

A Review on Some Folk Medicinal Plants and Their Common Uses

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Abstract

Current study aimed to Botanical features, applications in traditional medicinal plants, used to treat and prevent many types of diseases and systematically review publications indicating the viability of traditional medicinal plants. The leaves, fruits, seeds and bark of medicinal plants are used in traditional medicine to treat disorders affecting many systems, including blood circulation, the immune system, the heart, and digestive, respiratory, genetic, musculoskeletal, and conjunctive systems. Some herbal plants are used as pleasant spices, flavors, dyes, and preservatives food *etc.* Virtually every part of the plant has its own medicinal properties. Various types of phytochemicals found in medicinal plants play a key role in many types of diseases and are also used to produce medicines. The plant has various functions such as antimicrobial, antioxidant, anti-inflammatory, ant-diabetic, antibiotic, hemolytic properties that are widely used by indigenous peoples around the world. The folk medicinal plant uses of 12 herbal species belonging to various families are reported in this review article.

1. Introduction

Traditional medicinal plants are a strong source of biologically active compounds and play an important role in the discovery of drug (Sardadevi *et al.*, 2011). Several parts of the herbal plant such as leaf, stem, fruit, seed, bark, and roots are used to acquire many phytochemicals (Ashokkumar *et al.*, 2013). The curative properties of the herbal products can be source back to over five thousand years ago, as evidenced by the treatment of diseases and stimulate of the body systems in Indian, Egyptian, Chinese, Greek and Roman civilizations (Mahesh and Satish, 2008). In India, therapeutic plants are broadly used by all sections as folk medicine and processed products of the pharmaceutical industry in various indigenous medicine systems such as Siddha, Ayurveda, and Unani (Srinivasan *et al.*, 2007). Bioactive components or plant extracts can be used to treat a diversity of ailments, and can be used as a new formulation for innovative drug discovery in the pharmaceutical industry (Singh *et al.*, 2017). Important herbal medicines such as Brahmi and Ashwagandha support to increase a person's energy level, increase nutrients, restore body cells and improvement a person's immune system (Nishant, 2016). While retaining the biodiversity of these plant products, medicinal and aromatic plants may play an important role in

improving the livelihoods of rural people, especially women, in an environmentally sustainable manner (Sharma *et al.*, 2016).

Nowadays, according to the World Health Organization (WHO), 80% of the world's population relies on folk medicine for their primary health care needs. The medicinal plant is outstanding for the health of individuals and communities. The medicinal value of plants lies in a few of the chemically bioactive substances that elucidate the physiological activity of the human body (Yadav *et al.*, 2017). Secondary metabolites or phytochemicals from plants have excellent pharmacological functions such as antioxidant, antimicrobial, anti-hypoglycemic and anticancer drugs. These bioactive compounds protect cells from the damage caused by unstable molecules called free radicals (Sivakumar and Panneerselvam, 2011; Anburaj *et al.*, 2012; Sivakumar and Gajalakshmi, 2013; Sivakumar and Gajalakshmi, 2104; Senthilkumar and Sivakumar, 2014; Sivakumar *et al.*, 2015; Senthil Kumar *et al.*, 2016; Senthil Kumar *et al.*, 2017; Harini and Nithyalakshmi, 2017; Jothi *et al.*, 2019a; Jothi *et al.*, 2019b; Sivakumar, 2019; Angelin *et al.*, 2019). There is growing interests in preserving foods containing natural antimicrobial compounds, specifically extracted from plants. Hence the need to look for plants of medicinal value (Chavan,

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2016). Moreover, knowledge and awareness about herbal remedies are held by both men and women aged 41-70 years. Now, the decline in the use of medicinal plants by new generations may slowly disappear (Sharma, 2017).

2. *Gloriosa supera* L.

Whole plant (leaf, flower, seed, root) extract of *G. superba* otherwise called as flame lily, Calchicaceae containing colchicine and gloriosine are used externally and small quantity internally to Skin disease, Spines, Omitting, Indigestion, stomach-ache, Snake-bite and scorpion sting and antioxidant, antimicrobial activity (Jothi *et al.*, 2019a; Jothi *et al.*, 2019b).

3. *Allium sativum* L.

Fresh or crushed garlic provides sulfur-containing compounds such as alliin, ajoene, diallylpolysulfides, vinylidithins, S-allylcysteine and enzymes, saponins, flavonoids, and Maillard reaction products, which are not sulfur-containing compounds.

4. *Vinca rosea* L.

In traditional medicine, periwinkle is used for alleviate muscle pain, depression of the central nervous system, wasp stings and wound healing. Its use ranges from preventing diabetes to treating abdominal pain and phytochemical, antimicrobial activity (Sivakumar and Gajalakshmi, 2013; Angelin *et al.*, 2019; Angelin *et al.*, 2020).

5. *Aloe barbadensis* Mill.

Cosmetic companies commonly add soap or other derivatives from aloe vera to products such as cosmetics, tissues, moisturizers, soaps, sunscreens, incense, shaving cream or shampoos. *Aloe vera* is used on facial tissues, where it is promoted as a moisturizer and anti-irritant to reduce chafing of the nose (Reynolds, 2004).

6. *Ormocarpum cochinchinense* L.

These studies indicate that traditional bone healing methods are regional and that different plant species have been used for this purpose. In the Indian state of Tamil Nadu, village vaidiyas used a regional-specific bone healing treatment that used the herb *Ormocarpum cochinchinense* (Fabaceae) herb grown in the arid forests, in the Villupuram District. It is popularly known by the Tamil name "Elumbotti" (bone grafting) - and its use is known only to a few villagers for the treatment of fractures (Sivakumar and Gajalakshmi, 2013).

7. *Hibiscus rosa-sinensis* L.

In cosmetic skin care, for example, it may have some potential, and the extract from the flowers of *Hibiscus rosa-sinensis*, a plant with light-colored flowers, has been shown to act as an antisolar agent by absorbing ultraviolet radiation. The dried

flower petals are used in cancer treatment (Nevade *et al.*, 2011).

8. *Cassia auriculata* L.

The leaves of this plant are used for constipation and digestive purposes, as powdered dried flowers, and the flower buds show a powerful remedial action in case of eye infections, bark is used to treat gonorrhoea, arthritis, rheumatism. For pain, root powder is very effective. Avartaki's excellent hypoglycaemic plays an important role in lowering the body's blood sugar levels. Intake of the miracle herb intensifies the production of insulin by β -pancreatic cells.

9. *Mentha spicata* Linn.

Mentha spicata is used for its essential oil, which is also referred to as spearmint oil. The main ingredient in spearmint oil is R - (-) - Carvone, which gives spearmint its unique aroma smell. Spearmint oil contains significant amounts of limonene, dihydrocarvone and 1, 8-cineol. Unlike peppermint oil, spearmint oil contains less amount menthol and menthone. It is used as a flavour for toothpaste and confectionery, and is occasionally added to shampoos and soaps (Hussain *et al.*, 2010).

10. *Asparagus racemosus* L.

Asparagus racemosus is the most common medicinal plant grown in Tamil Nadu, India and belongs to the family Asparagaceae, commonly known as Asparagus, Wild Asparagus, Asparagus Root and Satavar. It is an effective flowering medicinal plant in tropical and subtropical countries such as India. *A. racemosus* are a valuable medicinal herb; its roots follow the process of processing and drying in Ayurvedic medicine. Traditionally racemoses plants have been used in nervous disorders, indigestion, tumors, urinary tract infections, upper respiratory tract infections, tuberculosis, whooping cough and general weakness (Gomase and Sherkhane, 2010). The roots are also used externally to treat stiffness in the joints, and some recent reports have demonstrated some additional beneficial effects of this herb, including antihypertensive, immunomodulatory, and antidepressant effects (Sivakumar and Gajalakshmi, 2014).

11. *Mimosa pudica* L.

Mimosa pudica include the toxic alkaloid mimosine, which has been obtained to have antiproliferative and apoptotic effects. The seeds of *Mimosa pudica* form mucilage made up of D-glucuronic acid and D-xlose (Restivo *et al.*, 2005).

12. *Syzygium cumini* L.

Unani and Chinese medicine for digestive diseases. Vinegar and wine are also made from the fruit. It is a good source of vitamin A and vitamin C (Luximon-Ramma and Amitabye, 2003).

13. *Ficus racemosa* L.

Ficus racemosa L. belongs to Family Moraceae is one of the plants mentioned in the ancient verses of Ayurveda. *F. racemosa* in folk medicine to treat many diseases, including

diabetes, and also used various parts of the *F. racemosa* (fruit, bark and root) are used. Experimental studies have demonstrated the anti-inflammatory, hepatoprotective, and hypoglycemic effects of racemosa (Li *et al.*, 2004) (Table 1).

Table 1: Folk medicinal plants and their uses of common disease

Sl. No.	Botanical Name	Common Name	Family	Used Plant Parts/ Habit
1	<i>Gloriosa superba</i> L.	Glory lily	Liliaceae	Leaf, flower, seed, tuber/ Climber
2	<i>Allium sativum</i> L.	Lahshun	Amaryllidaceae	Bulb/ herb
3	<i>Vinca rosea</i> L.	Sadabahar, or periwinkle	Apocynaceae	Leaf, root/ Sherub
4	<i>Aloe barbadensis</i> L.	Gwarpatha	Liliaceae	Leaf bulb/ Herb
5	<i>Ormocarpum cochincinane</i> L.	Elubotti	Fabaceae	Leaf/ shrub
6	<i>Hibiscus rosa-sinensis</i> L.	Gudhal	Malvaceae	Flower, leaf, Root/ Shrub
7	<i>Cassia auriculata</i>	Sugar free	Fabaceae	Leaf, flower/ Shrub
8	<i>Mentha spicata</i> L.	Pudina	Lamiaceae	Leaf/ Herb
9	<i>Asparagus racemosus</i> L.	Satamuli, Satavari	Liliaceae	Tuber/ Climber
10	<i>Mimosa pudica</i> L.	Lajwanti	Mimosaceae	Roots, leaves/ Herb
11	<i>Syzygium cumini</i> L.	Jamun	Myrtaceae	Bark/ Tree
12	<i>Ficus racemosa</i> L.	Gular	Moraceae	Fruit, Root/ Tree

14. Conclusion

From the above review work, we conclude that plants have an awfully versatile lifestyle. All parts of the plant are the boon to all living things throughout the cosmos. In the present review work, these 12 traditional medicinal plants were studied for the treatment of many diseases of humans such as abdominal pain, constipation, piles, diarrhea, jaundice, diabetes, leprosy, fever, bone fracture, cancer, asthma, menstrual disorders, and snakebite. These plant species are wild and cultivated. Most of the medicinal plants are shrubs trees and herbs respectively rather than climbers. Parts of the plant used for medicinal purpose are leaves, root, flower, bark, fruit, seeds, and rhizome *etc.*

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