaundal R, Sharma P, Verma A. Current demands for standardization of Indian medicinal plants and herbal formulations: A comprehensive review. *Journal of Ayurveda and Integrative Medicine*,2025;16(2):100912. <https://doi.org/10.1016/j.aim.2025.100912>
3. Latif R, Banerjee S, Sharma M. Medicinal plants and human health: A comprehensive review of ethnobotanical and therapeutic significance. *Phytochemistry Reviews*, 2025. <https://doi.org/10.1007/s11101-025-10194-7>
4. Singla RK, Rahman M, Orozco-Barocio A. Editorial: Reviews in ethnopharmacology: 2023. *Frontiers in Pharmacology*,2025;16:12023253. <https://doi.org/10.3389/fphar.2025.12023253>
5. Belete TM, Beyna AT. Review on the ethnopharmacological use of medicinal plants and their anticancer activity from preclinical to clinical trial. *Journal of Evidence-Based Integrative Medicine*,2025;30:1–18. <https://doi.org/10.1177/2515690X251322504>
6. Chashike A, Tadesse M, Gebremariam T. Ethnobotanical study of traditional medicinal plants and associated indigenous knowledge in Melokoza, Ethiopia. *Journal of Ethnobiology Reports*,2025;8(1):100075. <https://doi.org/10.1016/j.jobr.2025.100075>
7. Sagar PK, Sharma D, Singh V. A comprehensive review of the ethnopharmacology, phytochemistry, and medicinal potential of *Nyctanthes arbor-tristis* L. *Journal of Medicinal Natural Products*,2025;12(4):145–168.
8. Beura PP, Mishra S, Nayak S. A comprehensive ethnophytopharmacological review on medicinal plants used for gynecological disorders. *South African Journal of Botany*,2024;170:245–260. <https://doi.org/10.1016/j.sajb.2024.08.024>
9. Singh S, Kumar A, Patel R. Ethno-pharmacological activities of some important medicinal plants on mental health. *Journal of Pharmaceutical Technology Research and Management*,2024;12(2):55–70.
10. Lailaty IQ, Peniwidiyanti P, Ismaini L, et al. Ethnopharmacology properties of medicinal plants used by the community in Gunung Halimun Salak National Park, West Java, Indonesia. *Research Journal of Pharmacy and Technology*,2024;17(5):2121–2132. <https://doi.org/10.52711/0974-360X.2024.00336>
11. Moreau D, Jeuffroy MH, Munier-Jolain N. Agroecology and beyond: Enhancing ecosystem services provided by natural vegetation and inventing “service weeds.” *Frontiers in Plant Science*,2024;15:1436310. <https://doi.org/10.3389/fpls.2024.1436310>
12. Garcia YJ, Petit S, Munier-Jolain N. Benefit of weeds for crop-plant mycobiota in agroecosystems: Integrating ecological demonstration and management applicability. *Agriculture, Ecosystems & Environment*,2024;370:108945. <https://doi.org/10.1016/j.agee.2024.108945>
13. Salomé C, Coll P, Lardo E, et al. Weeds enhance multifunctionality in arable lands in South-West of France. *Frontiers in Sustainable Food Systems*,2020;4:71. <https://doi.org/10.3389/fsufs.2020.00071>
14. Mandal A, Das S. Ethnobotanical study of medicinal plants used by the ethnic communities of Alipurduar district of West Bengal, India. *Plant Archives*,2021;21(1):229–238. <https://doi.org/10.51470/PLANTARCHIVES.2021.v21.no1.032>
15. Rahaman CH, Karmakar S. Ethnomedicine of Santal tribe living around Susunia hill of Bankura district, West Bengal, India: A quantitative approach. *Journal of Applied Pharmaceutical Science*,2015;5(2):127–136.
16. Datta T, Patra AK, Ghosh Dastidar S. Medicinal plants used by tribal population of Coochbehar district, West Bengal, India—An ethnobotanical survey. *Asian Pacific Journal of Tropical Biomedicine*,2014;4(Suppl. 1):S478–S482.
17. Choudhury S, Sharma P, Choudhury MD, Sharma GD. Ethnomedicinal plants used by Chorei tribes of Southern Assam, North Eastern India. *Asian Pacific Journal of Tropical Disease*,2012;2(Suppl.1):S141–S147.