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PHARMACY AND BIO SCIENCES****IMPACT FACTOR 4.018\*\*\*****ICV 6.16\*\*\*****Pharmaceutical Sciences****Review****Article.....!!!****PHARAMACOLOGICAL ACTIVITY OF TRADITIONAL MEDICINAL PLANTS**

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**KEYWORDS:**

Medicinal Plants,  
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**ABSTRACT**

Plants have proven to be a novel source for bioactive natural products. They have evolved and adapted over million of years to with stand bacteria, insects, fungi and weather to produce unique, structurally diverse secondary metabolites. The ethnopharmacological properties have been used as a primary source of medicines for early drug discovery. According to the world health organization (WHO), 80% of people still rely on plant-based traditional medicines for primary health care and 80% of the plant derived drugs were related to their original ethno pharmacological purpose.

**INTRODUCTION:**

Medicinal plants frequently used in the synthesis of different drugs. Like in case of laxatives, blood thinners, antibiotics and anti-malarial medications, contain ingredients from plants. Moreover the active ingredients of taxol, vincristine and morphine isolated from foxglove, periwinkle, yew, and opium poppy, respectively.

Medicinal plants are an integral component of research development in the pharmaceutical in the pharmaceutical industry. Such research focuses on the isolation and direct use of active medicinal constituents, or on the development of semi-synthetic drugs or still again on the active screening of natural products to yield synthetic pharmacologically – active compounds.

The industrial uses of medicinal plants are many. These range from traditional medicines, herbal teas, and health foods such as nutraceuticals to galenicals, phytopharmaceuticals and industrially produced pharmaceuticals. Furthermore, medicinal plants constitute a source of valuable foreign example for most developing countries, as they are a ready source of drugs such as quinine and reserpine of galenicals like tinctures and of intermediates in the production of semi-synthetic drugs.

**PHARMACOLOGICAL ACTION OF MEDICINAL PLANTS:**

Humans have always suffered from infections by bacteria, fungi, viruses and parasites, but also from inflammation, cold, digestive problems, pain and many other health disorders and diseases. Modern medicines, which are based on synthetic drugs and on antibiotics, have only become available during the last 150 years. Previously, humans had to rely on drugs from nature, mostly from plants but also from nature, mostly from plants but also from fungi and animals. Medicinal systems around the world, which had developed thousands of years ago, heavily relied on herbal medicine, a good record of plants used is available for traditional Chinese medicine, kampo medicine, ayurvedic medicine, European medicine and traditional medicines of Africa, Australia and Americans. The treatment of infections and health disorders with herbal medicines is usually not or not entirely a placebo medicine but involves active natural products mostly of low molecular weight of great structural diversity which are typical for all plants.

A number of plants are well-known for their toxic or hallucinogenic properties. Very often, these plants contain certain alkaloids, terpenoids or other secondary metabolites which specifically modulate a corresponding molecular target in animals of humans. Such targets are often neuroreceptors. Enzymes which degrade neurotransmitters, ion channels, ion pumps, or elements of the cytoskeleton. Quite a number of these secondary metabolites are presently been extracted from plants and used in modern medicine as chemical entities with established applications. Several pharmacological activities including the treatment of cancer, immunomodulation, nervous system activation, antipyretic and legic,

hepatoprotection, antidiabetic nature etc have been possessed by plants and their products. Scientists have even started correlating phytochemical constituents of a plants with its pharmacological activity as well as the botanical properties of plants with their pharmacological activity. Correlation of botanical phyrochemical properties to specific pharmacological activities i.e. more co-ordinated multidimensional research is expected in the coming future. In terms of pharmacological activity, more attention has been paid to cental nervous system-active, cytoprotective, immunomodulators and chemotherapeutic plant products.

These medicinal plants consider as a rich resources of ingredients which can be used in drug development and synthesis. Besides that these plants play a critical role in the development of human cultures around the whole world.

### **CONCLUSION:**

Medicinal plants are an integral component of research developments in the pharamaceutical industry. Such research focuses on the isolation and direct use of active medicinal constituents or on the development of semi-synthetic drugs, or still again on the active screening of natural products to yield synthetic pharmacologically-active compounds. The term of medicinal plants include a various types of plants used in herbalism and some of these plants have a medicinal activities. Medicinal plants are the backbone of traditional medicine, which means more than 3.3 billion people in the less developed countries utilize medicinal plants on a regular basis. The world market for plant-derived chemicals pharmaceuticals, fragrance, flavours and colour ingredients alone exceeds several billion dollars per year.

### **REFERENCES:**

1. Balunas M. J. and Kinghorn A. (2005). Drug discovery from medicinal plants. *Life sciences.*, 78(5). 31-41.
2. Cragg G.M and Newman D.J. (2005). Biodiversity: a continuing source of novel drug leads. *Pure applied chemistry.*, 77: 7-24.
3. Kriahnaish D, Rosalam S and nithyanandam R. (2011). A review of potential antioxidant activity of medicinal plant species, *food.* 89(3): 217-233.
4. Wink M (2012). Molecular modes of action of drugs used in phytomedicine. In *herbal medicines: Development and validation of plant-derived medicines for human health.* PP 161-172.
5. Bruneton J. (2002). *Phytotherapie – Lesdonness de L evaluation.* Lavoisier. Paris.

6. Zhang L. W. and Li J. (2011). The present situation and development trend of the modernization of Chinese material medica. 40: 349-353.
7. Li Y. (2012). Chemistry and pharmacology. Acta Pharmacol. Sin. 33: 1141-1146.
8. Pei S. (2008). Review on two decades development of ethnobotany in china. Acta Botanica yunnanica. 30(4): 505-509.
9. Mahesh B. and Sathish S. (2008). Antimicrobial activity of some important medicinal plant against plant and human pathogens. World journal of Agricultural sciences. 4(5): 839-843.
10. Nair A. M, Tamhankar C.P. and Saraf M. N. (1994). Studies on the mast cell stabilising activity of vitex negundo Linn. Indian Drugs. 32: 277-282.
11. Carocho M. and Ferreira I. C. (2013). The role of phenolic compounds in the fight against cancer-a review. Anti-cancer agents med. Chem. 13(8): 1236-1258.