



INTERNATIONAL JOURNAL OF PHARMACY & LIFE SCIENCES  
(Int. J. of Pharm. Life Sci.)

Herbal plants used to treat diseases in India: A review

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**Abstract**

As a source of medicine, Medicinal plants have always been at forefront virtually all cultures of civilizations. Medicinal plants are regarded as rich resources of traditional medicines and from these plants many of the modern medicines are produced. For thousands of years medicinal plants have been used to treat health disorders, to add flavor and conserve food and to prevent diseases epidemics. Medicinal plants have been playing an essential role in the development of human culture. Herbal medicines are becoming popular day by day as Herbal drugs are safe, cheaper and easily available with therapeutic properties. Due to the rapid extension of side effects of allopathic medicines, Herbal medicines are becoming popular day by day as Herbal drugs are safe, cheaper and easily available with therapeutic properties. Medicinal plants are a boon for disease. Medicinal plants have been playing an essential role in the development of human culture.

**Key-words:** Herbal drugs, Medicinal plants, human culture, allopathic medicines

**Introduction**

Human beings have depended on nature for their simple requirements as being the sources for medicines, shelters, food stuffs, fragrances, clothing, flavours, fertilizers and means of transportation throughout the ages. For the large proportions of world's population medicinal plants continue to show a dominant role in the healthcare system and this is mainly true in developing countries, where herbal medicine has continuous history of long use. The development and recognition of medicinal and financial aids of these plants are on rise in both industrialized and developing nations <sup>[1]</sup>. India has treasure of traditional medicines. Herbal medicines have therapeutic value. Indian traditional medicinal systems are based on various therapies including Ayurveda, Homeopathy, Unani. The Herbal drugs are initially evaluated on the basis of phytochemical and pharmacological approach. WHO has prepared list of medicinal plants that used globally <sup>[2]</sup>.

The foundations of typical traditional systems of medicine for thousands of years that have been in existence have formed from plants. The plants remain to offer mankind with new medicines. Some of the beneficial properties ascribed to plants have recognised to be flawed and medicinal plant treatment is based on the experimental findings of hundreds to thousands of years. The traditional medicine practice is widespread in China, India, Japan, Pakistan, Sri Lanka and Thailand. About 40% of the total medicinal consumption is attributed to traditional tribal medicines alone by China. In Thailand, herbal medicines make use of legumes encountered in the Caesalpiniaceae, the Fabaceae, and the Mimosaceae. It is estimated that in mid-90s, more than US\$2.5 billion have resulted from the sales of herbal medicines. The herbal medicinal preparations are more in demand than mainstream pharmaceutical products in Japan <sup>[3]</sup>. Parts of plants are good generator of medicine. In India medicinal plants have been used since ancient time. Indian citizens are using spices in their food daily for better health <sup>[4-5]</sup>. Since last four decades considerable growth has been observed in the study of ethno medicinal plants <sup>[6]</sup>. Medicinal herbs are considered to be a chemical factory, which contain different kinds of chemical compounds like steroids, alkaloids, saponins, lactones, glycosides, sesquiterpene & oils <sup>[7]</sup>.

Most of the important drugs of the past 50 years, which have revolutionized modern

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medicinal practice, have been isolated from plants. These chemical ingredients exhibit therapeutic properties of plant and animal drugs. The WHO endorses and promotes the addition of herbal drugs in national health care programs because they are easily accessible at a price within the reach of a common man and are time tested and thus considered to be much safer than the modern synthetic drugs<sup>[8]</sup>. Thus, the research of pharmacologically/biologically active agents obtained by screening natural sources such as plant extracts had led to the detection of many pharmaceutically valuable drugs that play a key role in the treatment of human diseases<sup>[9]</sup>.

#### Future prospects of Medicinal Plants

There is a promising future of medicinal plants as there are about half million plants around the world, and most of them are not investigated yet for their medical activities and their hidden potential of medical activities could be decisive in the treatment of present and future studies<sup>[10]</sup>.

In the development of human culture medicinal plants have played an essential role, for example religions and different ceremonies<sup>[11]</sup>. Among the variety of modern medicines, many of them are produced indirectly from medicinal plants, for example aspirin. Many food crops have medicinal effects, for example garlic. Studying medicinal plants helps to understand plant toxicity and protect human and animals from natural poisons. The medicinal effects of plants are due to secondary metabolite production of the plants. Keeping this in consideration there have been increased waves of interest in the field of research in natural product chemistry. This interest can be due to several factors, including therapeutic needs, the remarkable diversity of both chemical structure and biological activities of naturally occurring secondary metabolites, the utility of novel bioactive natural compounds as biochemical probes, the development of novel and sensitive techniques to detect biologically active natural products, improved techniques to isolate, purify, and structurally characterize these active constituents, and advances in solving the demand for supply of complex natural products<sup>[12]</sup>. The importance of traditional medicine has also recognized by World Health Organization (WHO) and has created strategies, guidelines and standards for botanical medicines. For the cultivation, processing of medicinal plants and the manufacture of herbal medicines agro-industrial technologies need to be applied<sup>[13]</sup>. Medicinal plants are resources of new drugs and many of the modern medicines are produced indirectly from plants.

#### References

1. WHO, (1998). Regulatory situation of herbal medicines. A worldwide review. Pp 1-5. Geneva, Switzerland.
2. Srivastav S, Singh P, Mishra G, Jha KK, Khosa RL, *Achyranthes aspera* –An important medicinal plant :A review .j. Nat. Prod. Plant Resour, 2011 ;1(1):1-14.
3. Refaz Ahmad Dar\*, Mohd Shahnawaz, Parvaiz Hassan Qazi General overview of medicinal plants: A review The Journal of Phytopharmacology 2017; 6(6): 349-351.
4. Jain A.K., Vairale G.M. and Singh R. , Folklore claims on some medicinal plant used by Bheel tribal of Guna district Madhya Pradesh, Indian J.Traditional knowledge,2010;9(1):105-107.
5. Patel P. and Mahajan S.K. ,A note on medico-ethnobotany Survey India,2004;46(1-4):398-402.
6. Kadel C., Wagh V.V. and Jain A.K. ,Some Ethno medicinal plants species of Jhabua district Madhya Pradesh, *Indian J. Traditional Knowledge*, 2011;10(3):538-540.
7. Singh Amrit Pal, Promising Phytochemical Ethnobotanicals Leaflets, 2005 Vol, Issue 1, Article 18
8. Singh, P. and Singh, C. L. (1981). Chemical investigations of *Clerodendron fragrans*. *Journal of Indian Chemical Society* 58: 626-627.
9. Rastogi, P. R. and Meharotra, B. N. (1990). In *Compendium of Indian Medicinal Plants*. Vol. I, 339; a) (1993) III: 194. PID, CSIR, New Delhi, India.
10. Singh R. Medicinal Plants: A Review. *Journal of Plant Sciences*. Special Issue: Medicinal Plants. Vol. 3, No. 1-1, 2015, pp. 50-55.
11. Hosseinzadeh, S., Jafarikukhdan, A., Hosseini, A. and Armand, R. (2015). The application of Medicinal Plants in Traditional and Modern Medicine: A Review of *Thymus vulgaris*. *International Journal of Clinical Medicine*, 6, 635-642.

12. Clark, A.M. (1996) Natural Products as a Source for New Drugs. *Pharmaceutical Research*, 13, 1133-1141.
13. WHO (1993) Research Guidelines for Evaluating the Safety and Efficacy of Herbal Medicines. Manila.
14. Fakim, A.G. (2006) Medicinal plants: Traditions of yesterday and drugs of tomorrow. *Molecular aspects of medicine* 27: 1-93.
15. Harrison, P. (1998). Herbal medicine takes roots in Germany. *Canadian Medical Association Journal* 10: 637-639.
16. Jones, W.B. (1998) Alternative medicine-learning from the past examining the present advancing to the future. *Journal of American Medical Association* 280: 1616-1618.
17. Hamburger, M. and Hostettmann, K. (1991). Bioactivity in plants: the link between phytochemistry and medicine. *Phytochemistry* 30: 3864-3874.
18. Singh, P. and Singh, C. L. (1981). Chemical investigations of *Clerodendron fragrans*. *Journal of Indian Chemical Society* 58: 626-627.
19. Rastogi, P. R. and Meharotra, B. N. (1990). In *Compendium of Indian Medicinal Plants*. Vol. I, 339; a) (1993) III: 194. PID, CSIR, New Delhi, India.
20. Philipson, M. N. (1990). A symptomless endophyte of ryegrass (*Lolium perenne*) that spores on its host a light microscope study. *New Zealand Journal of Botany* 27: 513-519.
21. Galbley, S. and Thiericke, R. (1999). *Drug Discovery from Nature*, Series: Springer Desktop Editions in Chemistry, Springer, Berlin.
22. Cragg, G.M., Newman, D. J. and Snader, K. M. (1997). Natural products in drug discovery and development. *Journal of Natural Products* 60: 52-60.
23. Mittermeier, R. A., Gil, R. P., Hoffman, M., Pilgrim, J., Brooks, T., Mittermeier, C. G., Lamoreux, J. and Fonseca, G. A. B. (2005). Hotspots revisited: Earth's biologically richest and most endangered terrestrial ecoregions. Pp 392. Boston: University of Chicago Press.
24. Kaul, M. K. (1997). *Medicinal plants of Kashmir and Ladakh: temperate and cold arid Himalaya*. Indus Publishing, New Delhi.

**How to cite this article**

Sohani S. (2019). Herbal plants used to treat diseases in India: A review. *Int. J. Pharm. Life Sci.*, 10(9-10):6385-6387.

Source of Support: Nil; Conflict of Interest: None declared

**Received: 26.08.19; Revised: 16.10.19; Accepted: 25.10.19**