

## A Review on some Medicinal plants

Rajkumar Kedar<sup>1</sup>, Pramila Ghumare<sup>2</sup>DattatrayaJirekar\*

<sup>1</sup>(Department of Chemistry, M. N. Research Centre, Aurangabad, India)

<sup>2</sup>(Department of Chemistry, AnandraoDhonde Alias Babaji Mahavidyalaya, Kada, India)

\* (Department of Chemistry, AnandraoDhonde Alias Babaji Mahavidyalaya, Kada, India)

Email: [dattajirekar1@gmail.com](mailto:dattajirekar1@gmail.com)

### To Cite this Article

Rajkumar Kedar, Pramila Ghumare DattatrayaJirekar "A Review on some Medicinal plants", *Journal of Science and Technology*, Vol. 07, Special Issue 03, May 2022.

### Article Info

Received: 20-04-2022

Revised: 10-05-2022

Accepted: 12-05-2022

Published: 22-05-2022

**Abstract:** Medicinal plants have been used from the Vedic era. For thousands of years, they have been used to treat and prevent many types of diseases along with epidemics. Plants play an important role in the development of new drugs. A large number of the plants are also reported to possess many other activities like anti-oxidant, anti-inflammatory, anti-insecticidal, anti-parasitic, antibiotic, anti-hemolytic properties, etc. for thousands of years medicinal plants have been used to treat health disorders. In these reviews we gave general review of the medicinal plants.

**Key Word:** Intrathecal; Medicinal plants, drugs, antioxidant activity.

### Introduction

Plants have been associated with the human health from time immemorial and they are the important sources of medicines since the dawn of human civilization. In spite of tremendous development in the field of allopathic medicines during 20th century, plants still remain one of the major sources of drugs in modern as well as in traditional systems of medicine. In India, phytochemicals, as well as medicinal plants, have remained the most abundant source of health care and life improvement since very long [1]. India is the richest source of traditional herbal plants with their prescriptions. In India, Ayurvedic, Unani and Siddha medico-therapeutics are playing a very important role in the society since ancient time. Ayurveda is approximately 5000 years old and predominantly uses phytochemicals in their preparations and formulations. Now in modern era, about 24%–27% drugs are derived from the plant sources. Several synthetic drugs also have been developed as the analogs /prototype of the natural phytochemicals, which serve as lead compounds for these synthetic drugs [2]. Phytochemicals are classified as primary and secondary constituents, depending on their role in plant metabolism. Primary constituents (metabolites) include common sugar, amino acids, protein, chlorophyll etc. Secondary constituents are the remaining plant chemicals such as alkaloids, terpenes, flavonoids, lignans, plant steroids, curcumin's, saponins, phenolics, flavonoids and glucosides Nearly one third of the pharmaceuticals are plant origin. Plants derived compounds are playing an important role in the development of several clinically useful medicines. Secondary metabolites or phytochemical content have pharmacological activities such as antioxidative, antiallergic, anticarcinogenic, they protect cells from the damage cause by free radicals [3].

### Experimental Technique

#### Geographical Distribution:

India, being one of the richest plant biodiversity countries in the world, has Western Ghats and Himalayas as the regions rich in plant biodiversity in the country. About 7500 plant species out of 43,000, are recorded as medicinal plants [4].

**Traditional Uses:**

Different parts of the plant have been used in traditional medicine for bronchitis, whooping cough rheumatic joints and to quench dipsia in diabetes [5]. The plant aloe vera, leaf is used for cure fever. The plant hibiscus, root is used for cough and cold [6]. The plant ficus racemosa, root is used to cure diabetes.

Different extracts of parts of plants like roots, leaves are used to treat infection diseases such as muscular and articular rheumatism [7].

The plant millettia pinnata, all parts are used for medicinal purpose like skin disorders and managing constipation.

**Pharmacological Properties:**

**Antimicrobial activity:**

Medicinal plants are known to have potential endophytic microbes, due to their bioactive compounds [8]. The plant acacia leucophloea, bark is used as antimicrobial, the plant clove, garlic is used as antimicrobial. The plant aloe vera has potent antibacterial properties. The plant wild jasmine, leaf is used as antimicrobial [9].

**Antiulcer activity:**

Ulcer is a common gastrointestinal disorder which is seen among many people. Babul tree contains Arabic acid with calcium, potassium and small quantity of maleic acid, it protected against cold restraint stress induced gastric ulcer in a rat [10].

**Antidiarrhoeal activity:**

It is used against protection of diarrhoea. The plant mangifera indica, leaves are used as antidiarrhoeal. Plant pelargonium luridum, roots are used as antidiarrhoeal [11].

**Antiplasmodial activity:**

Antiplasmodium activity pertains to studies performed in vitro using different strains of plasmodium falciparum [12].

**Antioxidant activity:**

Antioxidants are widely distributed in medicinal plants; clove plants have highest antioxidant value. The banana plant has antioxidant phenols and flavonoids, the plant ginger also shows antioxidant activity [13].

**Antiviral activity:**

Medicinal plants have been widely used to treat a variety of infections and non-infections ailments. Aloe vera plants have jelly like substance found in the leaves may be used to treat skin infection [14]. The plant ginger is used for nausea associated with antiretroviral treatment, the olive tree, leaf has antiviral properties, the tea tree oil controls fungal infections [15].

**Anti-inflammatory activity:**

Inflammation is a pathologic condition that includes a wide range of diseases such as rheumatic, diabetes. The turmeric plant used as anti-inflammatory, the plant turmeric can be effective in improving inflammation of rheumatoid arthritis, the plant ginger also has anti-inflammatory properties [16].

**References**

- [1]. WHO, Alma Ata Declaration: primary health care, Health for all series, 1978, 1, 231.
- [2]. H. O. Edeoga, D. E. Okwu, B. O. Mbaebie, 'Phytochemical Constituents of Some Nigerian medicinal plants; African Journal of Biotechnology, Vol. 4 (7), pp. 685-688, 2005.
- [3]. S. Madhuri and Govind Pandey; 'Some anticancer medicinal plants of foreign origin'; Current Science, Vol. 96, No. 6, 25 March 2009.
- [4]. Hahn NI, Journal of the American Dietetic Association, 1998, 98, 974-976.
- [5]. Peteros, N. P. and Uy, M. M., 'Antioxidant and Cytotoxic Activities and Phytochemical Screening of Four Philippine medicinal Plants'. Journal of Medicinal Plants Research, 4, 407-414, 2010.
- [6]. Ames, B.N., Dietary carcinogens and anticarcinogens: oxygen radicals and degenerative diseases. Science 221, 1256-1264, 1983.
- [7]. Mary K. Montes de Oca, Ross L. Pearlman, Surah F. Mecless, Rebecca Strickland and Farrukh Afaq, "Phytochemicals for the prevention of photocarcinogenesis" phytochemistry and photobiology, 93; 956-974. 2007.
- [8]. Briskin D. P., Medicinal plants and phytomedicines. Linking plant Biochemistry and Physiology to human health. Journal of plant Physiology, 124, 507-514, 2000.

- [9]. Ruba A. A., Nishanthini A., Mohan V.R., In vitro Antioxidant and Free Radical Scavenging Activities of Leaf of *Arthrocneum fruticosum* Moq (Chenopodiaceae). *The Journal of Free Radicals and Antioxidants*. Photon 139, 166-174, 2013.
- [10]. Anderson, D.M.W. *Sesbania* species as sources of gum exudates and seed galactomanan gums. In: Macklin, B. and Evans, D.O. (eds), *Perennial Sesbania Species in Agroforestry SyWoods*. Proceedings of an international workshop at ICRAF Nairobi, Kenya. NFTA Special Publication 90-01, 99-194. 1989.
- [11]. Mohamed, AI and Rangappa, M., Screening soybean (grain and vegetable) genotypes for nutrients and antinutritional factors. *Plant Foods for Human Nutrition*. 42, 87 – 96, 1992.
- [12]. Inder Kumar Makhija, Indra Prakash Sharma, Devang Khamar, *Phytochemistry and Pharmacological properties of Ficus religiosa: an overview*, *Annals Biol. Res.*, 1 (4), 171-180; 2010.
- [13]. JosephinSheeba.B and Selva Mohan. T, Antimicrobial activity of *Adhatodavasica* against clinical pathogens, *J. Plant Sci. and Res.*, 2 (2), 83-88; 2012.
- [14]. Reinout M. Havinga, Anna Hartl, Johanna Putscher, Sarah Prehler, Christine Buchmann, Christian R. Vogl, *Tamarindus indica* L. (Fabaceae): Patterns of use in traditional African medicine, *J. Ethnopharm.* 127, 573–588; 2010.
- [15]. Surya Prakash DV, Sree Satya N, SumanjaliAvanigadda and Meena Vangalapati, Pharmacological review on *Terminalia Chebula*, *Int. J. Res. Pharm. and Biomed.Sci.* ,3(2),679-683; 2012.
- [16]. Love S. Chokotia, Pranav Vashistha, Rajkumar Sironiya, Harsha Matoli, Pharmacological activities of *Eclipta alba*, *Int. J Res. Develop Pharm and Life Sci.*, 2(4), 499-502; 2013.