

## 10. Indian Medicinal Plants- An Overview

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### **Abstract:**

Medicinal plants are the source of macro-nutrients, micro-nutrients, vitamins and useful phytochemicals. And these components are necessary for treating various health related problems. Actually, this type of plants is used as tonic, decoction, aqueous extract, raw materials, herbal products or as dry powder. A large number of populations depends on medicinal plants. Here we are discussing about some common but valuable medicinal plants and their uses.

**Keywords:** Diseases, Herbs, Medicinal Plants, Plant, Treatment.

### **10.1 Introduction:**

Introduction: India is the origin of Ayurvedic and Unani system of medicine. Many plants are the basis of this type of medical systems. Every plant has more or less medicinal properties. There are so many plants in the world which people have been using for many ages as medicine for various purposes. Many of them grow around our house and very common to us such as Tulsi (*Ocimum sanctum*), ashwagandha (*Withania somnifera*), kulekhara (*Hygrophila auriculata*), ginger (*Zingiber officinale*), basok (*Justicia adhatoda*) and so on. People in rural areas are most dependent on medicinal plants for the treatment of several diseases. For primary healthcare, a large number of world populations use raw plant materials, processed plant materials and herbal products (According to WHO). People also believe that natural plant products are much more secure than the synthetic drugs (Srivastava, A.K, 2018).

### **10.2 Some Medicinal Plants of India and their uses:**

**a. Tulsi (*Ocimum Sanctum*):** This herb belongs to the family Lamiaceae. Plant's extract has anti-microbial, anti-inflammatory, anti-tumour, antibacterial, anti-ulcerogenic, antistress, antihypertensive, antipyretic and antioxidant properties (Das & Vasudevan, 2006). Two flavonoids orientin and vicenin from leave of *Ocimum sanctum* show radioprotective effects (Lam et al, 2016).

**b. Kalmegh (*Andrographis Paniculata*):** Kalmegh, king of bitters is an annual herbaceous plant and it belongs to Acanthaceae family. The plant has antibacterial, anti-HIV, antispasmodic, anticarcinogenic, antidiabetic, antipyretic, hepatoprotective, nimatocidal and antioxidant activities (Niranjan et al,2010). It lowers the blood sugar by increasing the secretion of insulin and control blood pressure.

**c. Brahmi (*Bacopa Monniera*):** This plant is used as nerve tonic to improve memory and prevent stress and anxiety. It has neuro-psychopharmacological effects (Singh & Dhawan, 1997). It is used to treat Alzheimer's disease and attention deficit hyperactivity disorder (ADHD) by enhancing brain functions.

**d. Thankuni/ Gotu Kola (*Centella Asiatica*):** This herbaceous perennial flowering plant belongs to the family apiales. Phytochemical such as asiaticoside of this plant has wound healing power (Shukla et al, 1999). The herb is also used to treat diabetes mellitus, fever, diarrhoea, asthma, hepatitis and syphilis.

**e. Kulekhara (*Hygrophila Auriculata*):** This medicinal herb is used to increase blood hemoglobin and prevent anaemia. Leaf extract is useful for treatment of stomach pain, diarrhoea and dysentery. It is also used to treat diabetes.

**f. Ghritkumari (*Aloe Vera*):** It is good for skin and hair care. It has moisturizing potential. Aloe vera juice from the flesh of leaf lowers the blood sugar level and helps to cure digestive problems. It has healing (wound and burn) property, also anti-inflammatory and immunomodulators (Choi and Chung, 1999).

**g. Basak (*Justicia Adhatoda*):** Leaf extract of basak is quite effective in preventing various problems of lungs and regimen. Methanolic extract of the leaf shows anti-microbial property and anti-microbial agents may be useful for chemotherapy (Pa & Mathew, 2012).

**h. Drumstick Plant (*Moringa Oleifera*):** Prevent arthritis pain, liver problems and high blood pressure. Leave and drumstick are used as food and have high nutritional values. Several parts of the plant show antibacterial, anti-microbial, anti-inflammatory, antidiabetic, antifungal, antipyretic, antioxidant, hepatoprotective and cholesterol lowering activities (Anwar et al, 2007).

**i. Laajvanti/ Mimosa (*Mimosa Pudica*):** This herb is good for the treatment of diarrhoea, dysentery, vomiting and so on. Roots of the plant are used to treat asthma, fistula, leucoderma, jaundice and ulcer. Leave extract is good for treating conjunctivitis and hemorrhages. Root decoction is used to reduce toothache (Joseph et al, 2013).

**j. Ashwagandha (*Withania Somnifera*):** This medicinal plant belongs to the family solanaceae. It helps to reduce depression, stress, anxiety and improves memory and brain function. It can lower the blood sugar level, control diabetes and increase male fertility.

It can work against Parkinson's and Alzheimer's diseases, tardive dyskinesia and drug addiction (Kulkarni & Dhir, 2008).

**k. Turmeric (*Curcuma Longa*):** Turmeric powder is good for skin and liver. It is used to treat conjunctivitis, smallpox, chickenpox, wound, liver problems, urinary tract infection and so on (Dixit et al, 1988). Sometimes, turmeric powder is consumed with milk to boost immunity.

**l. Ginger (*Zingiber Officinale*):** This herb plays an effective role on cold, cough, nausea, vomiting, dizziness, digestion problem, menstrual pain, constipation and arthritis. It is a cholesterol lowering, antithrombotic and anti-inflammatory agent (Thomson et al, 2002).

**m. Amlaki/ Amla (*Phyllanthus Emblica*):** Amla is good for hair health. It provides strength to hair follicles, treat dandruff and enhances hair growth. Amla fruit is rich in vitamin-C. It purifies blood, improves liver, kidney and heart health and boost immune system. It helps to lose weight, improves eye sight, prevents bone and tooth decay.

**n. Methi/ Fenugreek (*Trigonella Foenum-Graecum*):** Aqueous extract of Fenugreek shows immunomodulatory effects (Hafeez et al, 2003). Drinking methi tea is useful for treatment of diabetes and weight loss. It is effective to prevent hair fall, hair thinning and dandruff.

**o. Sarpagandha/ Indian Snakeroot (*Rauwolfia Serpentina*):** The plant is highly beneficial to treat hypertension, epilepsy, fever, liver ailments, edema and so on. In India, it is applied to treat snakebites, high blood pressure and mental illness, pneumonia, asthma, fever, AIDS, spleen disease, skin diseases, rheumatism and veterinary diseases (Dey & De, 2011).

**p. Haritaki/Myrobalan (*Terminalia Chebula*):** Dry fruit powder of this plant is useful for treatment of indigestion, several cardio-problems, ulcer, acne, boost immunity and female fertility. It can help to lose weight, prevents cold and cough.

**q. Ivy Gourd (*Coccinia Grandis*):** It is used as vegetable and good source of iron, nutrient. People are used to treat constipation, cold, fever, epilepsy. Leave and stems are widely used for diabetes treatment.

**r. Satamuli/ Shatavari (*Asparagus Racemosus*):** Satamuli is used by ayurvedic practitioner to treat liver problems, nerve related disorder, inflammation, liver diseases and some infectious diseases (Goyal et al, 2003).

**s. Mulethi (*Glycyrrhiza Glabra*):** Daily use of licorice tea boost immunity. It cures cold and cough (especially dry cough), throat infection. Glabridin, active compound of mulethi is responsible to reduce pigmentation in the skin.

**t. Bahera (*Terminalia Bellirica*):** It is used to treat dysentery, respiratory tract infection, cold, cough and sore throat. It is also used as astringent and laxative.

### 10.3 Discussion:

Medicinal plants play an important role in rural areas for treatment of several diseases. Many people are dependent on herbal products because natural plant products are safe and

have less side effects than the synthetic drugs. And as a result, there is a great demand for herbal medicines or products. So, there is a need to conserve herbal or medicinal plants for future. In India, National Medicinal Plant Board (NMPB) works on the promotion of cultivation of medicinal plants under the Govt. scheme of National Mission of Medicinal Plants (2008-09) and National Ayush Mission (NAM). For sustainable conservation of medicinal plants, we should not collect too many threatened medicinal plants from the wild. on the body. Not only that, we should make people aware conservation and proper utilization of medicinal plants and also to do research on medicinal plants.

#### **10.4 Conclusion:**

Medicinal plants play important role in primary healthcare. But we need to know about the proper use of medicinal plants because overdose and wrong dosage of herbal products may lead to dangerous effects. On the other hand, many herbal trees are now on the verge of extinction. So, it is our duty to protect and conserve important medicinal plants.

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