

Supplementary material

Botanical names	Parts used	Therapeutic actions
<i>Acorus calamus</i> L. Araceae (Vacha)	Root	Memory loss, anxiety, bronchitis, mental fatigue sinusitis, tension, headache and joint pains
<i>Adhatoda vasica</i> Nees Acanthaceae (Vasaka)	Roots and leaves	Expectorant used in asthma, bronchitis, cough and dysmenorrhea.
<i>Aegle marmelos</i> Corr. Rutaceae (Bilwa)	Fruit	Diarrhea, gastritis and adult onset diabetes
<i>Andrographis paniculata</i> Wallich <i>ex</i> Nees. Acanthaceae (Kirta)	Leaves	Children's bowel complaints, gastric acidity, viral hepatitis, liver congestion and flatulence
<i>Asparagus racemosus</i> Willd. Liliaceae (Shatavari)	Root	Increases muscle strength, stomach, lungs, and sexual organs, increases breast milk secretion during lactation and male impotence.
<i>Bacopa monnieri</i> (L.) Penn. Scrophulariaceae (Brahmi)	Leaves	Nervous exhaustion, generalized fatigue, epilepsy, improves memory, anti-ageing and bronchitis, coughs.
<i>Boerhaavia diffusa</i> L. Nyctaginaceae (Punarnava)	Root	Diuretic, laxative, expectorant used in asthma, bronchitis, anemia and anti-inflammatory.
<i>Cedrus deodara</i> Roxb. Coniferae (Devadaru)	Wood	Flatulence, diarrhoea, hemorrhoids, fever, reduces and promotes sweating.
<i>Centella asiatica</i> Urbann Umbelliferae (Mandukaparni)	Whole plant	Anxiety, to promote memory power and also to reduce blood pressure.
<i>Cinnamomum iners</i> Reinw. Lauraceae (Tejpatra)	Leaves	Used for scorpion sting.
<i>Datura metel</i> L. Solanaceae (Datura)	Whole plant	Whooping cough, muscle spasm, sciatica, asthma and painful menstruation.
<i>Eclipta alba</i> Hassk. Asteraceae (Bhringaraj)	Whole plant	Liver disorders, skin and hair care, improves complexion, viral hepatitis, calms the mind, memory disorders, and strengthens spleen and general tonic.
<i>Embelia ribes</i> Burm. Myrsinaceae (Vidanga)	Powdered berries	Intestinal worms, skin-fungal infections, obesity, sore throat and digestive strengthener. Keep the intestines free of toxins. It is reported as a reducing agent of sperm count.
<i>Emblica officinalis</i> Gaertn. Euphorbiaceae (Amalaki)	Fruit	Increases red blood cell counts and therefore improves anemia, asthma, bronchitis, stomach problems and hemorrhoids.
<i>Evolvulus alsinoides</i> L. Convolvulaceae (Shankpushpi)	Whole plant	General weakness, nervous exhaustion and memory loss.
<i>Gloriosa superba</i> L. Liliaceae (Kalapaikilangu)	Tuber and seed	Deadly toxic to human beings, used as server ulcer in an optimum dose and cure cancer.
<i>Mucuna pruriens</i> Baker Papilionaceae (Kapikachchha)	Seed powder	Hypercholesterolemia, general weakness, Parkinson's disease and nervous disorders.
<i>Ocimum sanctum</i> L. Lamiaceae (Tulasi)	Leaves	Tuberculosis, ringworm, ear infections, common cold, cough, bronchitis, general stress syndrome, skin infections, indigestion, nausea and sinus infection.
<i>Oroxylum indicum</i> Vent. Bignoniaceae (Shyonaka)	Root bark powder	Digestive aid, arthritic conditions, anti-diarrhoea, and purgative.
<i>Operculina turpethum</i> S. Manso (Trivrit)	Root	Constipation and colic obesity.
<i>Phyllanthus amarus</i> L. Euphorbiaceae (Bhumi amalaki)	Whole plant	Chronic liver disorders, jaundice, viral hepatitis, dyspepsia, anorexia moderate constipation, chronic colitis, irritable bowel syndrome, urinary tract infection.
<i>Plumbago zeylanica</i> L. Plumbaginaceae (Chitraka)	Root	Skin conditions, arthritic pain, abortifacient, blood purifier, obesity and hemorrhoids.
<i>Ricinus communis</i> L. (Euphorbiaceae)	Seed	Dysentery, cough, constipation, piles, antivenom to scorpion stings, rheumatis and nerve disorder
<i>Rauwolfia serpentina</i> Benth. Apocynaceae (Sarpagandha)	Root	High blood pressure, mental agitation, insomnia, sedative, hypnotic. Sarpagandha is the source of reserpine, an anti-hypertensive drug used since 1970.
<i>Saraca indica</i> L. Caesalpiniaceae (Asoka),	Bark	Menorrhagia, depression, bleeding, hemorrhoids, uterine fibroids, considered as a uterine sedative and tonic.

<i>Sida cordifolia</i> L. Malvaceae (Bala)	Root	Generalized weakness, post-partum weakness, mental exhaustion, nervousness, bronchospasm and cough.
<i>Solanum surattense</i> Burm.f. Solanaceae (Kantakari)	Whole plant	Asthma, cough, bronchospasm, sore throat, constipation, an effective expectorant and diuretic.
<i>Terminalia bellerica</i> DC. (W & A) Combretaceae (Bibhitaka)	Fruits	General tonic and strengthener, cough, sore throat, fatigue, all types of gastrointestinal disorders and mild laxative.
<i>Tylophora asthmatica</i> W & A Asclepiadaceae (Nanjaruppan)	Root	Dry leaf is used to given asthma, tuberculosis and dry cough.
<i>Wedelia calendula</i> (L.) Less. Vitaceae	Leaf and root	Used as hepatic disorders, stomach and lung cancer
<i>Withania somnifera</i> Dunal. Solanaceae (Amukkura kizhangu)	Tuber and root	Used for rheumatism and arthritis.

Table 1: Therapeutic uses of medicinal and aromatic plants and their parts used in indigenous systems of Indian medicines.
*(Reference for the all the plants cited in table 1, Subhose and colleagues, 2005)

Botanical name	Chemical composition	Therapeutic uses
<i>Athradota vasica</i> Nees	1.0% Vasicine 2.0% Total alkaloids	Anti-asthmatic, Bronchodilator Cold remedy
<i>Andrographis paniculata</i> Wallich ex Nees	10% Andrographolides	Hepatoprotectant
<i>Boswellia serrata</i> Roxb.	65% Organic acids 20-25% Boswellic acid	Antiarthritic, Antiinflammatory
<i>Boswellia serrata</i> Roxb.	75% Organic acids, 40% Boswellic acid, 20% Sennosides	Antiarthritic, Antiinflammatory and laxative action
<i>Bacopa monniera</i> (L.) Pennell.	20% Bacosides A&B	Memory enhancer
<i>Capsicum annum</i> L.	40% Capsaicin, 75% Capsaicin 90% Capsaicin	Pain reliever
<i>Centella asiatica</i> Urb.	8% Total triterpenes	Skin, health weight management
<i>Coleus forskohlii</i> Briq. Syn	1% Forskohlin	Antihypertensive, weight management
<i>Curcuma longa</i> L.	Curcumin C3, 95% Curcuminoids	Antioxidant, anti-viral, anti- inflammatory, anticarcinogenic
<i>Emblica officinalis</i> Gaertn.	30%Tannins	Detoxification Rejuvenating agent
<i>Garcinia cambogia</i> Desr.	50% (-) HCA (Ca)	Weight management
<i>Garcinia indica</i> Chois.	CitrinO crystalline powder 10% (-) HCA	Beverages, naturally Red in color
<i>Gymnema sylvestre</i> R. Br.	Gymnema Sylvestre GS 425% 75% Gymnemic acids	Antidiabetic
<i>Glycyrrhiza glabra</i> L.	20% Glycyrrhizinic acid 5% Lutein	Eyesight-age related Macular degeneration
<i>Camellia sinensis</i> (L.) Kuntze	40% Catechins; 75% Catechins 2% Caffeine	Antioxidant
<i>Commiphora mukul</i> Engl.	Gugulipid 2.5% Guggulsterones Z&E	Cholesterol Management
<i>Momordica charantia</i> L.	7% Bitter principles 0.5% Charantin	Antidiabetic
<i>Morinda citrifolia</i> L.	Fruit Powder	General tonic
<i>Mucuna pruriens</i> Baker	10% & 15% L-Dopa Min. 20% Catecholamines	Nerve tonic Energy
<i>Melia azadirachta</i> L.	3% Bitter Principles	Anti-bacterial
<i>Phyllanthus amarus</i> L.	0.02% Phyllanthine & Hypophyllanthine	Anti-hepatitis
<i>Picrorhiza kurroa</i> Royle ex Benth.,	4% Kutkin	Hepatoprotectant
<i>Piper nigrum</i> L.	95% Piperine	Nutrient bio-availability Enhancer
<i>Piper longum</i> L.	1.5% Piperine	Biopotentiator, Ant-asthmatic Thermogenic
<i>Rubia cordifolia</i> L.	4:1 Concentration	Skin disorders
<i>Sida cordifolia</i> L.	0.8% Ephedrine 10% Isoflavones	Bronchodilator Anti-carcinogenic
<i>Terminalia arjuna</i> W. & A.	1% Arjunolic acid	Revitalizing, circulation
<i>Terminalia bellerica</i> Roxb.	35% Tannins	Rejuvenating agent
<i>Terminalia chebula</i> Retz.	30% Tannins	
<i>Tinospora cordifolia</i> Miers	2.5% Bitter principles	Diuretic
<i>Tribulus terrestris</i> L.	20% Steroidal saponins 45% Steroidal saponins	Muscle building, Anabolic alternative
<i>Ocimum sanctum</i> L.	2% Ursolic acid	Antidiabetic Stress management
<i>Tylophora asthmatica</i> W. & A.	0.1% Total alkaloids	Anti-asthmatic
<i>Withania somnifera</i> (L.) Dunal	.5% Withanolides, 1.0% Alkaloids, 0.25% Withaferin	Herbal adaptogen
<i>Zingiber officinale</i> (Willd.)Rosc.	5% Gingerols	Digestive aid Ginger soft extract

Table 2: The pharmacological properties of some Ayurvedic crude drugs support for their therapeutic claims.

Botanical names	Parts used	Vernacular names
<i>Acorus calamus</i> L. (Araceae)	Rhizome	Vacha
<i>Argemone mexicana</i> L. (Papaveraceae)	Fruit	Datura.
<i>Curcuma amada</i> L. (Scitamineae)	Rhizome	Amba haldi
<i>Curcuma longa</i> L. (Scitamineae)	Rhizome	Haldi
<i>Curcuma aromatica</i> Salish (Scitamineae)	Wild turmeric	Jangali haldi
<i>Cassia lanceolata</i> L. (Forsk) (Caceslpiniaceae)	Leaves	Thalispatri
<i>Glycyrrhiza glabra</i> L. (Papilionaceae)	Root	Jestimadhu
<i>Ipomaea hederacea</i> Jacq. (Convolvulaceae)	Pharbitis	Kala dana
<i>Withania somnifera</i> Dunal. (Solanaceae)	Vegetable rennet	Aswagandha
<i>Myrica nagi</i> Thunb. (Myricaceae)	Leaf	Kaifal
<i>Nardostachys jatamansi</i> DC. (Valerianaceae)	Whole plant	Jadamanshi
<i>Nigella sativa</i> L. (Ranunculaceae)	Seed	Kalajeera
<i>Ptychotis ajowan</i> DC. (Umbelliferae)	Leaf	Ajwain
<i>Piper longum</i> L. (Piperaceae)	Fruit	Adamkath
<i>Rubia cordifolia</i> L. (Rubiaceae)	Madder root	Medhamahmeda
<i>Sapindus trifoliatu</i> s L. (Sapindaceae)	Indian fiber	Sonth (dried)
<i>Symplocos racemosa</i> Roxb. (Styraceae)	Bark	Majithlall
<i>Swertia chirata</i> Ham. (Gentianaceae)	Whole plant	Chiraita
<i>Terminalia chebula</i> Retz. (Combretaceae)	Bark and seed	Harda chota
<i>Zingiber officinale</i> Roseoe (Gingiferaceae)	Rhizome	Adrak (fresh)

Table 3: Medicinal plant parts exported from India.