



An Evaluation of Indian Ayurvedic Medicinal Plants

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Abstract: Ayurveda, or conventional Indian medicine, emphasizes the importance of choosing a naturally comprehensive approach to maintaining one's bodily and mental well-being. It's not a diet for people looking for an escape or an excuse to keep abusing their bodies or minds. It is well known that Ayurvedic herbs are completely safe, have a unique flavor and aroma, and serve as the best mechanism for preserving a healthy balance between the mind and body. They are non-toxic and safe by nature because they are self-sufficient and nutritious. Antiseptics are frequently used and have excellent therapeutic benefits. Several herbs, including ginger, chamomile, cardamom, peppermint, coriander, and basil, help the body's blood circulation in a healthy way. The interaction between a person's personality, mental, emotional, and spiritual process determines whether they are ill or well. Ayurveda is a traditional medical system from India that promotes healthy food and active lifestyles. The tips in this article can help to adapt oneself to the surroundings. Aloe, ginger, tulsi, pepper, elaichi, and turmeric are all used in Ayurvedic natural remedies. The economic worth of Ayurvedic medicine is at an all-time high. The rise of a full-rate vital generation poses a serious challenge to contemporary life. According to the WHO, 36 million of the 57 million fatal cases reported globally in 2008 were caused by illnesses other than infections. This research has proved the value of therapeutic herbs to people in poor nations. The two biggest risks to therapeutic plants are the loss of Ayurveda and misuse of recognized species. Indigenous methods and expertise have been utilized to gather, utilize, and manage them for a very long time.

Keywords: ayurveda, ayurvedic herbs, Indian medicine, therapeutic herbs and health Care, traditional medical system

1 INTRODUCTION

The entire Indian medical system known as Ayurveda is founded on the Constitution. It attempts to offer flexible teaching to help people achieve a state of good health. The methods and treatments can be modified to meet the requirements of patients with medical conditions. Ayu (life) and Veda are two Sanskrit basic terms that make up the term "Ayurveda" (knowledge). It is legitimate to refer to Ayurveda as the "Science of Life" rather than just a method of ailment treatment because of this [1].

Historically significant Indian medical systems include Ayurveda, Siddha, and Unani. The Vedas and other prehistoric religious texts provide descriptions of medical systems. Between 2500 and 500 B.C., the Ayurvedic philosophy emerged and thrived in India. Ayurveda literally translates as "science of life," since the traditional Indian healthcare system emphasizes concepts of man and his illness. It has been said that individuals in good health have balanced metabolisms. Ayurveda is frequently referred to as the "science of longevity" since it offers a comprehensive strategy for living a long and healthy life.

It offers diet and nutrition regimens to aid in the renewal of the body. It offers therapeutic possibilities for a range of prevalent illnesses, such as food allergies, for which there aren't many available treatments right now. The patient must fully cooperate for the Ayurvedic diet to be effective, so it's crucial to keep in mind that it's not a "magic bullet" fix. It is an interactive system that is user-friendly and instructive. It teaches the victim to be responsible and self-sufficient. Ayurveda is not a diet for people looking for a way out or a justification to keep mistreating their bodies or brains. It encourages independence, wellness, and self-reliance. Ayurveda, or ancient Indian medicine, places a strong focus on taking a "natural" and comprehensive approach to maintaining bodily and mental health. Ayurvedic medicine, which has its roots in India, is one of the oldest medical systems still in practice [2].

2 USES AND IMPORTANCE OF MEDICAL PLANTS

Ayurvedic herbs have been used for thousands of years for their therapeutic properties and other applications. They are well acclaimed for their medicinal capabilities because of their strong nutritional value. They are well renowned for being completely safe, having a unique flavor and aroma, and, when frequently ingested, functioning as the ideal mechanism for preserving a healthy balance between the mind and body. Instead of focusing solely on one organ or area of the body, they revitalize the entire mechanism [3].

2.1 Benefits of Medicinal Plants

- These support healthy digestion and absorption and use a comprehensive approach.
- These do not target any condition, but instead function as a preventive medicine that strengthens the immune system and benefits general health and wellbeing.
- Those are comparable to allopathic medications and occasionally have a reputation for being successful in treating conditions like cancer and autoimmune illnesses.
- These are self-sufficient and nutritious by nature, making them non-toxic and safe.



- It emphasizes overall wellness and seeks to harmonies the mind, body, and soul.
- Ayurvedic medications and therapies can be used to treat a number of metabolic and chronic illnesses without causing any negative side effects.

2.2 Medicinal Values of Ayurvedic Herbs and Spices

Wounds, sores, and boils can be treated using Ayurvedic herbs and spices such as black pepper, cinnamon, aloe, sandalwood, ginseng, red clover, burdock, bayberry, and safflower. It is advised to take antipyretic herbs like chirayta, black pepper, and sandalwood to lower the fever and heat that the condition causes. In addition to being highly aromatic, cinnamon and sandalwood are excellent astringents. When it comes to stopping the release of blood, mucous, etc., sandalwood is particularly helpful [4].

It is advised to take antacids such as ajwain, amalaki, aswatha, etc. for healthy gastric acid flow and good digestion. Herbs with savoury characteristics include cardamom and coriander. Other fragrant herbs, like peppermint, cloves, and turmeric, enhance the flavour of food by infusing it with a savoury aroma. Some examples of herbs include Khare-Khaskhas, Aloe, Sandalwood, Turmeric, Sheetraj Hindi, and Aloe. Antiseptics are frequently used and have excellent therapeutic benefits. Basil, cardamom, peppermint, ginger, camomile, and coriander are all known to support good blood flow throughout the body.

3 HISTORY OF AYURVEDIC MEDICINE

The ancient rishis, or seers of truth, used religious disciplines and practices to pursue truth. Through regular meditation, they brought truth into their daily lives. The practical, intellectual, and spiritual experiences of the great sages served as the foundation for the Ayurvedic health approach. The Vedas, prehistoric records of knowledge, contain historical evidence for Ayurveda. The Atharva Veda, which is believed to have been authored more than 10,000 years ago, describes Ayurveda as a system that aids in maintaining people's health by using natural principles to restore them to harmony with their true nature [5].

3.1 Science and Ayurvedic

Ayurveda is a distinctive synthesis of philosophy, religion, and science. The term "religion" is used to describe philosophical ideas and a set of moral principles that help us understand all aspects of life. In Ayurveda, the entire life path is revered as sacred. Ayurveda uses a scientific approach to human life to harness the complex forces of the human body and mind. Through its philosophical outlook on human life, Ayurveda teaches us to see ourselves as minor components of this magnificent world. . In addition to providing conceptual frameworks based on balanced disorder, as well a healing and illness. Ayurvedic philosophy also offers a collection of ideas. The interconnectivity of oneself, personality, and all that occurs in one's mental, emotional, and spiritual being determines whether one is ill or well. Harmony between the healing objective, ideas, feelings, and physical action is necessary for wellness. The idea of wholesomeness serves as the organizing principle for the physiological and pharmaceutical concepts in Ayurveda. As a result, a holistic approach is taken to the Ayurvedic definition of the "human body" and "medicines." Additionally, their "interface" is identified from a comprehensive perspective [6].

3.2 Everyday Life using Ayurveda

The best way to describe Ayurveda is as the science of living in harmony with nature's laws. It is an antiquated natural and holistic medical concept from India that promotes people to have a balanced lifestyle by choosing natural and healthy dietary and lifestyle options. The ancient knowledge of Ayurveda still holds true today, just as it did before. Ayurveda and its tenets are simple to follow in today's fast-paced world in order to preserve and lead a balanced, stress-free, and healthy life. The three key pillars of Ayurveda are healthcare, healing, and prevention. Health care includes all methods for preserving long-term good health as well as for rejuvenation and ageing gracefully. There are several disorders that can be treated using ayurvedic home remedies. But while maintaining health is simpler than recovering from deterioration, prevention is the key objective [7].

In Ayurveda, the daily routine and pathya eating habits are crucial. The usage of Ayurvedic products and medical plants to lead a healthy lifestyle is also discussed, as are tips on how to adjust one's lifestyle to one's surroundings. It does not require a significant change in lifestyle to incorporate Ayurveda into everyday routine. Small adjustments, like favoring natural or organic ingredients over items and foods that have undergone chemical processing, can have a significant impact. By switching from a sedentary to a more active lifestyle that includes frequent activities like walking, one may be able to maintain their overall health and fitness. By drinking fresh juice instead of canned or juices with added preservatives and including seasonal and fresh vegetables in meals, one can prevent body from producing toxins and stay fresh and active throughout the day. Ayurveda recommends drinking enough water during the day to flush out harmful toxins from the body, as well as a glass of warm water before bed to prevent indigestion and encourage a comfortable and soothing night's sleep. If one suffers from this issue, try these simple natural indigestion remedies for quick relief [8].

4 AYURVEDIC BODY TYPES

Vata, pitta, and kapha, the three basic energy types on which Ayurveda is founded, are further broken down. According to Ayurveda, these doshas, or energies, are said to be present in everything and everyone, making them the fundamental elements of the physical cosmos. The three doshas interact with one another to create a range of climatic conditions, foods, species, and even individuals within the same species, as well as to perform different physiological activities in each person's body. Actually, our unique vata, pitta, and kapha ratios have a big impact on our emotional, mental, and physical characteristics [9]-[10].



4.1 Ayurvedic Herbs and Spices with Health Benefits that have been Scientifically Demonstrated

- Ashwagandha. Ashwagandha (*Withaniasomnifera*) is a small woody plant native to India and North Africa.
- Boswellia.
- Brahmi.
- Cumin.
- Turmeric.
- Licorice root.
- Gotu kola.
- Bitter melon.

4.2 Medicinal and Ayurvedic Plants

Because of our fast-paced world, humans are becoming more and more cut off from nature. Although our way of life may have negative consequences, it is important to remember that even minor changes to our daily routine can have a significant impact on how healthy and energized we feel. As a result, Ayurveda has indisputable significance in today's society because it is founded on the idea of bringing us closer to nature and relying on nature's inherent qualities to heal us and maintain our health without having any negative side effects.

In contrast to synthetic medications, which are thought to be detrimental and destructive to one's overall health, ayurvedic treatments and products, which use natural ingredients and therapeutic herbs, have become a symbol of safety. One way to better understand Indian Ayurvedic concepts is to spend more time outside, examining plants and herbs. Each plant or herb has special therapeutic qualities that can be used to cure a range of diseases and conditions. Aloe, turmeric, tulsi, pepper, elachi, and ginger are among the medicinal herbs frequently used in Ayurvedic home remedies and are said to be the most helpful in treating throat and skin conditions. Since ayurvedic herbs have a great therapeutic potential and are non-toxic, nutrient-rich, anti-bacterial, and antioxidant in nature, products or treatments utilising them are commonly recommended [11]-[13].

The popularity of Ayurvedic medical plant therapies is also attributed to their perceived safety and lack of adverse effects. Being in tune with nature gives them an advantage over products that have undergone chemical processing and manufactured drugs. Ayurvedic medicines, as opposed to other medications and treatments, are known to treat illness at its root, assisting one in maintaining long-term health and fitness. These herbs can be used for more than just health purposes; they can also be used to make teas, natural colors, perfumes, and pesticides.

There has been a noticeable rise in the usage of natural herbs for everyday use and for therapeutic purposes, as shown by several researches from around the world. Going back to the fundamentals, people now recognize the risks that chemically processed foods have to their health and, unsurprisingly, prefer healthier lives that use the principles of Ayurvedic as a basis [14].

- **VataDosha (Wind Energy)**

The components of space and air make up the majority of the vata. It is the energy that controls all motion-related biological processes, including heartbeat, breathing, blinking, tissue movement, cellular mobility, and nervous system to mind communication. Fear and worry can result from an unbalanced vatadosha in the body [15].

- **Pitta Dosh (Fire Energy)**

Pitta is mostly composed of the fire and water elements and combines the hot, sharp, light, liquid, greasy, and subtle qualities. Pitta has a propensity to spread yet is neither mobile nor steady. It controls all bodily metabolic processes, such as digestion, absorption, nutrition, and body temperature. Happiness and intelligence come from it when it is in balance, but ulcers and rage might result when it is out of balance [16].

- **Kaphadosha (Water Energy)**

The majority of Kapha is made up of soil and water. Everything has structure and rigidity thanks to energy, which also provides the cohesion needed to maintain a particular shape. It controls body development and moves water to every part of the body. It hydrates all cells and systems, lubricates joints, moisturises skin, safeguards tissues, and preserves immunity as a result. When it's in harmony, sentiments of love and forgiveness are produced; when it's out of harmony, feelings of insecurity and envy are produced [17].

- **Panchamahabhutas - Five Great Elements**

According to Ayurveda, everything in the universe is made up of five basic components. Earth (prithvi), Water (jal), Fire (agni), Wind (vayu), and Space (ether) are the five elements (akash). The five essential parts are together known as panchamahabhutas. Since Ayurveda maintains that the elements and processes of nature are comparable to those of the human body, the concept of Panchamahabhutas is regarded as the cornerstone of Ayurveda and crucial to understanding how the human body moves and functions.

All things, materials, and objects in the universe, both living and non-living, contain these panchmahabhutas. These substances are also referred to as "mahabhutas" because of their large size in comparison to their predecessors, the "bhutas" (small forms of mahabhutas), or their extensive distribution. In essence, however, these five elements make up everything in the cosmos, and nothing in this universe can be said to be entirely free of these five elements. Consequently, how does the physical body work in terms of the Panchmahabhuta? The mass of five elements that is referred to as the physical body comes to life when the atma, or soul, is infused into the five fundamental components that make up the structure of the human body. Diseases linked to a certain element or elements may be brought on by imbalances in one or more body elements. For instance, because the prithvi (earth) element makes up the majority of bone tissue, any imbalance in this element may cause bone-related conditions like osteoarthritis.



Prior to anything else, Ayurvedic therapy principles are primarily focused on resolving Panchakarma imbalances in the body. Table 1 lists several plants with medicinal values along with uses.

Table 1. Various Plants with Medicinal Values

Hindi Name	English Name	Botanical Name	Uses
Adusa/Vasaka	Malabar Nut	AdhatodavasicaNeesPennel	Cough, Asthma, Bronchitis
Ananas	Pineapple	AnanascomosusPennel	Sore Throat, Diabetes, Heart Disease, Obesity
Tulsi	Holy Basil	Ocimumsactum Linn Pennel	Indigestion, Heart Diseases, Respiratory Diseases
Agarkasth	Eagle Wood	AquilariaagallochaRoxbPennel	Bed-Wetting, Incompetency of Urinary Bladder
Malkagini	Staff Tree	CelastruspaniculatusWilldPennel	Muscle Cramps, Backache, Osteoarthritis, Paralysis
MeethaVish	Monks hood	Aconitum feroxPennel	Fever, Diuretic Action, Arthritis
Pippali	Long Pepper	Piper longum Linn Pennel	Asthma, Cough, Indigestion
Amla	Indian Gooseberry	Emblica officinalis Linn Pennel	Antioxidant, Antistress, Constipation, Fever
Neem	Margosa Tree	AzadirachtaIndica A. JussPennel	Leprosy, Eye Disorders, Bloody Nose, Intestinal Worms
Ratti	Rosary Pea	AbrusPrecatorius	Joint Pains, Paralysis, Alopecia
Bach	Sweet Flag	AcoruscalamusPennel	Flatulent Colic, Atonic Dyspepsia, Ulcers

5 POTENTIAL ECONOMIC CONSEQUENCES OF INCORPORATING AYURVEDA INTO THE HEALTHCARE SYSTEM

One of the world's oldest medicinal systems is Ayurveda. With the advent of new ideas like sustainable development, cleaner production technology, and environmental valuation techniques, humankind's perspective on the environment has recently altered. The economic worth of Ayurvedic medicine is at an all-time high.

The World Health Organization estimates that of the 57 million fatal cases reported globally in 2008, 36 million were caused by diseases other than infections. Cardiovascular diseases (48%) and oncology diseases (21%), chronic respiratory diseases (12%), and diabetes (3.5%) are the leading causes of mortality. Health care experts from many nations are convinced that a logical fusion of conventional and modern medical systems is the only way to address the current situation.

Ayurveda, a system of traditional medicine based on scientific understanding of the unique characteristics of human organisms, their interactions with the environment, the influences of the seasons and weather on them, and adequate nutrition, would make illness prevention and management effective. An enormous challenge in modern life is the birth of a full-rate vital generation, which Ayurveda can help with. It will provide individuals a chance to defeat cancer and other cardiovascular, neurological, chronic respiratory, and non-infectious disorders, including diabetes and obesity.

6 CONCLUSIONS

Medicinal plants have long been collected, used, and controlled using indigenous methods and knowledge. The two biggest dangers to medicinal plants are the decline of Ayurveda and the overuse of identified species. The natural world is disappearing quickly, especially moist tropical forests. This research has demonstrated the value of medicinal plants to people in poor nations as well as their potential application in primary healthcare. In addition, under the correct conditions, medicinal plants could be important elements of a development strategy that enhances sustainable rural lives. Economists assert that people will only be motivated to conserve resources if they stand to gain economically from their sustainable use and do so. This is only possible if property rights are well defined and protected. The same people must benefit from protection, make money from exploitation, and have their rights upheld.

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