

**COMMONLY USED MEDICINAL PLANTS, A NEED OF ERA AND THEIR  
THERAPEUTIC POTENTIAL: A REVIEW**

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**Abstract**

The connection between humans and mother nature is as old as humankind itself. According to the World Health Organization, 75% of the world's populations are using medicinal herbs for basic healthcare needs. From thousands of years, the ancient scholars believed that herbs are only solutions to cure a number of health-related problems. The study, experimentally approved the ancient believed on the therapeutics efficacy of different herbs. Herbal medicines have been used in order to prevent, cure and manage from various diseases since the birth of mankind. A large number of medicinal plants showing many therapeutics activities like antioxidants, anti-diabetic, anti-cancer, anti-parkinsonian, anti-inflammatory, anti-insecticidal, anti-pyritic, antibiotic, anti-hemolytic properties and cardioprotective, Neuroprotective, Nephroprotective etc. It is noted that medicinal plants also utilized as a pleasant condiment and conserve food. There are believed to be more than 350,000 species of medicinal plants in existence. It is noted that a lot of health-related issues like chronic obstructive pulmonary disease, asthma, cancer, cardiovascular and central nerve system disorders are being faced by the mankind due to the industrial pollution, environmental as well as mental health factors in today's life. Moreover, the synthetic drugs are having various side effects and adverse drug reactions and increasing day by day, therefore toxicology and therapeutic evaluation of existing medicinal plants for development of medicinal herbal formulations are the need of this era. This overview enlighten on therapeutic potentials of various medicinal plants and its active constituents in systemic manner furthermore it will helpful and roadmap for development of new herbal medicinal formulation.

**Keywords:** Medicinal Plants, Therapeutic Potentials, Antioxidants.

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## 1. INTRODUCTION

Medicinal plants are the oldest form of therapeutics that have been utilized as traditional drugs for ages. Empirical knowledge of their beneficial effects was passed down through human groups (Marrelli, 2021). The "Rig veda," is the oldest depository of human knowledge that bears the earliest reference of plant possessing medicinal properties (Saranraj & Sivasakti, 2014) Charak is considered as the founder of Ayurveda and Ayurvedic medicine. He wrote a medical treatise called Charak Samhita, in which he described a wide range of ailments and discussed their treatment (Shi & Zhang *et al.*, 2014). As per World Health Organization (WHO) 80% of the global population (advanced and developed) rely on traditional usage of medicines for therapeutic effects (Michel & Jennifer *et al.*, 2020). Furthermore, industrialization and excessive utilization of synthetic drugs have passed the way for the elucidation of medicinal plant products that have the tendency to produce therapeutic effect with minimal Adverse Drug Reactions(ADRs) and maximum therapeutic efficacy (Petrovska *et al.*, 2012). To begin with, it is clear that the vegetable kingdom represents a source of molecules that are still largely unexplored, and possess a great potential interest in drug discovery (Romano & Lucariello *et al.*, 2021). Alkaloids, steroids, tannins, glycosides, volatile oils, fixed oils, resins, phenols, and flavonoids are among the active constituents that are found in various sections of plants (Tonthubthimthong & Chuaprasert *et al.*, 2011). Bioactive natural ingredients were often utilized in the management of chronic and infectious ailments such as cancer, diabetes, and asthma, anti-inflammatory, analgesic, and antipyretic remedies, or as alternative to hormone replacement therapy (Liao *et al.*, 1995; Li & Yu, 2006; Javadi *et al.*, 2017). In addition to this, plant products to be with gastroprotective, hepatoprotective, nephroprotective, demulcent and expectorant properties (Ahmad & Alkarkhi *et al.*, 2009). Recently in 2019, with the breakdown of COVID-19 herbal drugs such as *Zingiber officinale*, *Commiphora molmol*, *Allium sativum*, *Magnolia officinalis* recognized as great breakthrough in the management of COVID-19 symptoms (Silveira *et al.*, 2020; Demeke *et al.*, 2021). Glycyrrhizin, extracted from the roots of *Glycyrrhiza glabra*, has remarkable antiviral activity against severe acute respiratory syndrome of coronavirus-2 (SARS-CoV), a previously pandemic coronavirus. Other notable medicinal plants used against SARS-CoV include *Artemisia annua*, *Isatisindigotica*, *Lindera aggregate*, *Pelargonium sidoides*, and *Glychirrhiza spp.* Emodin, reserpine, aescin, myricetin, scutellarin, apigenin, luteolin, and betulonic acid are some of the active compounds that have showed promising activity against coronaviruses and the list is too vast to compile in a single paper (Khan *et al.*, 2021). Plants are accountable for about one third to one half of all pharmacological medications. Table 1 indicated the Application of various medicinal plants and their constituents in the management of various ailments. Application of traditional medicine paved the way for novel drug development as bioactive molecules extruded from herbal medicines consisting of low toxicity and great therapeutic potentials (Yeshiwas *et al.*, 2019).

Sr. No.	Medicinal Plant /Botanical Name	Active Constituent	Therapeutic Potentials
1.	Azadirachta Indica (Neem) Family- Meliaceae	6-Desacetyl Nimbinene, Nimbin, Nimbanene, Nimbandiol, Nimbolide, Ascorbic Acid, N-Hexacosanol And Amino Acid, 17-Hydroxyazadiradione, And Nimbiol, Quercetin And $\beta$ -Sitosterol, Polyphenolic Flavonoids, 7-Desacetyl-7-Benzoylgedunin, 7-Desacetyl-7-Benzoylazadiradione.	Anti- Piles, Bile Suppressant, Antibacterial, Antimicrobial, Demulcent, Anorexia (Sharma <i>et al.</i> ,2011; Alzohairy <i>et al.</i> , 2016; Zanunico <i>et al.</i> , 2016; Ali <i>et al.</i> ,2021)
2.	Withania Somnifera (Ashwagandha) Family- Solanaceae	Alkaloids, Steroidal Lactones, Saponins etc.	Neuroprotective, Immunomodulator, Anti-Inflammatory, Anti-Arthritic, Anti-Anxiety, Anti-Tumor, Anti-cancerous , Antulcer (Kulkarni and Sharma, 1998; Singh <i>et al.</i> , 2011)
3.	Acorus Calmus (Vacha) Family- Acoraceae	Sesquiterpene Hydro Carbons, 80% Asarones & Ketones	Anti-Oxidant , Spasmolytic, Neuroprotective, (Gilani <i>et al.</i> , 2006; Esfandiari <i>et al.</i> , 2018)
4.	Aegle Marmelox (Bilwa Or Bael) Family- Rutaceae	Furoquinoline, Coumarins , Alkaloids (Skimmianine) , Limonoids (Nimbidinin), Di- and Tri- Terpenoids, and Flavonoids.	Anti-Cancer , Anti-Diabetic, Anti-Diarrheal, Cardio-Protective, (Prince <i>et al.</i> , 2005; Kesari <i>et al.</i> , 2006; Masuma <i>et al.</i> , 2008)
5.	Curcuma Longa (Haldi/ Turmeric) Family- Zingiberaceae	Curcuminoids , Essential Oils Embelin, Rapanone, Homoembelin and Vilangin	Hepatoprotective, Neuroprotective, Anti-Cancer, Anticoagulant, Anti-Inflammatory, Antiviral, Antibacterial, Anti- Tumor, Antiplatelet, And Cytoprotective (Zhang <i>et al.</i> , 2014 Esmaily <i>et al.</i> , 2015; Valizadeh <i>et al.</i> , 2020; Rattis Bruna <i>et al.</i> , 2021)
6.	Embelia Ribes / (False Black Pepper) Family- Primroses	Vilangin , Embelin, Homoembelin & Rapanone	Atherosclerosis, Anti-Cancer, Anti-Inflammatory, Antifungal Activity, Anxiolytic, Anti- Diabetic Antioxidant, Antihyperlipidemic (Bhandari <i>et al.</i> , 2002; Kwang <i>et al.</i> , 2007; Bist and Parsad, 2016)
7.	Glycyrrhiza Glabra / (Licorice) Family- Legumes	Coumarins , Triterpenoids , Flavonoids & Pterocarpan	Proliferation-resistant, Anti-Hypercholesterolemia, Anti-Oxidant, Prevention of Cerebral Ischemia (Visavadiya <i>et al.</i> , 2006; Sheela <i>et al.</i> , 2006)
8.	Hemidesmus Indicus / (Indian Sarsaparilla) Family- Dogbanes	Coumarinolignoids & Essential Oils	Anti-bacterial , Hepatoprotective & Anti-Nociceptive (Baheti <i>et al.</i> , 2006; Gadge and Jalalpure, 2011).
9.	Phyllanthus Emblica/ (Indian Gooseberry, Amla) Family- Euphorbiaceae	Flavonoids , Phenols (Gallic Acid), Triterpenoids & Tannin	Antioxidant, Anti-Inflammatory, Anti-Hypercholesterolemia, Anti-Atherogenic, Rich Source of Vit-C, Antimicrobial, Antipyretic, Hepatoprotective, Antitumor and Ulceroprotective (Kim <i>et al.</i> , 2005; Scartezzini <i>et al.</i> ,2005; Gaire and Subedi, 2014)
10.	Piper Longum Long Pepper Family- Piperaceae	12 Amides (Piperine) and 10 Lactams (Alkaloids), Lignans.	Chemo-protective , Immuno-modulator, Anti-hyperlipidemic, Antimicrobial, Cardioprotective, Coronary Vasodilation (Vijay Kumar and Nalini, 2006; Kumar <i>et al.</i> , 2011; Rather and Bhagat, 2018)
11.	Piper Nigrum (Black Pepper) Family- Piperaceae	Dehydropiperonaline & Piperidine	Anti-Hyperlipidaemic, Anti-Carcinogenic, Anti-Oxidant (Shah <i>et al.</i> , 2011; Saha and Verma, 2014)
12.	Plumbago Zeylanica Doctorbush Family- Plumbaginaceae	Mono-Di- and Tri-Naphthoquinones(Plumbagin), Triterpenoids and Coumarins	Proliferation- resistant, Anti-Oxidant (Zhao and Lu, 2006; Lee <i>et al.</i> , 2019)
13.	Valeriana Officinalis (Jatamansi) Family- Caprifoliaceae	Monoterpenes and Sesquiterpenes, Flavonoids, Alkaloids, Amino Acids, and Lignanoids.	Cardioprotective, Anxiolytic, Antidepressant, and Hypnoti-Sedative Effects (Holzmann <i>et al.</i> , 2011; Chen <i>et al.</i> , 2015).
14.	Terminalia Chebula/ Myrobalan, Hardad. Family- Combretaceae	Ellagic Acid ,Shikimic Acid Compounds, Triterpenoids and tannins	Anti-Diabetic, Anti-Oxidant, Nephro- Protective, Hepatic injury preventive(Lee <i>et al.</i> , 2005; Rao and Nammi, 2006; Dutta and Kalita, 2018)
15.	Zinziber Officinalis (Zinger Or Adrak) Family- Zingiberaceae	Mono & Sesquiterpenoids, Essential Oils, Pungent Principles (Vanilloids: Zingerone) & Curcuminoids	Chemo-preventive, Hypercholesterolaemic, Anti-Atherosclerotic & Anti-Cancerous (Fuhrman <i>et al.</i> , 2000; Joshi and Kaul, 2001; Prasad and Tyagi,2015; Jafarzadeh and Nernati, 2021)

16.	Aconitum Heterophyllum (Monkshood) Family- Ranunculaceae	Saponins, Alkaloids, Carbohydrates, Proteins and Amino Acids, Quinones, Flavonoids, Glycosides, Terpenoids, N-Diethyl-N-Formylaconitine, Methyl Aconitine, Aconitine & Anthorine.	Diuretic, Reproductive Disorders, Hepatoprotective, Antipyretic, Analgesic, Antioxidant, Carminative, Antidiarrheal (Paramanick <i>et al.</i> , 2017).
17.	Saraca Indica (Ashoka) Family-Fabaceae	Glycosides, Flavonoids, Tannins, Saponins, and Sterols (Epicatechin, Catechin, Procyanidin P2, 11-Deoxyprocyanidin B, Procyanidin, Leucocyanidin)	Oxytocic, Uterotonic, Anticancer, Anti-Estrogenic, Anti-Inflammatory, And Anti-Oxidant, Antiproliferative, Anti-Keratinizing Effects, Anti-PCOD (Baranwal, 2014; Shahid <i>et al.</i> , 2015)
18.	Ocimum Sactum (Tulsi) Family-Lamiaceae	Urosolic Acid, Carvacrol, Linalool, Limatrol, Caryophyllene, Euginal, Estragol, Rosmarinic Acid, Propanoic Acid, Apigenin, Eugenol, and Cirsimaritin	Anti-Bronchitis, Cardioprotective, Bronchial Asthma Protective, Anti-Malarial, Anti-Diarrheal, Anti-Dysentery, Painful Eye Diseases, Anti-Pyritic, Anticancerous, Antidiabetic, Anti-fungal, Anti-microbial, Hepatoprotective, Anti-emetic, Anti-spasmodic, Analgesic (Prakash and Gupta, 2005; Pattanayak <i>et al.</i> , 2010).
19.	Bacopa Monniera (Bramhi) Family-Plantaginaceae	Alkaloid Brahmine, Herpestine, Stigmasterol, A-Alanine, Aspartic Acid, Nicotinine, Glutamic Acid, Serine & Pseudojubilogenin Glycoside.	Sedative, Anti-depressant, Anti-oxidant, Anxiolytic, Adaptogenic, Antiepileptic, Gastrointestinal Effects, Endocrine, Gastrointestinal, Smooth Muscle Relaxant Effects, Analgesic, Antipyretic, Antidiabetic, Antiarthritic, Anticancerous, Antihypertensive, Antimicrobial, Antilipidemic, Anti-Inflammatory, Neuroprotective, and Hepatoprotective Activities (Jayshree <i>et al.</i> , 2020; Nandy <i>et al.</i> , 2020; Brimson <i>et al.</i> , 2021)
20.	Acacia Catechu (Khair or Kher) Family-Fabaceae	Tannins, Terpenoids, Triterpenoids, Alkaloids, Ascorbic Acid, and Carbohydrates, Resins and Saponins, 4-Hydroxybenzoic Acid, Kaempferol, Quercetin, 3,4',7-Trihydroxyl-3', 5-Dimethoxyflavone, Catechin, Epicatechin, Afzelechin, Epiafzelechin, Mesquitol, Ophioglonin, Aromadendrin, and Phenol.	Anti-Inflammatory, Anticancerous, Anti-diabetic, Antioxidant, Antimicrobial, Antidiarrheal, Anti-viral, Hepatoprotective, Immunomodulatory action (Jayshree <i>et al.</i> , 2009; Li <i>et al.</i> , 2010; Bikash Adhikari <i>et al.</i> , 2021).
21.	Camellia sinensis / (Green Tea) Family- Theaceae	Epigallocatechin, epicatechin, epicatechin 3-gallate and epigallocatechin 3-gallate and Gallic acid,	Antihepatotoxic, anti-oxidative, anti-hypertensive, anti-inflammatory, anti-proliferative & anti-thrombogenic. (Bhatia <i>et al.</i> , 2019 & Prasanth <i>et al.</i> , 2019)

Table 1: Therapeutic Potentials of Medicinal Plants and their Active Constituents

## 2. POTENTIAL TRADITIONAL DRUGS IN THE MANAGEMENT OF VARIOUS AILMENTS

### 2.1. Neuroprotective Potential of Medicinal Plants:

Neurodegeneration is a process that occurs as a result of both neuropathological diseases and the ageing of the brain. It is well recognized that brain pathology, disorders such as cerebrovascular and neurodegenerative illness, is a primary cause of death worldwide, with an incidence of roughly 2/1000 and an 8% global mortality rate (Rabas *et al.*, 1998). Neuroprotection refers to the methods and related mechanisms that can protect the central nervous system (CNS) against neuronal harm caused by both acute (e.g., stroke or trauma) and chronic (e.g., Alzheimer's disease and Parkinson's disease) neurodegenerative illnesses (Kumar & Khanum *et al.*, 2012). A variety of natural compounds, mostly plant extracts, have been reported to be utilised in traditional medicine for neuroprotective, memory-enhancing, and anti-aging properties of Ginkgo biloba, Panax ginseng, Curcuma longa, Bacopa monnieri, and Salvia officinalis (Elufioye *et al.*, 2017). Experimentally it was proved that the aqueous extract of *Cynodondactylon* (0.25g/kg b.w and 1g/kg b.w) when administered for seven days alleviates

radiation-induced behavioral and biochemical changes in the cerebral cortex of mice (Poojary *et al.*, 2021). Further, aqueous extract of *Saussureacostus* (0.25ml/ 0.5ml) too showed the neuroprotective potential (Deabas *et al.*, 2021). *Ziziphus jujuba* Mill. (Rhamnaceae) (29mg/kg, 57mg/kg, and 114 mg/kg) when administered for 15 days elicited neuroprotective effect (Djeuzong *et al.*, 2021). Similarly, *Bryophyllum pinnatum* at a dose of (50 and 100 mg/kg b.w) when administered for 21 days ameliorated oxidative imbalance and too provides neuroprotection (Ogidigo *et al.*, 2021).

## 2.2. Cardioprotective Potential of Medicinal Plants:

Cardiovascular disease (CVD) is a common term used for a number of pathologies, such as coronary heart disease (CHD), cerebrovascular disease, peripheral arterial disease, rheumatic and congenital heart diseases, and venous thromboembolism. CVD is responsible for 31% of global mortality, with CHD and cerebrovascular accidents accounting for the majority of this (Stewart *et al.*, 2017). It has been reported that various medications such as antibacterial and antiviral treatments can disrupt heart function by affecting the metabolism of the heart muscles (Mamoshina *et al.*, 2021). The number of cases of cardiovascular disease is increasing around the world, and due to its leading cause of death, the list of plants with presumptive claims of cardio-protection increased. Cardiac protective medicinal plants span different plant families and contain different bioactive plant components. It uses flavonoids, cardiac glycosides, alkaloids, and other antioxidant phytochemicals as its main bioactive ingredients (Michel *et al.*, 2020). Various bioactive constituents that possess cardioprotective properties have been found in medicinal plants such as *Daucus carota* Linn, *Nerium oleander* (NO) Linn, *Amaranthus viridis*, *Digitalis lanata*, *Crataegus oxyacantha*, *Ginkgo biloba*, *Primulaveris*, *Terminalia arjuna*, *Zingiberofficinale*, *Tinospora cordifolia*, *Hydrocotyle asiatica* Linn, *Mucuna pruriens*, and *Cichorium intybus* (Shah *et al.*, 2019).

Various researches have indicated the role of medicinal plant such as alcoholic extract of *Crataegus oxyacantha* (bansangli) (0.5 ml/100g BW) when administered to male albino rats for 30 days maintained mitochondrial antioxidant status, prevented mitochondrial lipid peroxidative damages and protects the myocardium, particularly during ischemic situations (Verma *et al.*, 2017). *Zingiber officinale* (Ginger) at a dose (0.3-3 mg/kg) maintains blood pressure by blocking calcium channels of organ and arterial walls, which induce smooth muscle contraction (Shivananjappa *et al.*, 2021). Solid herbal extract of *Primula veris* (cowslip)(30mg/kg *i.p.*) too exerts a cardioprotective effect (Latypovaa *et al.*, 2019). Similarly, ethanolic extract of *Tinospora cordifolia* (250mg/kg and 500mg/kg) significantly reduced the infarct size in a dose-dependent manner and produced cardio-protection (Rao *et al.*, 2005).

## 2.3. Nephroprotective potential of medicinal plants:

Chronic kidney disease (CKD) is defined as a kidney structural or functional disorder that lasts more than three months. 8 to 16% of population worldwide is affected by renal disorder (Kolominsky *et al.*, 1998). Various pathological factors that include diabetes, glomerulonephritis, and cystic kidney disorders, aggregate kidney disorders. Chronic kidney disease is more prevalent in persons with obesity, diabetes, and hypertension in high-income

nations, and it is more common in those with obesity, diabetes, and hypertension in low-income countries (Kumar & Khanum, 2012). Various herbal medicines have been demonstrated to offer anti-inflammatory, anti-oxidative, anti-apoptotic, autophagy, and anti-fibrotic capabilities, which may explain for the therapeutic strategy in treating chronic kidney disease (Elufioye *et al.*, 2017). Bioactive constituents such as alkaloids, glycosides, carotenoids, and other phenolic compounds, all of which have antioxidant properties. Phytoconstituents from different medicinal plants act as nephroprotective like *Artemisia annua*, *Curcuma xanthorrhiza*, *Zingiber officinale*, *Andrographis paniculata*, *Solanum xanthocarpum*, *Berberis vulgaris*, *Camellia sinensis*, *Nigella sativa*, *Tinospora cordifolia*, *Panax ginseng*, *Cordyceps cicadae* (Pathan *et al.*, 2021; Poojary *et al.*, 2021).

Experimentally fruit extract of *Solanum xanthocarpum* (200 and 400 mg/kg/d (p.o.)) for eight days showed nephroprotection by decreasing the generation of reactive oxygen species along with decrement in plasma and urine urea and creatinine (Hussain *et al.*, 2012; Deabes *et al.*, 2021). *Tinospora cordifolia* (162mg/kg/day) and *Alhagicamelorum* (400mg/kg, 600mg/kg) too elicited nephroprotective potential. (Djeuzong *et al.*, 2021; Ogidigo *et al.*, 2021; Iqbal *et al.*, 2022; Khan *et al.*, 2022).

#### **2.4. Anti-diabetic Medicinal Plants**

Diabetes is a huge global public health issue that occurs due to improper metabolism of carbohydrates, shortage of insulin or inadequate insulin synthesis in the pancreas (Kumar *et al.*, 2021; Shanmugam *et al.*, 2021). Diabetes is a second largest disorder worldwide as it is associated with micro and macrovascular complications such as neuropathy, nephropathy, retinopathy, cardiovascular complications and many more (Li *et al.*, 2022) The nature is blessed with various medicinal plants that have anti-diabetic potential such as *Allium sativum*, *Eugenia jambolana*, *Momordica charantia*, *Ocimum sanctum*, *Phyllanthus amarus*, *Pterocarpus marsupium*, *Tinospora cordifolia*, *Trigonella foenum graecum*, *Withaniasomnifera*, and *Withania somnifera* (Modak *et al.*, 2007; Pivari *et al.*, 2019). This contention is supported by various researchers that explain experimentally that administration of aqueous extract of *Moringa oleifera* Lam (100, 200 & 300mg/kg) when administered lowers the blood glucose level and used as an ethnomedicine to treat diabetes mellitus in streptozotocin induced diabetes in rats (Jaiswal *et al.*, 2009). In addition, extract of aloe vera (300mg/kg/day) to regulate blood sugar level and plasma lipid in diabetic mouse (Hasan & Abdullah, 2022). *Laurus nobilis* (200mg/kg) and *Vigna subterranea* (Bambara nut) (100, 200, 400mg/kg) to have hypoglycemic, anti-obesity and cardioprotective potential (Mohammed *et al.*, 2021; Megwas *et al.*, 2021).

#### **2.5. Use of Medicinal Plant as Anticancer Agent**

Cancer is a perplexing and unnerving disease affecting multicellular living beings for over 200 million years. (Hausman, 2019). Cancer is associated with unmanageable and excessive division of cells (Kaiser, 2021). Various anticancer drugs and chemotherapeutic agents are available that have been shown to prevent progression, development and metastasis but the problem rely in the

ADRs associated with chemotherapeutic agents so, there is a need to search medicinal plants having anticancer potential (Sung *et al.*, 2021). Various bioactive constituents are available in the market for the management of cancer such as *Tinospora cordifolia*, *Phyllanthus amarus*, *Taxus brevifolia*, *Allium sativum*, *Azadirachta indica*, *Berberis aristata*, *Catharanthus roseus*, *Glycine max*, *Podophyllum hexandrum*, *Withaniasomnifera* etc (Desai *et al.*, 2008). Studies indicated that *Berberine* and *Tinosporacaudifolia* possess anticancer activity against colon cancer (Palmieri *et al.*, 2019) Similarly *Ziziphus nummularia* and *Andrographis paniculata* possess anticancer activity (Mesmar *et al.*, 2021; Tan *et al.*, 2018). Terpenoids extracted from leaves of *Centella asiatica* inhibit lung cancer (Han *et al.*, 2020). In addition, rhizomes of *Curcuma longa* have anticancer potential against breast cancer (Ahmad *et al.*, 2016). Moreover, *Annona muricata*, *Withania somnifera* and Paclitaxel are too beneficial in the management of carcinoma. (Senthilnathan *et al.*, 2006; Sulistyoningrum *et al.*, 2017)

### 3. Miscellaneous

The therapeutic potential of medicinal plants is not limited rather it is very much widened. Evidences and Literature review indicated that medicinal plants are too used as antimicrobial (Sharma *et al.*, 2011), antibacterial (Ali *et al.*, 2021), antifungal (Bhandari, 2020) and in the management of polycystic ovarian disorder (Baranwal, 2014) and migraine (Chen *et al.*, 2021). Experimentally hydro-alcoholic extract of *Nigella sativa* (black cumin) and aqueous extract of flavonoid apigenin (flavone) are beneficial in PCOD (Darabi *et al.*, 2020; Khan *et al.*, 2021).

### 4. CONCLUSION

Hence with this review paper it can be concluded that the medicinal plants are the need of the era in order to improve the quality of life by preventing disease and its progression. Many formulations like tablets or capsules are used on a regular basis which are derived from plants. Medicinal plants and herbs were used to flavor & preserve food, as well as to relieve pain, headaches, and management of central nervous system, cardiovascular related complications etc. As the herbal medicines do not cause addiction or allergic reactions most probably, they can be used for a long time with properly prescribed dosage. It is noted that nature is integral part of our life and nothing can treat you better than your nature remedies. Thus, it was rightly stated by Robin Rose Bennet, "Mother earth's medicine chest is full of healing herbs of incomparable worth. In every period, every successive century from the development of humankind and advanced civilizations, the healing properties of certain medicinal plants were identified, noted, and conveyed to the successive generations. The benefits of one society were passed on to another, which upgraded the old properties, discovered new ones, till present days. The continuous and perpetual people's interest in medicinal plants has brought about today's modern and sophisticated fashion of their processing and usage. This present overview is enlightened on various medicinal plants and their therapeutic potentials including its active constituents in systemic manner, therefore it will roadmap for development of new herbal formulation for management of diseases.

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