

EXPLORING THE MARVELS OF MEDICINAL PLANTS

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ABSTRACT

This article delves into the varied realm of medicinal plants, looking at their therapeutic potential and their traditional usage. It emphasizes the importance of Ayurvedic medicine as a safe alternative to manufactured medications, as well as the numerous applications of herbs in home cures, pest and diseases management and different industries. It explores essential medicinal plants like as Brahmi, Tulasi and Ashwagandha, as well as the health advantages of other plants also. Despite their effectiveness, the concept tackles the most significant dangers to these plants, such as habitat loss, climate change and over-collection and recommends sustainable production and certification methods. It emphasizes the significance of keeping medicinal plants for their therapeutic potential and ecological balance by studying the synergy between nature and Ayurveda.



KEYWORDS: Ashwagandha, Ayurveda, Herbs, Medicinal plants, Pest and disease management, Tulasi

INTRODUCTION

A medicinal plant is a plant of any kind that includes chemicals that can be utilized for medicinal purposes or precursors for the synthesis of valuable pharmaceuticals in one or more of its parts (Gurib-Fakim, 2006). For long years, certain plants have been employed in traditional medicine. Some appear to work, yet there may not be enough scientific evidence to back them up. Such plants should be considered medicinal herbs. Pharmacists and pharmacologists use the term 'crude pharmaceuticals of natural or biological origin' to describe complete plants or portions of plants that have therapeutic characteristics (Napagoda and Wijesundara, 2022). For this work, a definition of medicinal plants should include the following. (Sofowora, 1993; Evans, 2009).

- a. Medicinal herbs or plant components used in galenical preparations (extracts, infusions, etc.). e.g. Cascara bark.

- b. Plants utilized for the hemi-synthesis of therapeutic substances (e.g., hemi-synthesis of sex hormones from diosgenin derived from Dioscorea yams) or for the extraction and processing of pure chemicals for immediate use as medicines.
- c. Food, spice and perfumery herbs used therapeutically. e.g. Ginger.
- d. Fiber plants. e.g. Cotton, flax and jute, used to prepare surgical dressings.

Ayurvedic medicinal products and merchandise have today become an emblem of safety in contrast to synthetic medications, which are deemed hazardous to one's entire health (Remya *et al.*, 2020). Spending more time in nature and observing the plants and herbs is one method to better grasp the principles of Indian Ayurveda. Each plant or herb has a distinct property that can be used to treat a variety of symptoms and disorders (Firenzuoli and Gori, 2007). Medicinal herbs such as aloe, turmeric, Tulsi, pepper, elachi and ginger are often utilised in several Ayurvedic home treatments and are thought to be the best aid for battling throat and skin illnesses. Ayurvedic herbs are non-toxic in nature and as a rich source of nutrients, anti-bacterial and antioxidant characteristics, the products or cures derived from them are frequently suggested for their high therapeutic potential (Basu *et al.*, 2023). Ayurvedic herbs can also be utilized for pest management, natural colours and the manufacture of food items, teas and perfumes, among other things.

APPLICATIONS OF MEDICINAL PLANTS

Following are a few medicinal plants and their usages:

Plant name	Scientific name	Uses
Brahmi	<i>Bacopa monniera</i>	Enhances memory and reduces anxiety
Coriander	<i>Coriandrum sativum</i>	Useful in indigestion and flatulence, helps in relieving from spasmodic pain
Garlic	<i>Allium sativum</i>	Ringworm, dysentery and Wounds
Tulasi	<i>Ocimum sanctum</i>	Indigestion, heart health and respiratory diseases
Asparagus	<i>Asparagus racemosus</i>	Infertility, loss of libido, uterine health and improves lactation
Ashwagandha	<i>Withania somnifera</i>	Stress tolerance, immunity, joint pains and in skin health
Aloe vera	<i>Aloe barbadensis</i>	Ulcers, burns, jaundice, acne and women's health
Sweet Flag	<i>Acorus calamus</i>	Flatulent colic, atonic dyspepsia and ulcers
Ashoka	<i>Saraca indica</i>	Menstrual irregularities and uterine stimulant
Guggal	<i>Commiphora mukul</i>	Joint disorders, heart diseases and hypolipidemic
Senna	<i>Cassia angustifolia</i>	Laxative, constipation, irritable bowel syndrome and weight loss

Pippali (long pepper)	<i>Piper longum</i>	Asthma, cough and indigestion
Gotu kola	<i>Centella asiatica</i>	Healing power of ulcers and skin injuries. Treat leprosy and revitalise the brain and nervous system
Thyme	<i>Thymus vulgaris</i>	Strong antiseptic nature and treat congestion, stomach gas and cough
Rosemary	<i>Salvia rosmarinus</i>	Stimulates energy and sharpens memory
Mint	<i>Mentha arvensis</i>	Reducing irritable bowel syndrome, curing stomachs and treat fever and flatulence

THREATS TO MEDICINAL PLANTS

Medicinal plants gathered from the wild, rather than farmed, face both general and specialised challenges. Climate change and habitat loss pose general hazards to development and agriculture. Over-collection to accommodate increased demand for pharmaceuticals is a special issue (Sen and Samanta, 2015). Over-collection could be mitigated by cultivating some therapeutic plants or implementing a certification system to make wild collecting more sustainable. According to a report published in 2020 by the Royal Botanic Gardens, Kew, 723 medicinal plants are on the verge of extinction, due in part to over-collection (Rehman *et al.*, 2021).

CONCLUSION

The diverse benefits of medicinal plants have arisen as a testament to nature's therapeutic prowess in the discovery of their marvels. From Ayurveda's holistic approach to the specific medicinal benefits of plants like Brahmi, Tulsi, and Ashwagandha, these botanical miracles provide cures for a wide range of diseases. Their survival, however, is threatened by looming dangers such as habitat loss, climate change, and over-collection. It is critical to maintain the delicate balance between utilisation and conservation. To protect these therapeutic assets, it is critical to cultivate sustainable methods and embrace certification systems. As we appreciate the numerous advantages, a collaborative commitment to proper care is required to maintain the long-term viability of these priceless biological treasures.

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