



## Indian traditional medicinal plants: A concise review

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### Abstract

Phytochemistry and herbal drugs are used in healthcare treatment system from ancient time. Medicinal plants had been used by different societies, ethnic groups and cultures throughout the world since long. Plants are the potential source of medicinal substances which have high pharmacological values and huge utility in healthcare development. Herbal medicines have huge prospects in the developing and developed nation for healing different diseases of human beings. Different types of ethnomedicinal plants have several utilities for giving protection from many severe diseases. Plants secondary metabolites are getting huge importance in nutraceutical and pharmaceutical industries, too. Ethnomedicinal plant products are cost effective and have minimal side effects or toxicity. Plant secondary metabolites are actually used for defense mechanisms. It gives protection against microbes, viruses, parasites and with other severe diseases and it boosts human immunity, too. It identifies foreign harmful substances and neutralizes them. The current review study deals with those plants that are traditionally used for prevention and healing purposes of several diseases. These medicinal plants are highly available in India with various reported pharmacological properties. This review was done to compile those ethnomedicinal plants which can give protection against various human ailments. This review can be helpful for a large scale of population throughout the world to find out the naturally available prevention and curing agents as well.

**Keywords:** medicinal plants, phytochemicals, herbal medicine, pharmacological properties

### 1. Introduction

In present day's human civilization the most used, acceptable and recognized form of medicine is plant derived medicinal products throughout the world. Plant generates several types of secondary metabolites that are bio-synthetically produced from primary metabolites and these phytochemicals are the primary sources of herbal, pharmaceutical and nutraceutical formulations. The medicinal and nutritional necessities of these plants are lies in various phytomolecules that have particular biological actions on the human organ system. Human beings are using various parts of the plants to generate phytochemistry and these are working as panacea for modern cultures, civilizations and societies. For getting the treatment and protection from several diseases various traditional medicinal plants would be the best alternative source to obtain quality and vital herbal formulations <sup>[1,3]</sup>.

From the ancient time, Indian medicinal plants have a promising site for treatment of various diseases <sup>[4]</sup>. For the treatment of those diseases ethnobotanicals or natural products and their derivatives have showed potential activities <sup>[5]</sup>. The protections against these several diseases are generated by consuming fruits and vegetables or ethnomedicinal plants or its products in a very effective way. Because medicinal plants are the remarkable natural resources of various phytochemicals like flavonoids, tannins, terpenoids, polyphenols, steroids, alkaloids, glycosides, chlorophyll, carotenoids, proteins, minerals, Vitamins, and other essential nutrients which have strong antioxidants properties as well as other biological activities <sup>[6,7]</sup>.

Medicinal plants are the integral part of human life to fight against several diseases from ancient time. More than

80,000 plants are used as medicinal plant around the world and among these maximum numbers of plants are traditionally used from generation to generation. It means medicinal plants are the backbone of traditional or folkloric medicines. At present scenario, traditional medicinal plants are being given serious attention by mainstream medical science or healthcare treatment system. Huge number of populations of the under developed or developing countries are continuously using traditional medicines as a primary source of healing agents from several diseases. To treat various health ailments, these native medicinal plants are extensively used as the potent source of alternative medicines. In the primary healthcare system medicinal plants are the core component for human beings that depend upon the availability, acceptability, compatibility and affordability <sup>[8,9]</sup>. Medicinal and aromatic plants are the vital and valuable resources of primary and secondary metabolites which are used as templates for lead optimization programs and are considered to make safe and effective herbal formulations <sup>[10]</sup>.

Considering the potentiality, availability and cost effectiveness various health practitioners and researchers are continuously advising for taking different ethnomedicinal plants or its derivatives to get protection from several health ailments. In this current review article the studied plants have high medicinal utility from ancient time and are rich with various bioactive ingredients. These plants are very effective for several serious diseases such as viral and microbial infections, diabetes, kidney, lung, cancer, and other severe diseases <sup>[11,12]</sup>.

Through this review, we are compiling 100 Indian traditional medicinal plants (herbs, shrubs and trees) which are represented in the following table. These are highly

effective for preventing and recovery purposes for different kind of health ailments. These medicinal plants can be used to formulate herbal drugs and effective nutraceuticals by

applying the modern pharmacological technologies and methodologies.

**Table 1:** Some important Indian traditional medicinal plants which are used for healing purposes of various human diseases

SI No	Botanical Name	Family	Common Name	Phytochemical Compounds	Ethnomedicinal Uses	Pharmacological Activities
1	<i>Ocimum sanctum</i>	Lamiaceae	Holy basil	Phenolics, flavonoids, phenyl propanoids, terpenoids, fatty acid, ursolic acid, apigenin, luteolin, steroids, eugenol, and carvacrol.	It is used for nausea, cold and flu, fever, indigestion, stress, anxiety, earache, bronchitis, malaria, diabetes, asthma, heart disease, snakebite antidote, hepatitis, tuberculosis, genitourinary disorders, migraine, acne, anti-aging purposes.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-tussive</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-arthritic [13, 14]</li> </ul>
2	<i>Azadirachta indica</i>	Meliaceae	Neem	Phenolic compounds, alkaloids, glycosides, terpenoids, flavonoids, azadirachtin, nimbin, azharon, nimbidol, azadirone, melianol, steroids, and tannins.	This plant parts are used for the treatment of rheumatism, asthma, fever, worm infestations, bacterial infection, tuberculosis, diarrhea, jaundice, dysentery, to promote healing, measles, smallpox, inflamed gums, urinary diseases.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-fertility</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-malarial</li> <li>▪ Antioxidant</li> <li>▪ Neuro-protective</li> <li>▪ Insect repellent [15]</li> </ul>
3	<i>Mentha piperita</i>	Lamiaceae	Mint	Flavonoids, carbohydrates, alkaloids, phenols, coumarin, saponin, steroids, essential oils(menthol, menthone, pulegone, Menthofuran) azulenes, cholene, carotenes and tannins.	It is used in indigestion, diarrhea, hyperacidity, anemia, morning sickness, bad breath and gum problem, Irritable bowel syndrome, tuberculosis, bronchitis, eczema, acne, anxiety, Crohn's disease, colitis, gallbladder, liver complaints.	<ul style="list-style-type: none"> <li>▪ Antibacterial</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-cancer</li> <li>▪ Anti-parasitic</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-tussive [16]</li> </ul>
4	<i>Zingiber officinale</i>	Zingiberaceae	Ginger	Phenolic compounds, flavonoids, steroids, triterpenoids, glycosides, tannins, saponins, proteins, carbohydrates, amino acids and proteins, volatile oil.	This plant is used to treat stomach upset, nausea, vomiting, nose bleeds, rheumatism, coughs, chest congestion, cholera, cold, diarrhea, dropsy, stomachache, and baldness, snakebite and toothache.	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Anthelmintic</li> <li>▪ Anti-arthritic</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-hypertensive</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant [15]</li> </ul>
5	<i>Allium sativum</i>	Amaryllidaceae	Garlic	Alkaloids, glycosides, saponins, flavonoids, steroids, proteins, carbohydrates, oils, reducing sugars and acidic compounds.	It is used as natural immunity booster, reduces high blood pressure, diabetes, cardiovascular diseases, and reduces stress, cure nerve problems, skin darkening, and blistering purposes.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-cancer</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diabetic</li> <li>▪ Atherosclerosis</li> <li>▪ Anti-hypertensive [13]</li> </ul>
6	<i>Curcuma longa</i>	Zingiberaceae	Turmeric	Carbohydrates, protein, curcumin, tannins, alkaloids, saponins, flavonoids, terpenoids and cardiac glycosides, coumarins, and steroids.	It is used to cure burns, cuts, improves digestion, dissolves gallstone, relieves arthritis, prevents cancer, helps in Alzheimer, and inhibits bacteria, virus, fungi, and parasites, cures acne, pimples, allergy, and pores.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Antimicrobial</li> <li>▪ Antiseptic</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-carcinogenic</li> <li>▪ Anti-allergic</li> <li>▪ Anti-diabetic [13]</li> </ul>
7	<i>Allium cepa</i>	Amaryllidaceae	Onion	Flavonoids, carbohydrates, glycosides, proteins, alkaloids, saponins, acid compounds, reducing sugars, oils and tannins.	It is mainly used for common cold, normalizes blood pressure, prevent diarrhea, inhibits microbial infection, increases appetite, treats diabetes, inhibits cancer cell growth, stimulates respiratory tract, helpful in swollen feet, hair	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Anti-cancer</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-platelet</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-thrombotic</li> <li>▪ Anti-hypertensive [13]</li> </ul>

					growth.	
8	<i>Spinacia oleracea</i>	Amaranthaceae	Spinach	Flavonoids, carotenoids, $\beta$ -carotene, apocyanin, ascorbic acid, proteins, amino acids, steroids, tannins, carbohydrates, anthroquinones, coumarin, and saponins.	It is used in digestion, liver and kidney diseases, diuretic, laxative, inflammation of the lungs, bowels, sore throat, ring worm scabies, constipation, anemia, diabetes, fever, brain and heart disease, urinary infection, gallstones.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-carcinogenic</li> <li>▪ Antimicrobial</li> <li>▪ Protection against Gamma Radiation</li> <li>▪ Hepato-protective [17]</li> </ul>
9	<i>Carica papaya</i>	Caricaceae	Papaya	Flavonoids, papain, tannins, saponins, alkaloids, phenolic compounds and phytosterols, alkaloids, saponins, and glycosides.	It prevents dengue fever, cancer cell growth, facilitates digestion, menstrual pain, anti-malarial, and helps in IBS, used in skin problems, arthritis, dressing wounds, and cure dyspepsia.	<ul style="list-style-type: none"> <li>▪ Wound healing</li> <li>▪ Nephro-protective</li> <li>▪ Anti-inflammatory</li> <li>▪ Anthelmintic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diabetic</li> <li>▪ Analgesic [13]</li> </ul>
10	<i>Actinidia deliciosa</i>	Actinidiaceae	Kiwi	Flavonoids, polyphenols, anthocyanin, carotenoids, alkaloids, tannin, proteins, triterpenoids, carbohydrate, and minerals.	Kiwi is used for good digestive health, hair growth, and strong bone, in eye disease, pregnancy period, stress, high blood pressure, cancer, to reduce stone in kidney, lower blood sugar level, and better sleep.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Hepato-protective</li> <li>▪ Dermatological Activity</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Cardio-protective</li> <li>▪ ACE Inhibitor [18]</li> </ul>
11	<i>Camellia sinensis</i>	Theaceae	Green tea	Flavonoids, tannins, caffeine, polyphenols, boheic acid, theophylline, theobromine, anthocyanins, and gallic acid.	Green tea helps in weight loss and metabolism, lowers blood sugar level, used in heart disease, esophageal cancer, high cholesterol, Alzheimer's and Parkinson's disease, helps in depression, good sleep, tooth decay, to reduce wrinkles and signs of aging.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-carcinogenic</li> <li>▪ Anti-arteriosclerotic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diabetic</li> <li>▪ Weight control</li> <li>▪ Anti-hypertensive</li> <li>▪ Cardio-protective [19, 20]</li> </ul>
12	<i>Prunus dulcis</i>	Rosaceae	Almonds	Flavonoids, carotenoid, phenolics, tannins, lignans, anthocyanins, phytosterols, polyphenols, and fatty acids.	Almond has memory improving activities, used for insomnia, headache, respiratory troubles, colic pain and peptic ulcer disease, constipation, enhances glow and fairness of skin, cures hair fall, itching, used in kidney stone, ladder, and strengthening of tooth.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-aging</li> <li>▪ Hepato-protective</li> <li>▪ Memory Improving</li> <li>▪ Anxiolytic Activity</li> <li>▪ Hypoglycemic</li> <li>▪ Anti-inflammatory</li> <li>▪ Immuno-stimulant [21]</li> </ul>
13	<i>Cuminum cyminum</i>	Apiaceae	Cumin	Alkaloid, coumarin, anthraquinone, flavonoid, glycoside, protein, resin, saponin, tannin and steroid.	It is used against jaundice, lung diseases, nosebleeds, menstrual pains, remedy for colic or diarrhea, digestive problems, stimulates saliva production, excretion of bile, increase production of breast milk, used in menstrual cramp, inhibit formation of tumors, lowers blood sugar, to treat insomnia, fever.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Antioxidant</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-platelet</li> <li>▪ Anti-cancer</li> <li>▪ Hypotensive</li> <li>▪ Bronchodilatory</li> <li>▪ Anti-amyloidogenic</li> <li>▪ Anti-osteoporotic [13]</li> </ul>
14	<i>Marsilea quadrifolia</i>	Marsileaceae	Marsilea	Polyphenols, tannins, saponins, flavonoids, steroids, terpenoids, alkaloids, carbohydrates, and proteins.	It is used to treat cold, respiratory troubles, hypertension, insomnia, anemia, in migraine, epilepsy, diarrhea, bronchitis, hepatitis, to treat snake bite, skin diseases, and inflammation, enhances memory, lowers blood sugar.	<ul style="list-style-type: none"> <li>▪ Anti-tussive</li> <li>▪ Analgesic</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-pyretic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-tumor</li> <li>▪ Anti-inflammatory</li> <li>▪ Hepato-protective</li> <li>▪ Antioxidant [22]</li> </ul>
15	<i>Nigella sativa</i>	Ranunculaceae	Black cumin	Alkaloids, carboxylic acid, coumarins, phenol, resin,	It has been used for the treatment of respiratory	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Anti-hyperlipidemic</li> </ul>

				saponin, and steroid, protein, fat, and carbohydrates.	problems, digestive tract, and kidney, liver function, cardiovascular system, asthma, inflammatory diseases, externally its oil is used as antiseptic, anesthetic, to stop vomiting, in dropsy, and in treatments of worm and skin eruptions.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-hypertensive</li> <li>▪ Wound healing activity</li> <li>▪ Gastro-protective</li> <li>▪ Antioxidant</li> <li>▪ Analgesic [13]</li> </ul>
16	<i>Lactuca sativa</i>	Asteraceae	Lettuce	Phenols, flavonoids, triterpenoid, saponins, anthocyanin, $\beta$ -carotene, ascorbic acid, riboflavin, niacin, carotene, iodine, and fluorine.	The milky leaves of the plant contain 'lactucarium' is used in medicine for its anodyne, digestive, diuretic, hypnotic, narcotic, sedative, to treat insomnia, anxiety, neuroses, dry cough, pain, drowsiness, prevents microbial attacks.	<ul style="list-style-type: none"> <li>▪ Hypoglycaemic activity</li> <li>▪ Anxiolytic effect</li> <li>▪ Sedative Effect</li> <li>▪ Anti-inflammatory</li> <li>▪ Antioxidant</li> <li>▪ Anti-aging</li> <li>▪ Antimicrobial [23]</li> </ul>
17	<i>Citrus limon</i>	Rutaceae	Lemon	Alkaloids, flavonoids, limonoids, steroids, terpenoids, carotenoids, tannic acids and phenolic compound.	Lemon is active against bacteria, reduces inflammation, against fever, prevents scurvy, ulcer, urinary diseases, an antidote against poison, prevents bad breath, body odor, lowers blood pressure, vomiting, liver disorder, enhances immunity, for glowing skin.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-scorbutic</li> <li>▪ Anti-migraine</li> <li>▪ Diuretic</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-carcinogenic</li> <li>▪ Anti-pyretic</li> <li>▪ Hypertension</li> <li>▪ Antidote</li> <li>▪ Anti-ulcer [24]</li> </ul>
18	<i>Piper nigrum</i>	Piperaceae	Black pepper	Alkaloids, flavonoid, cardiac glycosides, piperine, piperatine, piperidine, protein, carbohydrates, essential oils, and tannins.	It prevents asthma, arthritis, bronchitis, used in infection that causes diarrhea, headache, stuffy nose, sinus infection, weight loss, menstrual pain, cancer, nerve pain, itchy skin, and people inhale pepper oil to prevent falls, to help quit smoking.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-thyroid</li> <li>▪ Anti-tumor</li> <li>▪ Anti-asthmatics</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-depressants [13, 15]</li> </ul>
19	<i>Mangifera indica</i>	Anacardiaceae	Mango	Alkaloids, flavonoids, saponins, tannins, phenols, ascorbic acid, carotenoids, glycosides and phytosterols.	The leaves are used in the burns and scalds; chewed to strengthen the gums, used for skin ailments, asthma and cough, bark is used for the treatment of fever cholera, rheumatism, to treat ulcerated tongue.	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-convulsant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-cancer</li> <li>▪ Gastro-protective</li> <li>▪ Hepato-protective [13,15]</li> </ul>
20	<i>Malus domestica</i>	Rosaceae	Apple	Phenolics, flavonoids and carotenoid, saponin, glycosides and steroid, carbohydrates, and proteins.	Used in kidney stones, constipation, blood formation, diarrhea, high blood pressure, cardiac problems, useful in sore eyes, inflammation, Alzheimer's, cancer, diabetes, gallstone, obesity loss.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-depressant</li> <li>▪ Anti-asthmatic</li> <li>▪ Anti-cancer [13]</li> </ul>
21	<i>Musa paradisiaca</i>	Musaceae	Banana	Alkaloids, flavonoids, tannins, phenolic compounds, carotenoids, anthocyanins, and cardiac glycosides.	It cures depression, treats emotional sickness, increase blood and cures anemia, reduces risk of blood pressure, menstrual cramp, helps to reduce morning sickness, constipation, ulcers, mosquito bites.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Anti-hypertensive</li> <li>▪ Antioxidant</li> <li>▪ Anti-diarrheal</li> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-ulcer [13]</li> </ul>
22	<i>Coriandrum sativum</i>	Apiaceae	Coriander	Flavanoids, alkaloids, tannins, saponin, terpenoids, sterol, carbohydrate, protein, and fat.	It treats indigestion, worm infections, rheumatism, convulsion, insomnia, anxiety, pain in the joints, used as a diuretic plant, in skin disease, effective in constipation, irritable bowel	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Diuretic</li> <li>▪ Anti-diabetic</li> <li>▪ Sedative</li> <li>▪ Antimicrobial</li> <li>▪ Anti-convulsant</li> <li>▪ Anthelmintic</li> </ul>

					syndrome, diarrhea, measles, toothaches, nausea, hernia.	Anti-mutagenic <sup>[13]</sup>
23	<i>Crinum asiaticum</i>	Amaryllidaceae	Spider Lily	Alkaloids, flavonoids, tannins, phenols, cardiac glycosides, triterpenes, steroids, saponins, hamayne, palmilycorine, lycoriside, ambelline, crinine, powelline, and ungeremine.	It is used to treat injury and inflamed joints, carbuncles and cancer, to treat wounds by poisoned arrows, bites and stings, swellings, fever, inflammation, piles, to stop bleeding and to treat gonorrhoea, induces vomiting, toothache, ulcers.	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Antiviral</li> <li>▪ Anti-cancer</li> <li>▪ Anti-tumor</li> <li>▪ Anti-mitotic</li> <li>▪ Membrane stabilizing <sup>[13, 15]</sup></li> </ul>
24	<i>Cicer arietinum</i>	Fabaceae	Chick Peas	Alkaloids, carbohydrates, proteins, amino acids, fixed oils, phytosterols, phenolic compounds and tannins, flavonoids, glycosides, saponins, and amino acids.	Used for insufficient milk or sperm, kidney stones, urine problems, menstruation, treats bronchitis, sunstroke, snake bites, diabetes, hypertension, itchy skin, tumor, increases bone health, controls blood pressure, prevent cancer, develops memory and thinking power.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-hypertensive</li> <li>▪ Anti-cancer</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-cancer</li> <li>▪ Estrogenic <sup>[13]</sup></li> </ul>
25	<i>Ipomoea aquatica</i>	Amaranthaceae	Water spinach	Flavonoids, amino acids, alkaloids, lipids, steroids, saponins, phenols, reducing sugars, tannins, β-carotene, glycosides, and minerals.	It helps to reduce cholesterol, treats jaundice and liver damages, anemia, useful for indigestion, constipation, diabetes, prevents heart attack, lowers blood pressure, boosts immunity and treats ulcer, menstruation pain, fever, rejuvenates skin.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Antiseptic</li> <li>▪ Anti-cancer <sup>[13]</sup></li> </ul>
26	<i>Citrus aurantiifolia</i>	Rutaceae	Lime	Alkaloid, glycoside, saponin, tannin, flavonoids, steroids, terpenoids, limonene, pinene, sabinene, protein, ascorbic acid and polyphenols.	It is used in headaches, cold, fever, insomnia, indigestion, to treat diarrhea, chest pain, snake bite, cancer, itching, dandruff, skin diseases, to glow skin, boiled root with alcohol is drunk to abort foetus, It prevents from microbial attack, allergy.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Antioxidant</li> <li>▪ Immuno-modulatory</li> <li>▪ Anti-obesity</li> <li>▪ Anti-fertility</li> <li>▪ Anthelmintic</li> <li>▪ Anti-pyretic</li> <li>▪ Hepato-protective</li> <li>▪ Cardio-protective <sup>[24]</sup></li> </ul>
27	<i>Citrus sinensis</i>	Rutaceae	Orange	Phenolics, flavonoids, carbohydrates, alkaloids, tannins, fixed oils and lipids, sugars, proteins, terpenoids, steroids, and amino acids, ascorbic acid and carotenoids.	The fruit is appetizer and blood purifier, used to treats bilious diarrhea, acne, skin disease, itching, obesity, enlarged spleen, constipation, coughs, dyspepsia, prevents digestive tract ailments, nerve disorder, blood pressure, it relieves headache and cures rheumatism.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-parasitic</li> <li>▪ Anti-proliferative</li> <li>▪ Insecticidal</li> <li>▪ Relaxant, Sedative</li> <li>▪ Anxiolytic</li> <li>▪ Protective of UV</li> <li>▪ Anti-osteoporotic</li> <li>▪ Anti-obesity</li> <li>▪ Hypo-cholesterolemic</li> <li>▪ Antioxidant <sup>[24]</sup></li> </ul>
28	<i>Aegle marmelos</i>	Rutaceae	Stone apple	Phenols, flavonoids, alkaloids, cardiac glycosides, saponins, terpenoids, steroids, carbohydrate, tannins, and proteins.	Fruits and leaves are used for wound healing, curing digestive disorders, ulcers, headache, hypertension, diabetes, promotes digestion, fight against cholera, diarrhea, to cure constipation, scurvy, skin disorders, liver, heart, kidney problems.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-inflammatory</li> <li>▪ Laxative</li> <li>▪ Hepato-protective</li> <li>▪ Insecticidal</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-ulcer</li> <li>▪ Antioxidant <sup>[25]</sup></li> </ul>
29	<i>Petroselinum crispum</i>	Apiaceae	Parsley	Flavonoids, volatile oils, proteins, minerals, carotenes, carotenoids, ascorbic acid, coumarins, tocopherol, myristicin, essentials oils and	Used to treat asthma, bladder infections, bruises, cough, cracked or chapped skin, digestive problems, swelling, insect bites, Prevents tumor, liver	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-platelet</li> <li>▪ Antimicrobial</li> <li>▪ Hypotensive</li> <li>▪ Anti-pyretic</li> </ul>

				phenolic compounds, Vitamin-A, B and C.	disorder, kidney stones, high blood pressure, diabetes, obesity, anemia, osteoarthritis.	<ul style="list-style-type: none"> <li>▪ Gastro-protective</li> <li>▪ Cyto-protective</li> <li>▪ Laxative</li> <li>▪ Analgesic [26]</li> </ul>
30	<i>Cymbopogon citratus</i>	Gramineae	Lemon Grass	Alkaloids, glucosides, phenols, saponins, flavonoids, tannins, terpenoids, resins, citral, citronellal, cymbogonol, $\alpha$ -terpineol, citronellic acid, $\alpha$ -camphorene, geranial, isoscoparin.	Used to treat digestive problems, cramping pains, coughs, fever, to reduce swelling, improve blood circulation, bladder problems and leprosy, oil is used as an insect repellent, detergent, carminative for cholera.	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Anthelmintic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-neoplastic</li> <li>▪ Anti-malarial</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Hypoglycaemic</li> <li>▪ Radio-protective [13, 15]</li> </ul>
31	<i>Aloe barbadensis</i>	Asphodelaceae	Aloe vera	Flavonoids, alkaloids, aloin, carbohydrate, tannin, steroid, triterpenoids, glycosides, saponins, salicylic acids, amino acids, and beta-carotene.	Treatment of pimples, acne and mouth ulcers, laxative, wash for piles, burns, edema, pain, swellings and wounds, Juice used to increase menstrual flow and for eye disease, used in case of any type of skin problem.	<ul style="list-style-type: none"> <li>▪ Angiogenic</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-cancer</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Dermatitis</li> <li>▪ Gastric mucosal</li> <li>▪ Wound healing [15]</li> </ul>
32	<i>Capsicum annuum</i>	Solanaceae	Chili	Flavonoids, carotenoids, phenolics, capsaicin, solasidine, scopoletin, capsaicinoids, and ascorbic acid.	It is used to cure toothache, also used to increase blood circulation and stimulate gastric activities, used to treat arthritis, neuralgia, lumbago and chilblains.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Antioxidant</li> <li>▪ Anti-protozoal</li> <li>▪ Immuno-modulatory</li> <li>▪ Pesticidal [15]</li> </ul>
33	<i>Ananas comosus</i>	Bromeliaceae	Pineapple	Flavonoids, saponins, tannins, alkaloids, terpenoids, anthraquinones, carbohydrate, steroids, phenols and glycoside.	Pineapples are rich in nutrients, low in calories, fights with oxidative stress, to treat indigestion, reduce cancer, boosts immunity, suppress inflammation, to recover surgery, kill parasites, gout, bronchitis, ulcer, cystic fibrosis.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Hypolipidemic</li> <li>▪ Laxative</li> <li>▪ Diuretic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-obesity</li> <li>▪ Anti-diarrheal</li> <li>▪ Antioxidant [13]</li> </ul>
34	<i>Centella asiatica</i>	Apiaceae	Pennywort	Flavonoids, tannins, alkaloids, carbohydrate asiaticoside, asiatic acid, brahmie acid, brahmioside, asiaticin, centellicin, terpenoids, sterols, triterpenoids and saponins.	Used to cure diarrhea, diuretic, gravel, leprosy treatment, stones, wound healing the plant is used in cooling drinks when boiled, treatment of nervous system, skin, and blood diseases, treatment for cancer, circulatory stimulant, headache, urinary discharges, peptic ulcer and sore throat.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-depressant</li> <li>▪ Antioxidant</li> <li>▪ Anti-thrombotic</li> <li>▪ Anxiolytic</li> <li>▪ Gastro-protective</li> <li>▪ Immuno-modulatory</li> <li>▪ Nerve-regenerative</li> <li>▪ Wound healing [13, 15]</li> </ul>
35	<i>Agaricus bisporus</i>	Agaricaceae	Mushrooms	Alkaloids, flavonoids, phenols, tannins, saponins, terpenoids, cardiac glycosides, proteins, carbohydrates, fibers, and ascorbic acid.	It is effective in diabetes, cancer, hardening of arteries, to cure digestive problems, ulcer, hepatitis B, colitis, high cholesterol, osteoporosis, asthma..	<ul style="list-style-type: none"> <li>▪ Anti-cancer</li> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-hepatitis</li> <li>▪ Hepato-protective [27]</li> </ul>
36	<i>Trigonella foenum-graecum</i>	Fabaceae	Fenugreek	Flavonoids, alkaloids, terpenoids, steroids, saponins, anthocyanins, tannins, volatile oils, phenol, carbohydrates, fat, amino acids and quinones.	It is used to lower blood sugar, reduce menstrual cramps, sexual problems, used as antacid, treats dysentery, stomach disturbances, respiratory infections, fever, and hormonal disorders, induce labor pain, and induce lactation, hair growth.	<ul style="list-style-type: none"> <li>▪ Carminative</li> <li>▪ Gastric stimulant</li> <li>▪ Anti-diabetic</li> <li>▪ Hypolipidemic</li> <li>▪ Anti-ulcer</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Antacid [28]</li> </ul>
37	<i>Chrysanthemum morifolium</i>	Asteraceae	Chrysanthemum	Alkaloids, phenols, flavonoids, caffeoylquinic acids, terpenoids, cardiac glycosides, steroids, tannins and saponins.	It is used to cure chest pain, diabetes, and fever, cold, swelling, cancer, to treat headache, inflamed eyes, and pain in the throat, boils	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-cancer</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-tussive</li> </ul>

					syndrome, vertigo, tonic, urinary stones, and swelling feet.	<ul style="list-style-type: none"> <li>▪ Anti-ulcer</li> <li>▪ Anti-diabetic</li> <li>▪ Gastro-protective [29]</li> </ul>
38	<i>Phyllanthus emblica</i>	Phyllanthaceae	Indian Gooseberry	Falvonoids, saponins, tannins, cardiac glycosides, alkaloids, anthraquinones, phlobotanins steroids, and carbohydrates.	This plant is used for the treatment of jaundice, inflammation, diabetes, cough, asthma, bronchitis, dyspepsia, anemia, cures colic, peptic ulcer, skin diseases, cardiac disorders, dizziness, snake bite, vomiting, and gonorrhea.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Laxative</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Analgesic</li> <li>▪ Anti-pyretic</li> <li>▪ Hepato-protective</li> <li>▪ Cardio-protective</li> <li>▪ Anti-cancer<sup>[13]</sup></li> </ul>
39	<i>Boerhaavia diffusa</i>	Nyctaginaceae	Punarnava	Phenols, flavonoids, terpenoids, reducing sugar, ligans, organic acids, boeravinones, flavone, isoflavone, flavonol, xanthone, lignin, purine nucleoside, and sterols.	It is beneficial in treating obesity, dropsy, liver diseases, bacterial, fungal infections, intestinal worms, and bronchial tubes, treats asthma, ulcers, skin diseases, swelling, anemia, nervous weakness, paralysis, constipation, cough, mild laxative, and improves appetite, cure jaundice.	<ul style="list-style-type: none"> <li>▪ Laxative</li> <li>▪ Cardio tonic</li> <li>▪ Stomachic</li> <li>▪ Anthelmintic</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-metastatic</li> <li>▪ Immuno-modulatory</li> <li>▪ Anti-proliferative</li> <li>▪ Anti-estrogenic</li> <li>▪ Gastro-protective [30]</li> </ul>
40	<i>Coccinia grandis</i>	Cucurbitaceae	Ivy Gourd	Alkaloids, glycosides, saponin, amyrine, lupeol, cucubbitacin, cephalandrol, cephalandrine, flavonoids, saponin and polyphenols.	It is useful treatment for diabetes, cancer, eye problems, skin eruptions, it is laxative, treats headache, rheumatism, high blood pressure, endocrine system disorder, stimulate weight loss, malaria, helps in constipation, hypertension, skin wounds, infections.	<ul style="list-style-type: none"> <li>▪ Anti-pyretic</li> <li>▪ Anti-ulcer</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Anti-cancer</li> <li>▪ Anti-malarial</li> <li>▪ Anti-diabetic</li> <li>▪ Analgesic</li> <li>▪ Anti-dyslipidemic [15]</li> </ul>
41	<i>Nyctanthes arbor-tristis</i>	Oleaceae	Night-flowering Jasmine	Flavonoids, terpenoids, saponins, steroids, carbohydrates, cardiac glycosides, alkaloids, proteins and tannins.	It is used in various ailments like fever, enlargement of spleen, malaria, blood dysentery, gastritis, anemia, also used to treat infection of scalp, piles, skin disease, and stem bark cures rheumatic joint pain, eye disease, internal injury, diarrhea, other infections.	<ul style="list-style-type: none"> <li>▪ Anti-allergy</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-filarial</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-malarial</li> <li>▪ Anti-leishmanial [31]</li> </ul>
42	<i>Euphorbia hirta</i>	Euphorbiaceae	Asthma Weed	Alkaloid, flavonoids, saponins, terpenoids, tannin, polyphenols, sugar, amino acids, euphorbon, and euphosterol.	It is used to cure asthma, calculus, cough, eruptions, headache, hypertension, measles, nausea, stomachache, warts and wounds, athlete's foot, dysentery, enteritis, fever, gas, itch, skin conditions.	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-platelet</li> <li>▪ Anxiolytic</li> <li>▪ Gastro-protective</li> <li>▪ Molluscicidal [32]</li> </ul>
43	<i>Moringa olifera</i>	Moringaceae	Drumstick	Alkaloids, flavonoids, steroids, tannins, saponins, glycosides, carotenoids, ascorbates, tocopherols, beta-sitosterol, moringine, and kaempferol.	It is used to treat ear infection, eye infection, toothache, cold, HIV, male impotency, blood sugar, it helps to treat high blood pressure, fever, typhoid, malaria, indigestion, diarrhea, boost immunity, cure skin diseases, treats snake bite, improves lactation in mother.	<ul style="list-style-type: none"> <li>▪ Oxidative DNA damage</li> <li>▪ Cardio-protective</li> <li>▪ Anti-proliferation</li> <li>▪ Hepato-protective</li> <li>▪ Hypolipidaemic</li> <li>▪ Hypercholesterolemic</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Antinociceptive</li> <li>▪ Antimicrobial [33]</li> </ul>
44	<i>Hygrophila spinosa</i>	Acanthaceae	Swamp Weeds	Alkaloids, flavonoids, tannins, saponins, steroids, terpenoids, phytosterol, minerals, polyphenols, proanthocyanins, mucilages, ascorbic acid,	It is used to treat biliaryness, blood disorders, gonorrhea, diarrhea and fever, urinary affections, rheumatism, hepatic obstruction, urinary calculi,	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Anti-tumor</li> <li>▪ Anti-pyretic</li> <li>▪ Hepato-protective</li> <li>▪ Diuretic</li> <li>▪ Antioxidant</li> </ul>

				amino acids, and glycosides.	inflammations, eye diseases, cough, joint pains, anemia, abdominal disorders.	Antimicrobial Analgesic <sup>[34]</sup>
45	<i>Bacopa monnieri</i>	Plantaginaceae	Waterhyssop	Flavonoid, tannin, phlobatannin, saponin, steroid, cardiac glycoside, polyphenol, carbohydrate and alkaloids.	It contains antioxidants, protects against cell damage, prevents Alzheimer's, Parkinson's disorders, reduces inflammation, cure diabetes, heart & kidney disease, boosts brain function, prevent anxiety, stress, lower blood pressure, inhibit tumor cells, epilepsy.	Anti-depressant Anti-anxiety Anti-cancer Anti-inflammatory Antioxidant Anti-ulcer Analgesic Hypertensive Anti-diarrheal <sup>[13]</sup>
46	<i>Justicia adhatoda</i>	Acanthaceae	Malabar Nut	Alkaloids, anthraquinones, flavonoids, carbohydrate, proteins, saponins, phytoosterols, triterpenoids, and polyphenols.	Different parts of the plants have been used in cough, cold, asthma, bronchitis, tuberculosis, allergy, wound healing, it prevents intestinal parasites, dysentery, helps in skin disease, scabies etc. chest congestion, breathing problems, spasms.	Anti-tussive Hepato-protective Antimicrobial Anti-ulcer Anti-inflammatory Abortifacient Cardio-protective Thrombolytic <sup>[35]</sup>
47	<i>Bryonia alba</i>	Cucurbitaceae	Bryony	Alkaloids, saponins, steroids, triterpenoids, cucurbitane, triterpene, glycosides, carbohydrates and proteins.	It gives relief to constipation, upset stomach, fluid retention, arthritis, inflammation, headache, migraine, prevents cancer, lung disorder, vomiting, wounds, ulcer, edema, rheumatism, epilepsy, snake bite, gout pain.	Analgesic Anti-inflammatory Anti-pyretic Antimicrobial Anti-viral Anti-tumor Antidote Anti-arthritic <sup>[36]</sup>
48	<i>Cinnamomum zeylanicum</i>	Lauraceae	Cinnamon	Alkaloids, flavonoids, saponins, terpenoids, cinnzeylanin, cinnzeylanol cinnamic acid, phenolic acids, tannins, and essential oils.	It is useful in upset stomach, gastrointestinal problems, diarrhea, morning sickness, cold, vomiting, urinary tract infections, vaginal infections, diabetes, and nose bleeds, colic, prevents head lice, pain-killer, mouth freshener, and cures skin problems.	Antimicrobial Anti-inflammatory Anti-cancer Antioxidant Anti-diarrheal Anti-diabetic Cardio-protective Gastro-protective <sup>[37]</sup>
49	<i>Vitis vinifera</i>	Vitaceae	Grapes	Phenolic acids, flavonols, flavon-3-ols, myricetin, peonidin, flavonoids, quercetin, tannin, anthocyanin, cyanidin, ellagic acid, and proanthocyanidins.	Leaves are used in diarrhea, unripe fruit astringent, used in throat affections, laxative, stomachic, consumption, uterine tumors, and hardness of the liver, fresh fruits, eaten or processed into wine, juice.	Antioxidant Hepato-protective Anti-carcinogenic Anti-bacterial Anti-viral Anti-diabetic Cardio-protective <sup>[38]</sup>
50	<i>Thymus vulgaris</i>	Lamiaceae	Thyme	Flavonoids, phenols, terpenoids, protein, fat, essential oils, saponins, steroids and cardiac glycosides.	Thyme is effective in anxiety, arthritis, bad breath, bronchitis, colds, sore throat, colic, diarrhea, dermatitis, gingivitis, earache, hair loss, menstrual cramps, oral thrush, reduce inflammation, swelling of tonsils.	Anti-inflammatory Anti-anxiolytic Antimicrobial Anti-tussive Antioxidant Anti-spasmodic Insecticidal activity <sup>[39]</sup>
51	<i>Laurus nobilis</i>	Lauraceae	Bay Leaves	Alkaloids, flavonoids, tannins, limonien, cineol, linalool, terpinol, essential oil, phenols, coumarins, steroids, triterpenes and saponins.	It has been used to treat indigestion, bronchitis, influenza, upper respiratory tract disorder, arthritic, used to improve appetite, prevent cancer, urinary ailments, rheumatic pain, renal disease, migraine, skin irritation, stimulate hair growth.	Anti-cancer Antimicrobial Antioxidant Anti-tussive Cardio-protective Gastro-protective Nematicidal Insecticidal <sup>[13]</sup>
52	<i>Elettaria cardamomum</i>	Zingiberaceae	Cardamom	Flavonoids, carbohydrates, proteins, minerals, lipids, essential oils, terpenoids	It is used to treat indigestion, vomiting, congestion of lungs, to	Antioxidant Anti-inflammatory Antimicrobial

				and carotenoids.	prevent stomach pain, gripping, colic, heart burn, stomach disorder, stones, arthritis, sore muscle, scanty urination, cystitis, fight against skin disorders.	<ul style="list-style-type: none"> <li>▪ Anti-cancer</li> <li>▪ Insecticidal</li> <li>▪ Gastro-protective</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-asthmatic [13]</li> </ul>
53	<i>Diospyros virginiana</i>	Ebenaceae	Persimmon	Alkaloids, proanthocyanidins, flavonoids, tannins, $\beta$ -carotene, zeaxanthin, phenolics, carotenoids, and dietary fiber.	It is used to treat bloody stools, cancer, dysentery, diarrhea, for making spirits and beer; fruits are used in treatment of diarrhea, cancers, in the treatment of thrust and sore throats.	<ul style="list-style-type: none"> <li>▪ Antipyretic effect</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-diarrheal</li> <li>▪ Gastro-protective</li> <li>▪ Anti-cancer</li> <li>▪ Antimicrobial [40]</li> </ul>
54	<i>Withania somnifera</i>	Solanaceae	Ashwagandha	Flavonoids, phenolics, alkaloids, steroidal lactones, tannins, terpenoids, carbohydrates, and saponins.	It is useful in curing the bronchial asthma, chronic fever, dysentery, arthritis, emetic syndrome, insect bites, gastric, cardiovascular, hepatic disorders, nervous exhaustion, insomnia, loose teeth, diabetes, male infertility, fibromyalgia, Parkinson disease.	<ul style="list-style-type: none"> <li>▪ Anti-stress</li> <li>▪ Anti-arthritic</li> <li>▪ Neuro-protective</li> <li>▪ Analgesic</li> <li>▪ Anti-tumor</li> <li>▪ Anti-ulcer</li> <li>▪ Antioxidant</li> <li>▪ Antimicrobial</li> <li>▪ Abortifacient [41]</li> </ul>
55	<i>Tinospora cordifolia</i>	Menispermaceae	Giloy	Alkaloids, flavonoids, glycosides, steroids, phenolics, aliphatic compounds, polysaccharides, protein, terpenoid, lignans, and steroids.	It is used to boost immunity, to treats heart related issues, infertility, swine flu, dengue, constipation, reduces stress, anxiety, tonsils, boosts memory, rheumatoid arthritis, improves the vision, reduces sign of aging, dark spots, pimples, fin lines.	<ul style="list-style-type: none"> <li>▪ Neuro-protective</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-diarrheal</li> <li>▪ Analgesic</li> <li>▪ Aphrodisiac</li> <li>▪ Immuno-modulatory</li> <li>▪ Anti-inflammatory</li> <li>▪ Gastro-protective [42]</li> </ul>
56	<i>Artemisia vulgaris</i>	Asteraceae	Artemisia	Flavonoids, coumarins, sesquiterpene, lactones, volatile oils, insulin, alkaloids, volatile oils (camphor, camphene, caryophyllene) and essential oils.	It is used as an immunity booster, itching, burns, colic, diarrhea, constipation, irregular menstrual periods, to treat headache, fatigue, sleeping disorders, depression, asthma, improves digestion, metabolism.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anthelmintic</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-hypertensive</li> <li>▪ Hepato-protective</li> <li>▪ Antiseptic</li> <li>▪ Anti-spasmodic [13]</li> </ul>
57	<i>Vitex negundo</i>	Lamiaceae	Lagundi	Flavonoids, carbohydrates, proteins, amino acids, saponins anthraquinones, tannins, triterpenes, lignin and polyphenolics.	It is used to treat oozing from ear, obesity, diabetes, muscular pain, skin disease, cold, diarrhea, swelling of gums, arthritis, joint pain, colon cancer, effective in chronic bronchitis, scrofulous sores, used in burns, and angina.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antispasmodic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-pyretic</li> <li>▪ Anthelmintic</li> <li>▪ Rejuvenative</li> <li>▪ Tranquilizer</li> <li>▪ Anti-arthritic [13]</li> </ul>
58	<i>Glycyrrhiza glabra</i>	Fabaceae	Liquorice	Flavonoids, saponin, isoflavonoids, stilbenoids, coumarins, glycosides, carbohydrates, starches, phenolics, alkaloids, proteins, pectin, lipids, tannins, and steroids.	It improves the symptoms of eczema, sore throats, bad breath, dental plaque, indigestion, ulcer, hepatitis, kidney problems, liver injury, obesity, Parkinson disease, stomach ulcer, and enlarged ovary with cysts, infections, cancer, tuberculosis, chronic fatigue.	<ul style="list-style-type: none"> <li>▪ Anti-tumor</li> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-cancer</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Anti-allergic [13]</li> </ul>
59	<i>Hibiscus rosa-sinensis</i>	Malvaceae	China Rose	Flavanoides, tannins, anthraquinones, quinines, phenols, alkaloids, terpenoids, saponins, cardiac glycosides, mucilages, anthocyanin, myristic acid, and campesterol.	The plant is used to treat headaches respiratory and digestive tracts, skin problems, mumps, to relieve from fever, astringent for excessive menstruation, used to treat gonorrhea, diarrhea.	<ul style="list-style-type: none"> <li>▪ Anti-anxiety</li> <li>▪ Anti-cancer</li> <li>▪ Anti-fertility</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Hypolipidaemic</li> <li>▪ Anti-diarrheal</li> <li>▪ Wound healing [15]</li> </ul>

60	<i>Murraya koenigii</i>	Rutaceae	Curry Plant	Alkaloids, flavonoids, phenols, saponins, tannins, reducing sugars, terpenoids carbohydrates, and steroids.	It treats diabetes, anemia, eye related problems, improves vision, fights against infection and germs, burns excess fat. It is useful in digestion, constipation, diarrhea, dysentery, piles, nausea, bloating. It prevents cancer, toothache, improves memory, skin, hair, respiratory problems.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-tumor</li> <li>▪ Neuro-protective</li> <li>▪ Anti-cancer</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diarrheal</li> <li>▪ Blood purifying</li> <li>▪ Gastro-protective</li> <li>▪ Anti-depressant [13]</li> </ul>
61	<i>Punica granatum</i>	Punicaceae	Pomegranate	Phenolics, flavonoids gallotannins, lipid, ellagic acid, gallic acid, punicalins, punicalagins, tannins Punicafofin, punicalagin, friedelin, and betulic acids.	It is used for diarrhea, dysentery, vomiting, eye pain, gastrointestinal disturbances, used to relieve itch, used to treat diarrhea, colitis, dysentery, leucorrhoea, paralysis, to treat piles, yellowish discharge from the vagina, nose bleed.	<ul style="list-style-type: none"> <li>▪ Anthelmintic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Hypoglycemic</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-fertility</li> <li>▪ Antioxidant</li> <li>▪ Anti-convulsant</li> <li>▪ Gastro-protective</li> <li>▪ Hepato-protective [15]</li> </ul>
62	<i>Averrhoa carambol</i>	Oxalidaceae	Carambola	Alkaloids, phenols, flavonoids, protein, tannins, steroids, carbohydrates and glycosides.	It is used for skin disorder, fevers, high blood pressure, diabetes, coughs, rheumatism, asthma, colic, used to treat chicken pox, ringworm infection, to relieve gastritis, angina, malaria, intestinal worms, diarrhea, and hemorrhoids.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-tumor</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Hypertensive</li> <li>▪ Hypoglycemic</li> <li>▪ Anti-ulcer [43]</li> </ul>
63	<i>Syzygium aromaticum</i>	Myrtaceae	Clove	Alkaloids, glycoside, steroids, carbohydrates, terpenoids, saponins, tannins and phenolic compound.	It reduces plaque on the teeth, excessive sweating of the palms, pain, blood sugar, bacterial infections, it helps in hangovers, diarrhea, gas, dyspepsia, nausea, vomiting, swelling, cholera, earache, mosquito repellent, bone stronger.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-carcinogenic</li> <li>▪ Analgesic</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-thrombotic</li> <li>▪ Anesthetic</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-diabetic [13]</li> </ul>
64	<i>Zea mays</i>	Poaceae	Corn	Polyphenols, flavonoids, anthocyanins, glycosides, carotenoids, maizenic acid, maysin, rutin, and polysaccharides.	It is used to cure diabetes, cystitis, gout, prevents nose bleeding, menorrhagia, ulcer, swellings, rheumatic pain, cancer, warts, bladder infections, kidney stones, heart failure, high blood pressure, high cholesterol.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Antimicrobial</li> <li>▪ Anti-obesity</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-proliferative</li> <li>▪ Hepato-protective</li> <li>▪ Renal protective</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-cancer [15]</li> </ul>
65	<i>Nelumbo nucifera</i>	Nelumbonaceae	Sacred lotus	Alkaloids, flavonoids, phenols, tannins, steroids carbohydrate, protein, fats and glycosides.	The leaves are used to treat sunstroke, dysentery, fever, dizziness and vomiting of blood. It is also used as an antidote for mushroom poisoning and for small pox; it is used to treat cholera, worm infestation, vomiting, and exhaustion.	<ul style="list-style-type: none"> <li>▪ Anti-anxiety</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-inflammatory</li> <li>▪ Hepato-protective</li> <li>▪ Antioxidant</li> <li>▪ Anti-proliferative</li> <li>▪ Anti-pyretic [15]</li> </ul>
66	<i>Ricinus communis</i>	Euphorbiaceae	Castor Bean	Flavonoids, glycosides, alkaloids, steroids, terpenoids, ricinoleic acid, ricinine, ferulic acid, syringic acid, cinnamic acids, and stigmastrol.	It is used for anal prolapsed, arthritis, constipation, facial palsy, strabismus, to treat deafness, abscesses, headache, skin problems, bleeding, constipation, boils, piles warts, dandruff, and hair loss.	<ul style="list-style-type: none"> <li>▪ Anti-fertility</li> <li>▪ Antioxidant</li> <li>▪ Antipsychotic</li> <li>▪ Anti-inflammatory</li> <li>▪ Hepato-protective</li> <li>▪ Haemagglutination</li> <li>▪ Insecticidal [15]</li> </ul>
67	<i>Bryophyllum pinnatum</i>	Crassulaceae	Goethe plant	Alkaloids, saponins, flavonoids, carbohydrate, sterols, fatty acids,	The paste of the leaves are externally used for the treatment of boils, insect	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-allergic</li> </ul>

				monoarylphenolics and tannins.	bites, burns, to treat dysentery, bleeding piles, fresh wounds, blood mixed diarrhea, to reduce swelling, asthma, cold, ulcer, earache, kidney stones.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Sedative</li> <li>▪ Analgesic</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-ulcer <sup>[44]</sup></li> </ul>
68	<i>Oxalis corniculata</i>	Oxalidaceae	Creeping Woodsorrel	Flavonoids, alkaloids, tannins, phenols, carbohydrates, reducing sugar, proteins, sterols, cardiac glycosides and ascorbic acid.	It is used for liver and digestive problems, headache, cures digestive problems, to stop bleeding from cuts, used as good appetizer, piles, dyspepsia, swelling, helps in insomnia, an antidote for snake bite, mercury, arsenic poisoning.	<ul style="list-style-type: none"> <li>▪ Anti-diarrheal</li> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-epileptic</li> <li>▪ Wound healing</li> <li>▪ Anti-scorbutic <sup>[45]</sup></li> </ul>
69	<i>Trianthema portulacastrum</i>	Aizoaceae	Horse purslane	Phenols, flavonoids, alkaloids, cardiac glycosides, tannins, steroids, saponins, triterpenes, lipids, carbohydrates, and proteins.	This plant has analgesic, laxative, stomachic, used in cardiac diseases, bronchitis, inflammations, piles, cancer, obstruction of the liver asthma, amenorrhea, dropsy, edema, rheumatism, anemia, ulcer, night blindness.	<ul style="list-style-type: none"> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-carcinogenic</li> <li>▪ Hepato-protective</li> <li>▪ Anti-hyperglycemic</li> <li>▪ Antinociceptive</li> <li>▪ Antimicrobial <sup>[46]</sup></li> </ul>
70	<i>Scoparia dulcis</i>	Scrophulariaceae	Sweet Broom	Flavonoids, alkaloids, tannins, triterpenes, hexacosonal, $\beta$ -sitosterol, ketone-dulcitone, amellin, carbohydrates, protein, saponins, and steroids.	It is used to treat cough, diarrhea, bronchitis, jaundice, menstrual disorder, and malaria, skin infections, used to cure headache, liver disorders, burns, anemia, urinary tract disorders, ulcer, snake bite, migraine, hepatitis, and hypertension.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-malarial</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Antioxidant</li> <li>▪ Anti-cancer</li> <li>▪ Anti-hypertensive <sup>[47]</sup></li> </ul>
71	<i>Psidium guajava</i>	Myrtaceae	Guava	Flavonoids, alkaloids, anthocyanins, carotenoids, essential oils, fatty acids, lectins, phenols, saponins, tannins, triterpenes and Vitamin C.	It cures diarrhea, reduce fever, gastroenteritis, diabetes, wounds, prevents cancer, skin aging, high blood pressure, colitis, vomiting, obesity, used to treat nail, and enhances hair growth, cure heart disease, and high cholesterol.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Anti-cancer</li> <li>▪ Anti-inflammatory</li> <li>▪ Cardio-protective <sup>[13]</sup></li> </ul>
72	<i>Artocarpus heterophyllus</i>	Moraceae	Jackfruit	Phenolic compounds, flavonoids, stilbenoids, arylbenzofurans, carotenoids, volatile acid, sterols, vitamins, protein and tannins.	The decoction from its seed, root and bark is used to treat digestion, diarrhea, and dysentery. Root extract used as a remedy of skin disease, asthma, fever, used to cure wounds. It heals abscesses, ear problems, ulcer, gall stones, diabetes, reduce pain, builds muscle.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Wound healing</li> <li>▪ Anti-carcinogenic</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal</li> <li>▪ Antimicrobial <sup>[48]</sup></li> </ul>
73	<i>Catharanthus roseus</i>	Apocynaceae	Periwinkle	Alkaloids, flavonoids, terpenoids, saponins, steroids, carbohydrates, anthaquinone, glycosides, carbohydrates and protein.	It is used to treat leukemia, Hodgkin's lymphoma, and increases blood flow in brain, cures hypertension, dizziness, cranial traumas, menstrual irregularities, chronic constipation, dyspepsia, malaria, dengue, skin diseases, wasp stings, toothache, and diabetes.	<ul style="list-style-type: none"> <li>▪ Anti-carcinogenic</li> <li>▪ Anti-diabetic</li> <li>▪ Antioxidant</li> <li>▪ Antimicrobial</li> <li>▪ Anthelmintic</li> <li>▪ Anti-sterility</li> <li>▪ Anti-diarrheal</li> <li>▪ Hypertensive</li> <li>▪ Wound healing <sup>[15]</sup></li> </ul>
74	<i>Tagetes erecta</i>	Asteraceae	Marigold	Flavonoids, cadinol, carotenoids, isorhamnetin, saponins, triterpenes, quercetin, kaempferol, quercetagenin, phenolics and syringic acid.	It detoxifies the digestive system, heals viral inflammations, treats urinary, liver, gallbladder ailments, cure sore throats, toothaches, measles, mumps, heals cuts, scrapes, treats sunburn, diaper rash, insomnia.	<ul style="list-style-type: none"> <li>▪ Antiseptic</li> <li>▪ Wound healing</li> <li>▪ Analgesic</li> <li>▪ Antispasmodic</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Stomachic</li> <li>▪ Anti-ulcer <sup>[13]</sup></li> </ul>

75	<i>Heliotropium indicum</i>	Boraginaceae	Indian Heliotrope	Flavonoids, steroids, tannins, alkaloids, saponins, glycosides, terpenoids, phenols, and carbohydrates, and phytosterols.	Heliotrope is used to heal skin infections, stomach problems, poisonous animal bites, nervous disorders, Prevents dandruff, treats eye diseases, cure wounds, inflammation, tumor, malaria, vein disease, kidney stones, gum infection, ring worm infection.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antioxidant</li> <li>▪ Anti-cataract</li> <li>▪ Anti-tumor</li> <li>▪ Anti-ulcer</li> <li>▪ Anti-fertility</li> <li>▪ Diuretic</li> <li>▪ Antimicrobial</li> <li>▪ Analgesic <sup>[49]</sup></li> </ul>
76	<i>Tectona grandis</i>	Verbenaceae	Teak	Alkaloids, triterpenoids, steroids, lignans, fatty esters, phenolic compounds, tannin, carbohydrate, flavonoids, and phytosterols.	It is useful in bronchitis, dysentery, hyperacidity, diabetes, leprosy, nerve and skin disease, to treat headache, ringworm, promote hair growth.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Analgesic</li> <li>▪ Diuretic</li> <li>▪ Laxative <sup>[10]</sup></li> </ul>
77	<i>Leucas aspera</i>	Lamiaceae	Thumba	Alkaloids, phytosterols, flavonoids, saponins, phenols, glycosides, oleanolic acid, ursolic acid, triterpenoids and beta-sitosterol.	Used orally as stimulant, anthelmintic, laxative, and diaphoretic, to treat inflammation, dyspepsia, and jaundice, diarrhea, used orally for gastroenteritis, cholera, malaria, syphilis, leprosy, and dysentery.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-diarrheal <sup>[50]</sup></li> </ul>
78	<i>Lantana camara</i>	Verbenaceae	Indian Lantana	Flavonoids, phenols, saponins, alkaloids, tannin, anthocyanins, flavones, isoflavones, coumarins, lignans, catechins, carotenoids, carbohydrates, proteins, glycosides, and steroids.	Used to treat cuts, rheumatism, catarrhal infection, tetanus, abdominal viscera, sores, measles, malaria, chicken pox, asthma, ulcer, swelling, bilious fever, used in the treatment of skin, itches.	<ul style="list-style-type: none"> <li>▪ Anti-cancer</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-diabetic</li> <li>▪ Anthelmintic</li> <li>▪ Antimicrobial</li> <li>▪ Hepato-protective</li> <li>▪ Antioxidant</li> <li>▪ Larvicidal <sup>[15]</sup></li> </ul>
79	<i>Oldenlandia corymbosa</i>	Rubiaceae	Diamond Flower	Alkaloids, sterols, terpenes, flavonoids, saponin, glycosides, cyanogenics, tannins, resins, lactones, quinines, phenolic acids, anthocyanidins, and volatile oils.	To treat skin sores, ulcers, sore throat, bronchitis, gynecologic infections, pelvic inflammatory diseases, fever, jaundice, diarrhea, heat eruption, hepatitis, pneumonia, urinary infection, colic, constipation.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Anti-malarial</li> <li>▪ Anti-inflammatory</li> <li>▪ Abortifacient</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Hepato-protective <sup>[51]</sup></li> </ul>
80	<i>Centipeda minima</i>	Asteraceae	Spreading Sneezeweed	Alkaloids, flavonoids, tannins, phenolic compounds, glycosides, fats, terpenes and carbohydrates.	It is used to prevent pain in joints, used against hepatitis, diabetes mellitus, malaria, opium poisoning, and bronchitis, in night blindness, ring worm, and fever.	<ul style="list-style-type: none"> <li>▪ Anti-angiogenic</li> <li>▪ Anti-proliferative</li> <li>▪ Anti-arthritis</li> <li>▪ Anti-diabetic</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory <sup>[13]</sup></li> </ul>
81	<i>Canna indica</i>	Cannaceae	Canna	Alkaloids, steroids, carbohydrates, proteins, flavonoids, terpenoids, cardiac glycosides, $\beta$ -carotene, essential oil, lignin, diterpenes, steroids and saponins.	Used as diuretic, diaphoretic, demulcent and stimulant, flowers are used to cure eye disease, to treat dropsy, tonsillitis, malaria, diarrhea and dysentery, fever, diabetics, cancer, bruises.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-inflammatory</li> <li>▪ Analgesic</li> <li>▪ Immuno-modulatory</li> <li>▪ Anti-diarrheal</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-cancer <sup>[52]</sup></li> </ul>
82	<i>Acalypha indica</i>	Euphorbiaceae	Acalypha	Alkaloids, catechols, flavonoids, phenolics, tannin, saponins, triterpenoids, steroids, glycosides, anthraquinone, proteins, and amino acids.	Used in curing diabetes, leprosy, jaundice and heart disease, Used to treat asthma, ulcers, bronchitis, headache, cough, dysmenorrhoea, and skin disease, Also used for constipation, tummy ache, gastrointestinal irritant.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diabetes</li> <li>▪ Anti-obesity</li> <li>▪ Anti-venom</li> <li>▪ Hepato-protective <sup>[53]</sup></li> </ul>
83	<i>Sida cordifolia</i>	Malvaceae	Country Mallow	Flavonoids, lignin, glycosides, alkaloids, saponins, phytosterols, fixed oils, reducing sugar, and fatty acids.	Used as astringent, diuretic, tonic, cystitis, hematuria, fever, leucorrhoea, and disease of nervous system, paralysis, to treat piles, throat disease, phthisis, and	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Hepato-protective</li> <li>▪ Anthelmintic</li> <li>▪ Anti-diabetic <sup>[13]</sup></li> </ul>

					sciatica.	
84	<i>Sesbania sesban</i>	Fabaceae	Sesban	Alkaloids, anthocyanins, polyphenols, flavonoids, phytosterol, triterpenoids, Vitamins, tannins, saponins, and glycosides.	It is used to treat diabetics, inflammation, pains, diarrhea, scorpion sting, emmenagogue astringent, skin disease, leucoderma, menorrhagia, and for spleen enlargement.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Antioxidant</li> <li>▪ Anthelmintic</li> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Dermatitis</li> <li>▪ Anti-pyretic</li> <li>▪ Antimicrobial [54]</li> </ul>
85	<i>Daucus carota</i>	Apiaceae	Carrot	Phenolics, carotenoids, alkaloids, flavonoids, terpenoids, polyacetylenes, ascorbic acid, uccinic acid, $\alpha$ -ketoglutaric acid, lactic acid, and glycolic acid.	It is used as a diuretic and treats many urinary problem kidney stone. It also used in digestive disorders such as indigestion, gas formation, also used to treat skin disease, and cancer.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Anti-oxidant</li> <li>▪ Anti-cancer</li> <li>▪ Antimicrobial</li> <li>▪ Anti-flu</li> <li>▪ Anti-anxiety</li> <li>▪ Antispasmodic [13]</li> </ul>
86	<i>Cocos nucifera</i>	Arecaceae	Coconut	Phenols, tannins, leucoanthocyanidins, flavonoids, triterpenes, steroids, alkaloids, lipids, phytates and saponins.	Used for the treatment of diarrhea, arthritis, uterine diseases, bronchitis, liver complaints, diuretic, laxative, to treat diseased skin, teeth.	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Laxative</li> <li>▪ Diuretic</li> <li>▪ Hepato-protective</li> <li>▪ Anti-diabetic [15]</li> </ul>
87	<i>Andrographis paniculata</i>	Acanthaceae	Green Chiretta	Alkaloids, steroids, flavonoids, tannins, triterpenoids, quinones, protein, and sugars.	It is used to treat diabetes, high blood pressure, ulcer, leprosy, bronchitis, colic, influenza, malaria, blood purifier, cold, constipation, fever, liver disorders, loss of appetite, urinary tract and lung infections, low sperm count.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Anti-hyperglycemic</li> <li>▪ Hepato-protective</li> <li>▪ Antimicrobial</li> <li>▪ Anti-cancer</li> <li>▪ Anti-viral</li> <li>▪ Gastro-protective</li> <li>▪ Cardio-protective [8]</li> </ul>
88	<i>Phoenix dactylifera</i>	Arecaceae	Date Palm	Carotenoids, flavonoids, polyphenols, isoflavons, lignans, alkaloids, saponins, terpenoids, tannins, cardiac glycosides, and sterols.	Used for the treatment of memory disturbances, paralysis, loss of consciousness, inflammation, nervous disorders, diuretic, sore throat, colds, bronchial asthma, to relieve fever, cystitis, gonorrhea, liver and abdominal troubles.	<ul style="list-style-type: none"> <li>▪ Anti-ulcer</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diarrheal</li> <li>▪ Hepato-protective</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-hyperlipidemic [55]</li> </ul>
89	<i>Morinda citrifolia</i>	Rubiaceae	Indian Mulberry	Alkaloids, octanoic acid, terpenoids, anthraquinones, sitosterol, carotene, Vitamin-A, flavones glycosides, amino acids, caproic acid, ursolic acid, rutin and proxeronine.	It is used in diabetes, anxiety, and high blood pressure, also used to treat in colds, flu, asthma, bronchitis, piles, depression, mental disorder, improved high frequency hearing, cure heart disease, leprosy, kidney problems and urinary discharges.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-tumor</li> <li>▪ Hypertensive activity,</li> <li>▪ Mental health and improved high frequency hearing</li> <li>▪ Anti-convulsant</li> <li>▪ Anti-fertility [15]</li> </ul>
90	<i>Saraca asoca</i>	Fabaceae	Ashoka	Glycoside, flavonoids, tannins, saponins, carbohydrates, phenols, steroids, lignins, catechol, leucopetargonidin and leucocyanidin.	Used in treating hemorrhagic, uterine pain, tumors, worm infestations, bacterial infections, skin problems, leucorrhoea, internal, menstrual cycle and uterine disorders, diabetes, diseases of the blood, enlargement of abdomen.	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Anti-implantation</li> <li>▪ Anti-tumor</li> <li>▪ Anti-progestational</li> <li>▪ Anti-inflammatory</li> <li>▪ Antioxidant</li> <li>▪ Anti-cancer [13]</li> </ul>
91	<i>Ficus benghalensis</i>	Moraceae	Banyan	Steroids, flavonoids, tannins, phenolics, leucocyanidin, glycosides, proteins, carbohydrates, fatty acid, amino acid, terpenoids, Vitamin C, and anthraquinones.	It is used to treat diabetes, seminal weakness, leucorrhoea, nervous disorders, burning sensation, ulcers, vomiting, vaginal complains, fever, inflammations, leprosy, syphilis, dysentery, inflammation of liver, applied for reducing	<ul style="list-style-type: none"> <li>▪ Analgesic</li> <li>▪ Anti-pyretic</li> <li>▪ Anti-ulcerogenic</li> <li>▪ Anti-inflammatory</li> <li>▪ Antimicrobial</li> <li>▪ Anti-diabetic</li> <li>▪ Anti-convulsant</li> <li>▪ Anti-diarrheal</li> <li>▪ Hepato-protective</li> <li>▪ Larvicidal [56]</li> </ul>

					pimples.	
92	<i>Tridax procumbens</i>	Asteraceae	Coatbuttons	Flavonoids, alkaloids, hydroxycinnamates, tannins, phytosterols, lignans, carotenoids saponins, phenols and anthocyanins.	Used to treat diabetes, insect repellent, diarrhea, hemorrhages, hair loss, wounds, inflammation, cough, stomachache, epilepsy, gastrointestinal disorders.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antiviral</li> <li>▪ Anti-oxidant</li> <li>▪ Hypo-lipidaemic</li> <li>▪ Anti-hypertensive [57]</li> </ul>
93	<i>Solanum nigrum</i>	Solanaceae	Black Night Shade	Alkaloids, flavonoids, steroids, tannins, phlobatannins, phenols, solanidine, tigogenin, tomatidenol, uttronins and solanigraside.	Used in wounds, cancerous growths, piles, abdominal pain, dysentery, inflammation, asthma, ulcer, neuralgia, heavy female discharge, diarrhea, diuretic, dysentery, febrifuge.	<ul style="list-style-type: none"> <li>▪ Anti-inflammatory</li> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antinociceptive</li> <li>▪ Anti-cancer</li> <li>▪ Hepato-protective [15]</li> </ul>
94	<i>Terminalia arjuna</i>	Combretaceae	Arjuna	Flavonoids, tannins, phenols, phytosterols, saponins, alkaloids, lactones, terpenoids, Carotenoids, stilbenes, lignans, tannins and glycosides.	Used for the treatment of heart diseases, hypertension, to decrease blood pressure, hemorrhages, ulcers, tumors, earaches, dysentery, sexual diseases, urinary tract infection	<ul style="list-style-type: none"> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-carcinogenic</li> <li>▪ Anti-mutagenic</li> <li>▪ Gastro-protective</li> <li>▪ Anti-hypertensive</li> <li>▪ Anti-atherogenic [58]</li> </ul>
95	<i>Mimosa pudica</i>	Mimosaceae	Sensitive Plant	Alkaloids, flavonoids, cardiac glycosides, polyphenols, saponins, tannins, terpenoids, quinines, and coumarin.	Used to treat blood and bile, cure piles, jaundice, leprosy, ulcer and smallpox, dysentery, inflammations, asthma, insomnia, premenstrual syndrome.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antioxidant</li> <li>▪ Anti-hepatotoxin</li> <li>▪ Anti-inflammatory</li> <li>▪ Wound healing</li> <li>▪ Anti-fertility [59]</li> </ul>
96	<i>Momordica charantia</i>	Cucurbitaceae	Bitter Gourd	Flavanoids, saponins, terpenoids, coumarins, emodins, alkaloids, proteins, glycosides, anthraquinones, anthocyanins, and steroids.	Used to treat diabetes, abortifacient, gout, jaundice, abdominal pain, leprosy, laxative, piles, pneumonia, psoriasis, purgative, rheumatism, melanoma, cancer and lymphoma.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-tumor</li> <li>▪ Anti-inflammatory</li> <li>▪ Hypo-lipidaemic [60]</li> </ul>
97	<i>Pterocarpus marsupium</i>	Fabaceae	Malabar Kino	Alkaloids, glycosides, flavonoids, flavonols, poly, phenols pterostilbene, tannins, lignans, stilbenes, sterols, and terpenoids.	Used in fractures, constipation, hemorrhages, arthritis, sores, boils, stomach pain, cholera, leprosy, toothache, tumors, dysentery, fever.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diarrheal [61]</li> </ul>
98	<i>Gymnema sylvestre</i>	Apocynaceae	Gurmar	Alkaloids, flavanoids, glycosides, tannins, triterpene, saponins gymnemic acids, phenols, anthraquinones, and phtoseterois.	It is used in the treatment of jaundice, constipation, asthma, bronchitis, conjunctivitis, renal, calculi, laxative, jaundice, piles, colic pain, eye troubles, cardiac, and respiratory diseases.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Anti-arthritic</li> <li>▪ Antimicrobial</li> <li>▪ Hepato-protective</li> <li>▪ Anti-cancer</li> <li>▪ Anti-hyperlipidemic [62]</li> </ul>
99	<i>Encostemma littorale</i>	Gentianaceae	Indian Gentian	Flavonoids, steroids, quinones, cardiac glycosides, saponins, quinine, tannins, phenols, and alkaloids.	Used for treating diabetes, stomachic, tonic, reduce fever, tonic for appetite loss, improves kidney function, blood pressure, and malaria.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-tumor [63]</li> </ul>
100	<i>Clerodendrum phlomidis</i>	Lamiaceae	Arna	Flavonoids, glycosides, terpenoids, saponins, tannins, lignin, phenols, alkaloids, glycosides, phenylethanoid, steroid, anthraquinones, and cyanogenic acid.	Used to treat inflammation, diabetes, nervous disorder, rheumatism, urinary disorders, asthma, febrifuge, coughs, venereal infections, skin diseases, elephantiasis, tropical burns, and malaria.	<ul style="list-style-type: none"> <li>▪ Anti-diabetic</li> <li>▪ Antimicrobial</li> <li>▪ Antioxidant</li> <li>▪ Anti-inflammatory</li> <li>▪ Anti-cancer</li> <li>▪ Anti-diarrheal [64]</li> </ul>

## 2. Significance of Ethnomedicinal Plants in Phytochemistry and Pharmacology

The current review study and explanations has focused on various Indian ethnomedicinal plants that have various pharmacological or medicinal properties which can help to diminish the risk of life threatening diseases. Extensive varieties of phytochemicals are act as strong protectors from different diseases or it may serve as strong immune

boosters. These traditional medicinal plants study helps in understanding the biological activities for future human welfare and healthcare development. For this novel purposes proper nurture of these medicinal and aromatic plant species need special care. Their methodical cultivation and preservation is also requires. The diverse range of taxonomical categorization of these medicinal plants also reflected on the current study which agrees with the

previous studies, too. The path of the study showed the prospects of pharmacology in the way arising from experimental and observational therapeutics for complementary and alternative medicines. These plants are also used as supplementary functional food to promote better health as these are the rich source of dietary fibers, minerals, and vitamins, important primary and secondary metabolites. The plant species showed huge potentiality on future uses for the pharmaceutical and nutraceutical purposes on consideration of pharmacology or phytotherapy and phytochemistry as well [1, 5, 65, 67].

### 3. Conclusion

The present review study focuses on the wide range of potentiality for phytochemicals, pharmacological, therapeutic and nutritional attributes of the some important Indian traditional medicinal plants. From the above review and explanations, it can be concluded that these medicinal plants has been used as an important medicinal, pharmacological, therapeutic, pharmaceutical and nutritional source for different diseases and those are briefly mentioned in the current review study as well. The review study gives a clear idea on traditionally used Indian medicinal plants that these are much more worthy for healing from different diseases or to fight against any sort of other severe life threatening diseases.

### 4. Acknowledgement

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### 5. Conflict of Interest

The author declares no conflict of interest.

### 6. References

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