



Medicinal Plant Garden Academic year 2022-23

S.No.	Botanical Name	S.No.	Botanical Name
1.	<u>Adhatoda vasica.</u>	32	<u>Ficus glomerata</u>
2.	<u>Aegle marmelos</u>	33	<u>Gymnema sylvester</u>
3.	<u>Aloe barbadensis</u>	34	<u>Helicteres isora</u>
4.	<u>Andrographis paniculata</u>	35	<u>Hemidesmus indicus</u>
5.	<u>Annona reticulata</u>	36	<u>Hibiscus rosa sinensis</u>
6.	<u>Anthocephalus cadamba</u>	37	<u>Lawsonia inermis</u>
7.	<u>Areca Catechu</u>	38	<u>Magnolia champaca</u>
8.	<u>Artabotrys hexapetalus</u>	39	<u>Mangifera indica</u>
9.	<u>Asparagus racemosus</u>	40	<u>Manilkara zapota</u>
10.	<u>Azadirachta indica</u>	41	<u>Mimosa pudica</u>
11.	<u>Bauhinia racemosa</u>	42	<u>Musa acuminata</u>
12.	<u>Bergera koenigii</u>	43	<u>Myristica fragrans</u>
13.	<u>Bixa orellana</u>	44	<u>Pimenta dioica</u>
14.	<u>Bryophyllum Pinnatum</u>	45	<u>Piper betel</u>
15.	<u>Butea monosperma</u>	46	<u>Piper longum</u>
16.	<u>Calotropis gigantea</u>	47	<u>Piper nigrum</u>
17.	<u>Cassia angustifolia</u>	48	<u>Pongamia pinnata</u>
18.	<u>Catharanthus roseus</u>	49	<u>Psidium guava</u>
19.	<u>Centella asiatica</u>	50	<u>Pterocarpus santalinus</u>
20.	<u>Chrysalidocarpus lutescens</u>	51	<u>Ruta graveolens</u>
21.	<u>Cinamomum camphora</u>	52	<u>Sapindus mukorossi</u>
22.	<u>Cinnamomum zeylanicum</u>	53	<u>Senegalia catechu</u>
23.	<u>Citrus limon</u>	54	<u>Syzygium aromaticum</u>
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25.	<u>Curcuma amada</u>	56	<u>Tamarindus indica</u>
26.	<u>Curcuma longa</u>	57	<u>Terminalia arjuna</u>
27.	<u>Cymbopogon citratus</u>	58	<u>Terminalia bellerica</u>
28.	<u>Eleocarpus ganitrus</u>	59	<u>Terminalia chebula</u>
29.	<u>Elettaria cardamomum</u>	60	<u>Tinospora cordifolia</u>
30.	<u>Emblica officinalis</u>	61	<u>Vitex negundo</u>
31.	<u>Eucalyptus globules</u>		

Adulsa

Adhatoda vasica

Scientific Name: Leaves of *Adhatoda vasica* or *Justicia adhatoda* belonging to Family: Acanthaceae. It is commonly known in English as Malabar nut, adulsa, adhatoda, vasaka, Plant is native to Asia.

Beneficial Parts: Leaves, Roots, Flowers and Stem Bark

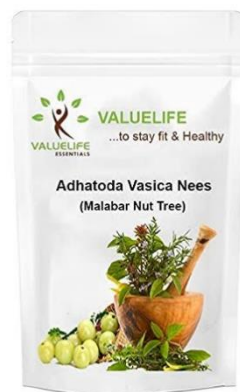


Chemical constituents: The leaves of *Justicia adhatoda* contains phytochemicals such as alkaloids, tannins, saponins, phenolics and flavonoids. The most important is vasicine (Quinazoline alkaloid).

Pharmacological activity: Antispasmodic, Antipyretic, anti-inflammatory, anti-bleeding, bronchodilator, hypoglycemic, disinfectant, anti-jaundice and oxytocic. It is antiperiodic, astringent, diuretic, purgative and is also used as an expectorant in addition to liquefy sputum.

Therapeutic Indications: It is used to reduce fever, inflammation, to stop bleeding, as a bronchodilator, as an antidiabetic, to treat jaundice, constipation.

Marketed Formulations:

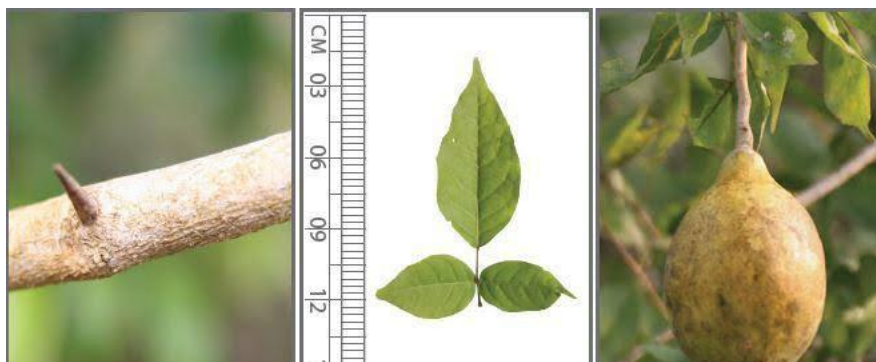


Bael

Aegle marmelos

Scientific Name: It consists of fruits, leaves of *Aegle marmelos*, belonging to Family: Rutaceae, commonly known as bael (bili or bhel), also Bengal quince, golden apple, Japanese bitter orange, stone apple or wood apple.

Beneficial Parts: Fruits, Leaves, Bark, Stem, and Root.



Chemical constituents: The fruits, bark, leaves, seeds, and roots of bael contain bioactive compounds such as **coumarin, xanthotoxol, imperatorin, aegeline, and marmeline.**

Pharmacological activity: Antidiarrhoeal, antimicrobial, antiviral, radioprotective, anticancer, chemopreventive, antipyretic, ulcer healing, antigenotoxic, diuretic, antifertility and anti-inflammatory properties.

Therapeutic Indications: reduce inflammation, reduces fever healing of stomach ulcers, anti microbial agent.

Marketed Formulations:



Aloe

Aloe barbadensis

Scientific Name: Aloe vera is a succulent plant species of the genus *Aloe barbadensis* belonging to Family: Asphodelaceae having some 500 species. Hindi: Musabhar, Elva, Marathi: Korphad.

Beneficial Parts: Leaves



Chemical constituents: Aloe-emodin, aloin, aloesin, emodin, and acemannan, lignin, saponins, salicylic acids and amino acids. Vitamins: It contains vitamins A, C and E It also contains vitamin B12, folic acid, and choline.

Pharmacological activity: Aloe vera has been traditionally used to treat skin injuries (burns, cuts, insect bites, and eczemas) and digestive problems because its anti-inflammatory, antimicrobial, and wound healing properties.

Therapeutic Indications: promotion of wound healing, antifungal activity, anti-inflammatory, anticancer, immunomodulatory and oral wound healing

Marketed Formulations:



Kalmegh

Andrographis paniculata

Scientific Name: It consists of leaves or entire aerial part of *Andrographis paniculata*, belonging to Family: Acanthaceae. Commonly it is known as **King of Bitter**, Bitterweed, green chiretta.

Beneficial Parts: Leaf, Stem & Root.



Chemical constituents: Majorly plant species contains diterpenoids, flavonoids and polyphenols. Andrographolide is the major constituent extracted from the leaves of the plant and is a bicyclic diterpenoid lactone.

Pharmacological activity: Immunostimulatory, anti-infective and anti-atherosclerotic, anti-inflammatory, anti-infective and anti-hepatotoxic.

Therapeutic Indications: Traditionally used for the treatment of common cold, diarrhoea, fever due to several infective cause, jaundice, as a health tonic for the liver and cardiovascular health, and as an antioxidant. It is also used to improve sexual dysfunctions and serve as a contraceptive.

Marketed Formulations:



Ramphal

Annona reticulata

Scientific Name: It consists of leaf, fruit of *Annona reticulata*, belonging to Family: Annonaceae. It also known as sugar apple or bullock's-heart. Common names in Hindi: Ramphal, Ramachitta.

Beneficial Parts: Leaf, Fruit, Stem & Bark



Chemical constituents: Several phytoconstituents have been identified from different parts of *A. reticulata*. Stem bark contains tannins, alkaloid and phenolic compounds. Leaves contain wide range of chemicals like alkaloids, amino acids, carbohydrates, steroids, flavonoids, proteins, tannins, glycosides and phenolics. Root has been identified for the content of acetogenin, alkaloid, carbohydrates, proteins, flavonoids, tannins. The plant also found to be rich in minerals such as Ca, P, K, Mg, Na, Cl, S, Mn, Zn, Fe, Cu, Se, Co, Ni and Cr.

Pharmacological activity: Antioxidant, anticancer, analgesic and CNS depressant, antimalarial, anthelmintic.

Therapeutic Indications: Traditionally used for the treatment of diarrhoea, dysentery, insecticidal, pain reductant, treatment of malaria.

Marketed Formulations:



Kadamba

Anthocephalus cadamba

Scientific Name: It consists flowers and bark of *Anthocephalus cadamba* belonging to family Rubiaceae. It is also known as Kadamba, or wild Cinchona. It is a large tree with unique flowers. It is also known as: *Kadam*, *kadamb*, *Vrattapuspa*, *Attutek*, *Acokari* and etc.

Beneficial Parts: Bark and Flowers



Chemical constituents: The preliminary phytochemical screening of *Anthocephalus cadamba* whole plant showed the presence of saponines, terpenes, sesquiterpenes, glycosides and alkaloids.

Pharmacological activity: Antidiabetic, antitumor, analgesics, anti-inflammatory, diuretic, laxative, hypolipidemic and etc activities are shown.

Therapeutic Indications: Used in diabetes, Fungal infections, Cancer, musculoskeletal diseases, GIT disturbances, Parasitic infections and etc.

Marketed Formulations:



Areca palm

Areca catechu

Scientific Name: Areca nuts are the seeds of *Areca catechu* Linn, belonging to family Palmaceae. The tree is cultivated in topical India, Sri Lanka, Malay states, South China, East Indies and etc
Common names are: Areca palm, betel palm, betel nut, Indian nut, Pinang palm or catechu, areca nut palm or betel nut palm.

Beneficial Parts: Seeds, fruits and Leaves



Chemical constituents: It contains alkaloids (0.5%) such as arecaidine and arecoline and polyphenols which when chewed are intoxicating and slightly addictive. Other than these two polysaccharides (18.7%), fat (14%), fiber (10.8%)

Pharmacological activity: Antiparasitic, antioxidant, anti-inflammatory, antibacterial and antifungal, antiallergic activities.

Therapeutic Indications: It is use in treatment of obesity, menstrual cramps, abdominal pain, digestive ailments, inflammatory conditions, toothache.

Marketed Formulations:



Hirva chapha

Artabotrys hexapetalus

Scientific Name: It is shrub found in India through Burma, southern China and Tiwan, having flowers that are renowned for their exotic fragrance belonging to family Annonaceae. It also known as Ylang-ylang vine or tail grape.

Beneficial Parts: Fruits, Leaves, stem.



Chemical constituents: Hexapetalus contained mainly caryophyllene oxide (31.5%), beta caryophyllene oxide (11.4%), humulene epoxide (10%) and alpha-copaene (8.1%).

Pharmacological activity: Antimicrobial, antileishmanial, antioxidant, antifungal, antifertility, anthelmintic properties are attributed to presence of valuable bioactive phytoconstituents.

Therapeutic Indications: Hexapetalus are tonic and stimulant. The fruits and bark are used to treat fever, diarrhea, skin diseases, wounds, ulcers, inflammation, cough, asthma.

Marketed Formulations:



Shatavari

Asparagus racemosus

Scientific Name: It is a species of *Asparagus racemosus* belongs to family of Asparagaceae, distributed throughout India, Himalayas and Northern Australia. It is also known as Satavari, Shatamull, etc

Beneficial Parts: Root



Chemical constituents: It contains Asparagine A which is a polycyclic alkaloid reported in dried roots. Steroidal saponins, Shatavarside A, B and schidigerasaponin D5, Isoflavone, glucopyranoside are also found in shatavari.

Pharmacological activity: Anti-inflammatory, antipsychotic, anticancer, antiemetic.

Therapeutic Indications: It improves mental function, vigor and add vitality to the body, used in Neural disorders, dyspepsia, tumors, neuropathy, hepatopathy, anti-inflammatory and etc.

Marketed Formulations:



Neem

Azadirachta indica

Scientific Name: It is known as *Azadirachta indica* belongs to the family of Meliaceae. It is typically grown in tropical and semitropical regions of India, Islands in southern Iran. It is commonly known as Neem, nimtree or Indian lilac or veppa.

Beneficial Parts: Barks, seeds and leaves.



Chemical constituents: Neem contains bitter principle called Nimbidin, complex liminoid compound named azadirachtin. Other than this, it contains glycerides, diverse polyphenols, nimbolide, triterpenes, beta-sitosterol, quercetin, catechins, carotenes and vitamin C.

Pharmacological activity: Antimicrobial, Antifeedant, spermicidal activity, antiseptic.

Therapeutic Indications: The bark of neem tree is good bitter tonic, used in Malarial fever, in skin diseases, it is used as an insect repellent, insecticide, nematocidal and also have antimicrobial properties. The seed oil of neem is found to pose spermicidal activity.

Marketed formulations:



Apta

Bauhinia racemosa

Scientific Name: Apta consists of leaves, barks and flowers of *Bauhinia racemosa* belonging to Family: Fabaceae.

Bauhinia racemosa, commonly known as the **bidi leaf tree**.

Beneficial Parts: Bark, Leaves, Pods



Chemical constituents: Main components Gallic acids, Kaempferol, quercetin 3-O- α -rhamnoside, kaempferol 3-O- β -glucoside, myricetin 3-O- β -glucoside and quercetin 3-O-rutinoside.

Pharmacological activity; Used as a refrigerant, astringent, in the treatment of headache, fever, skin diseases, blood diseases, dysentery diarrhea. spasmotic, Diurectis etc.

Therapeutic Indications: It is use in treatment of Diarrhoe, Dysentry, Astigent, Antinoeoplastic Agent, Malondialdehyde Antioxidants

Marketed Formulations:-



Kari patta *Bergera koenigii*

Scientific name: It consist of leaves of *Bergera Koenigii*, *Murraya koenigii* belonging to Family: Rutaceae.

It is also known as Kari patta (Hindi), Curry leaf, Daun Kari, Indian curry tree, Karapincha.

Beneficial Parts: Leaves, Roots and Barks



Chemical constituents: Main components identified Linalool (32.83%), Elemol (7.44%), Geranyl acetate (6.18%), Myrcene (6.12%), Allo-Ocimene (5.02%), α -Terpinene (4.9%), (E)- β -Ocimene (3.68%), Neryl acetate (3.45%).

Pharmacological activity: Anthelmintics, analgesics, digestives, appetizer, antioxidant, antibacterial, antifungal, antidiabetic, anti-inflammatory and neuroprotective activities.

Therapeutic Indications: It is use in treatment of pruritis, skin disorders, ulcers, appetizer, poisoning, premature hair greying, dandruff. It also reduces risk of cancer, heart diseases and help in management of diabetes.

Marketed Formulations:



Sinduri

Bixa orellana

Scientific name: It consists of seeds of *Bixa orellana* belonging to Family: Bixaceae.

Regional names: Hindi: *Sinduri*, *Latkan*, *sada suhagan*.

Beneficial Parts: Whole plant, seeds



Chemical constituents: Main components identified are Bixin, fat, isobixin, beta-carotene, ellagic acid, salicylic acid, tomentosic acid, orellin, bixein.

Pharmacological activity: antibacterial, purgative, antipyretic, good appetizer, absorbent.

Therapeutic Indications: It is used in treatment of jaundice, dysentery, vomiting during pregnancy.

Marketed Formulations:



Panphuti

Bryophyllum Pinnatum

Scientific Name: It consists of the leaves, flower fruits and stem of the *Bryophyllum pinnatum* belonging to family: Crassulaceae.

Bryophyllum Pinnatum, also known as in Hindi: Bryophyllum, Panphuti, Sprout Leaf Plant

Beneficial Parts: Leaves, Root, Stem, flower



Chemical constituents: Main components proanthocyanin, rutin, quinine, flavan-3-ol, anthocyanin, lunamarin, sapogenin, phenol, flavonones, steroids, epicatechin, kaempferol, phytate, oxalate, resveratrol, catechin, flavones, tannin,

Pharmacological activity: Anthelmintic, immunomodulatory, hepatoprotective, antinociceptive, anti-inflammatory, antidiabetic, nephroprotective, antioxidant, antimicrobial, analgesic, anticonvulsant and antipyretic etc.

Therapeutic Indications: It is use in treatment of treat inflammation, microbial infection, pain, respiratory diseases, gastritis, ulcers, diabetes and cancer tumors etc

Marketed Formulations:



Palash

Butea monosperma

Scientific Name: It consists of flowers, leaves, fruits of *Butea monosperma*, *Butea frondosa* Rob. Wild, *Erythrina monosperma* Lam., *Plaso monosperma* Kuntze belonging to Family: Fabaceae. *Butea Monosperma*, also known as in Hindi: flame-of-the-forest, Bastard teak, Palash, Parrot tree, Butea gum and Sacred tree.

Beneficial Parts: Palash flowers, roots, leaves, seeds, fruits.



Chemical constituents: Main components identified palasonin, d-mecantharidin proteolytic and lipolytic enzymes, α -amyrin, β -sitosterol and alkaloid monospermine glycerides of stearic, palmitic, linoceric, oleic and linoleic acids.

Pharmacological activity: astringent, anti-diabetic, anti-stress, anti-diarrheal, anti-dysentery, febrifuge, aphrodisiac, purgative, anthelmintic, anti-fungal.

Therapeutic Indications: It is use in treatment of diarrhea, dysentery, diabetes mellitus, hypertension, skin infections, dandruff, Alopecia, jaundice, joint pain, insomnia.

Marketed Formulations:



Rui

Calotropis gigantea

Scientific Name: Calotrope is the dried root or bark of the *Calotropis gigantea*, *Calotropis procera*, belonging to Family: Apocynaceae.

Calotrope, also known as madar and akada in Hindi and in English it is known as crown flower, apple of Sodom, desert apple, giant milkweed or Sodom's milkweed, rubber bush, swallow-wort, Dead Sea apple.

Beneficial Parts: flower, roots, bark of stem



Chemical constituents: Leaf and stem of *Calotropis procera* consists 0.133% and 0.09% essential oils. Leaf oil is dominated by tyranton (54.4%), 1-pentadecene (9.5%) and 1-heptadecene (8.2%). Most abundant compounds in stem oil are Z-13-docosenamide (31.8%), isobutyl nonane (13.7%) and 2,7,10-trimethyldodecane (12.3%)

Pharmacological activity: Calotrope has Antimicrobial, anti-inflammatory, antipyretic, anthelmintic, analgesic, anticancer, anticonvulsant, antidiabetic, antiangiogenic, immunological, cardiovascular and hypolipidemic, gastroprotective, antioxidant effects

Therapeutic Indications: Whole plant was used to treat common diseases such as fever, rheumatism, indigestion, cold, eczema, diarrhea, for the treatment of boils, to remove thorn from

body and for the treatment of jaundice. The root was used for the treatment of eczema, leprosy, elephantiasis, asthma, cough, rheumatism, diarrhea and dysentery.

Marketed Formulations:



Sonmukhi

Cassia angustifolia

Scientific Name: Senna is dried leaflet or pods of *Cassia angustifolia*, *Cassia Alexandrina*, *cassia acutifolia*, *Cassia lanceolata* belonging to Family: Ceasalpiniaceae
It is also known as senna commonly, Markandika, Swarnpatri, Sonmukhi, Senai, Indian Senna, Alexandrain Senna.

Beneficial Parts: Flowers, barks, Leaves, pods

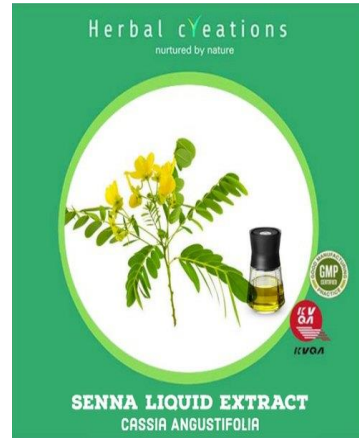


Chemical constituents: The leaves of *Cassia angustifolia* consists anthraquinone glycosides Sennoside A, B C &D, tinnevellin glycoside, isorhamnetin-3-O-beta-gentiobioside, apigenin-6,8-di-C-glycoside, emodin-8-O-beta-D-glucopyranoside, kaempferol, aloe emodin, D-3-O-methylinositol, sucrose, aloe- emodin, sennosides, tinnevellin, chrysophanol.

Pharmacological activity: purgative, antiemetic, anthelmintic, antidiabetic, antipyretic.

Therapeutic Indications: It is mainly used as blood purifier, laxative, skin diseases, jaundice, malaria, arthritis, anemia, hemorrhoids.

Marketed Formulations:



Vinca

Catharanthus roseus

Scientific Name: It consists of leaves of *Catharanthus roseus*, *Vinca rosea*, *Vinca periwinkle* belonging to Family: Apocynaceae.

Catharanthus roseus, commonly known as bright eyes, Cape periwinkle, graveyard plant, Madagascar periwinkle, old maid, pink periwinkle, rose periwinkle, old maid, cayenne jasmine, in Hindi, bara massi, sada bahar, nayantara

Beneficial Parts: Fruits, Leaves



Chemical constituents: The pink flower *C. roseus* has its leaf oil consisting mainly of linolenic acid ethyl ester (43.9 %), stearic acid (10.6 %), phytol (7.3 %) and hexadecanoic acid (6.8 %), while the flower was made up of limonene (34.1 %), phytol (29.6 %) and linolenic acid ethyl ester (14.0 %). Leaf also contains alkaloids like **Vinblastine (VBL)**, **vinorelbine (VRL)**, **vincristine (VCR)** and **vindesine (VDS)**.

Pharmacological activity: Antimicrobial, anticancer, antidiabetic, antioxidant, anti-ulcer.

Therapeutic Indications: cancer, ulcer, diarrhea, hypertension, stomach ache, depression of CNS, Wound healing, releasing muscle pain.

Marketed Formulations:



Brahmi *Centella asiatica*

Scientific Name: It consists of leaves of *Centella asiatica*, *Centella boninensis*, *Centella glochidiata* belonging to the family: Apiaceae
Centella also known as Gotu Kola, Kodavan, Indian Pennywort, Asiatic Pennywort, Brahmi, Mandookparni.

Beneficial Parts: Whole plant, mainly Leaves

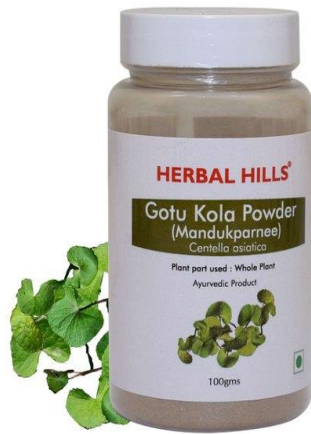


Chemical constituents: A quantitative estimation of triterpenoids showed highest asiaticoside content (6.42%) in Leaf samples. New triterpene and a Saponin, are reported in lant species.

Pharmacological activity: Anticancer, antiaging, antifungal, anti-inflammatory, antioxidant, antidepressant, hepatoprotective, neuroprotective.

Therapeutic Indications: The whole plant has therapeutic values. It is used as nervine tonic, for improving memory and mental disorders. It is anti-leprosy, diuretic, stomachic and used in insomnia, asthma, abdominal disorders and fever. Decoction of the plant is given in the treatment of leprosy

Marketed Formulations:



Areca palm *Chrysalidocarpus lutescens*

Scientific Name: It consists of dried seeds of fruit of *Chrysalidocarpus lutescens*, *Duplicate lutescens* belonging to Family: Arecacea

It is commonly known as yellow palm, butterfly palm, areca palm, golden cane, bamboo palm, supari, betel nut palm, pinang palm, supari palm.

Beneficial part: Fruit, Leaves

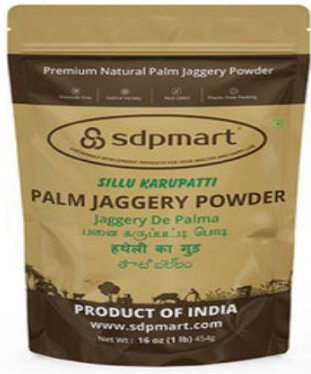


Chemical constituents: The major alkaloid in betel nut is arecoline. There are other compounds, such as arecaidine, guvacine, isoguvacine, guvacoline and arecolidine. Tannins present in betel nut are mainly proanthocyanidins along with catechins and arecatannin.

Pharmacological activity: Antioxidant, anti-inflammatory, wound healing, antiallergic, antifungal, Antimicrobial, antibacterial, memory enhancer,

Therapeutic Indications: It is useful in treatment of HIV AIDS, GI Disorders, diabetes, cardiac disorder, high BP, Eye disease, ulcer, CNS disorders.

Marketed Formulations:



Camphor Tree

Cinamomum camphora

Scientific Name: It consists of leaves of *Cinamomum camphora* (L.) Nees belonging to family *Lauraceae*. (L.) Nees.

Cinamomum camphora is also known as camphor tree, kapur baras.

Beneficial Parts: Leaves, roots and wood



Chemical constituents: Camphor oil contains camphor, cineole, pinene, camphene, phellandrene, limonene, and diterpenes. Camphor is entirely a monoterpene ketone.

Pharmacological activity: Anti-arrhythmic, analgesic, anti-inflammatory, antidepressant, antimicrobial

Therapeutic Indications: It is used in treatment of motion sickness, Parkinsonism, pneumonia

Marketed Formulations:



Dalchini

Cinnamomum zeylanicum

Scientific name: Cinnamon is the dried inner bark of the coppiced shoots of *Cinnamomum zeylanicum* Breyn, belonging to family Lauraceae.

Beneficial Parts: bark



Chemical constituents: Cinnamon consists of a variety of resinous compounds, including cinnamaldehyde, cinnamate, cinnamic acid, and numerous essential oils. The major chemical constituents of cinnamon bark oil are cinnamaldehyde (65-80%) and eugenol (5-10%).

Pharmacological Activity: Carminative, stomachic, mild astringent, Antiseptic, flavoring agent, stimulants.

Therapeutic Indications: It is use in treatment of virus infection, Type2 Diabetes, cancer, Infertility, youthful skin, tooth ache, neurodegenerative disease, Hyperlipidemia.

Marketed Formulation:



Lemon

[Citrus limon](#)

Scientific Name: The lemon (*Citrus limon*) is a species of **small evergreen trees in the flowering plant family Rutaceae**, native to Asia, primarily Northeast India (Assam), Northern Myanmar or China.

Beneficial Parts: Fruit, Seeds, Leaves, Flowers.



Chemical constituents: Lemon peel contains volatile oil from 2-4%. The other constituents are hesperidin, pectin, calcium oxalate and bitter substances. The volatile oil of drug containing mainly lemonene (Above 90%), corral (About 4%) and other aromatic compounds are Geranyl acetate and terpineol

Pharmacological Activity: Antibacterial, Antioxidant, Antitumor, Anti mutagenic, Anti platelet aggregating, Anti-inflammatory.

Therapeutic Indications: It is use in treatment of asthenia, obesity, flu, edema, hypertension, fever, capillary fragility, diarrhea, dyspepsia, Pharyngitis, stomatitis

Marketed Formulation:



Insulin Costus igneus

Scientific Name: It consists of dried and fresh leaves of *Costus igneus* belonging to family Costaceae. It is also known as Insulin Plant.

Beneficial Parts: Leaves



Chemical constituents: Igneus leaves revealed that it is rich in protein, iron, and antioxidant components such as ascorbic acid, α -tocopherol, β -carotene, terpinoids, steroids, and flavonoids.

Pharmacological Activity: Antioxidant, Antimicrobial, Anti-cancer, Anodyne, Antidiabetic.

Therapeutic Indications: It is use in treatment of diabetes, reduce cholesterol level, sore throat, skin diseases, Boost immunity, reduce bronchitis, cures asthma, lowers blood pressure.

Marketed Formulation:



Amba Halad

Curcuma amada

Scientific Name: It consists of fresh and dried rhizome of *Curcuma amada* or *Mango ginger* belonging to family Zingiberaceae. It is also known as *Amba halad*.

Beneficial Parts: Rhizome



Chemical constituents: The rhizome essential oil of *Curcuma amada* contains ar-curcumene (28.1%), β -curcumene (11.2%), camphor (11.2%) and curzerenone (7.1%), 1,8-cineole (6.0%) as major components.

Pharmacological Activity: Alexiteric, antipyretic, aphrodisiac, diuretic, emollient, expectorant and laxative.

Therapeutic Indications: It is use in treatment of cure biliousness, itching, skin diseases, bronchitis, asthma, hiccough and inflammation due to injuries.

Marketed Formulation:



Halad

Curcuma longa

Scientific Name: It consists of dried or fresh rhizome of *Curcuma longa* L. belonging to family Zingiberaceae

Also known as: Turmeric, Haldi, Halad (Marathi)

Beneficial Parts: Tuber rhizomes or underground stem



Chemical constituents: Curcumin, Desmethoxycurcumin, and Bisdemethoxycurcumin are nontoxic polyphenolic derivatives of curcumin. Several phytochemical studies on Curcuma oils, sesquiterpenoids and monoterpenoids as the major components

Pharmacological activity: Anti-bacterial, anti-inflammatory, anti-oxidant, anti-cancer.

Therapeutic Indications: It used as a spice in curries, food additive and also, as a dietary pigment. It has also been used to treat various illnesses, cold, boost immunity.

Marketed Formulations:



Lemongrass

Cymbopogon citratus

Scientific Name: It consists the leaves of *Cymbopogon citratus*, belonging to Family: Poaceae. *Cymbopogon citratus*, also known as in Hindi: lemongrass, barbed wire grass, silky heads, cochinch grass, malabar grass, oily heads, citronella grass or fever grass.

Beneficial Parts: Leaves and whole plant.



Chemical constituents: The essential oils of lemongrass contain Citral-alpha, Citral-beta, Nerol Geraniol, Citronella, Terpinolene, Geranyl acetate, Myrcene and Terpinol Methyl heptenone. The plants also contain flavonoids and phenolic compounds which consist of luteolin, quercetin, kaempferol and apiginin.

Pharmacological activity: Antiamoebic, antibacterial, antidiarrheal, ant filarial, antifungal, anti-inflammatory.

Therapeutic Indications: It is used to improve digestion, menstruation problems, nausea and ailments like headaches, muscle cramps, spasms and rheumatism and urine problems.

Marketed Formulations:



Rudrasha

Eleocharpus ganitrus

Scientific Name: It consists of dried fruit and leaves of *Eleocharpus ganitrus* belonging to Family: *Elaeocarpacea*. It is also known as Rudrasha. Rudraksha is a Sanskrit compound consisting of the name Rudra ("Shiva") and aksha ("Tear Drops").

Beneficial parts: leaves, seeds



Chemical constituents: Elaeocarpus species are known to contain several chemicals such as triterpenes, tannins (e.g., geranin and 3, 4, 5-trimethoxy geranin), indolizine alkaloids (e.g. grandisines), flavonoids.

Pharmacological activity: Anti-inflammatory, analgesic, sedative, antidepressant, anti-asthmatic, hypoglycaemic, antihypertensive, smooth muscle relaxant, antiulcerogenic, hydrocholeretic.

Therapeutic Indications: It is used for treating diverse diseases such as mental illness, epilepsy, hysteria, cough and hepatic diseases.

Marketed Formulations:



Cardamom

Elettaria cardamomum

Scientific Name: It consists of seed of *Elettaria cardamomum* belonging to family Zingiberaceae. It also known as: Cardamom, Elaichi.

Beneficial Parts: Pods, Seeds



Chemical constituents: The major component of the oil of the leaf was β -caryophyllene (60.7%). The rhizome oil was dominated by γ -terpinene (21.8%) and β -pinene (17.6%), monoterpenes

Pharmacological activity: Anti-inflammatory, antimicrobial, antispasmodic.

Therapeutic Indications: It is used for digestion problems including heartburn, intestinal spasms, irritable bowel syndrome (IBS), intestinal gas, constipation, liver and gallbladder complaints, and loss of appetite. It is also used for common cold, cough, bronchitis, sore mouth and throat, and tendency toward infection

Marketed Formulations:



Amla

Emblica officinalis

Scientific Name: It consists of fruits of *Emblica officinalis* Gaertn. or *Phyllanthus emblica* Linn. Belonging to family: Phyllanthaceae. It is commonly known as Indian goose berry or Amla.

Beneficial Parts: Fruits

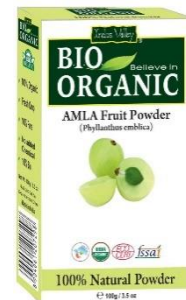
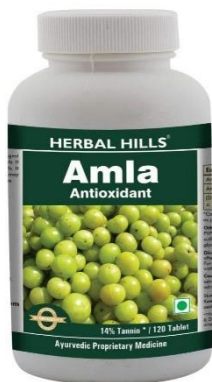


Chemical constituents: The fruit of Amla is rich in vitamin C (ascorbic acid) and contains several bioactive phytochemicals, of which majority are of polyphenols (ellagic acid, chebulinic acid, gallic acid, chebulagic acid, aepigenin, quercetin, corilagin, leutolin, etc.) Sugar-substituted phenolics such as flavone glycosides, phenolic glycosides, and flavonol glycosides, tannins such as emblicanin A, emblicanin B, phyllaemblicin B, and punigluconin, are reported in fruit's pulp

Pharmacological activity: Anti-inflammatory, antioxidants, anticancer.

Therapeutic Indications: Hepatoprotective, anti-diarrhoeal, reducing fever, radioprotective, boost energy, boost immunity.

Marketed Formulations:



Nilgiri

Eucalyptus globules

Scientific Name: It consists of leaves of *Eucalyptus globules* belonging to the family Myrtaceae. commonly known as southern blue gum or blue gum, Regional Names: Hindi: Neelgir, Marathi: Nilgiri

Beneficial Parts: Leaves, Oil



Chemical Constituents: The major constituents of *Eucalyptus* leaves essential oils are 1,8-cineole, also known as eucalyptol (63.81%), α -pinene (16.06%), aromadendrene (3.68%) and o-cymene (2.35%). In the case of *E. radiata* EO, the principal components were limonene (68.51%), α -terpineol (8.60%), α -terpinyl acetate (6.07%) and α -pinene (3.01%).

Pharmacological Activity: Antiviral, Antimicrobial, Antitumor, Antioxidant.

Therapeutic Indications: It is used in treatment of Bronchitis, Arthritis, Asthma, Headache, Diabetes, Bladder diseases.

Marketed Formulations:



Umber

Ficus glomerata

Scientific Name: It consists of fruits and leaves of *Ficus glomerata* belonging to family: Moraceae. Popularly it is known as the cluster fig tree, Indian fig tree or goolar (gular) fig, this is native to

Australia, Malaysia, and the Indian subcontinent. Regional Names: Hindi: Gular, English: Cluster fig, Country fig, Redwood fig

Beneficial Parts: Fruits and Leaves



Chemical Constituents: Bergenin I together with lupeol acetate and sitosterol have been reported in the latex of *Ficus glomerata* Roxb.

Pharmacological Activity: Antioxidant, Anti-inflammatory, Antimicrobial, Anti-ulcer.

Therapeutic Indications: Is the treatment used in Fever, Piles, Urinary disorders, Gonorrhoea.

Marketed Formulations:



Bedki Cha Pala

Gymnema Sylvester

Scientific Name: *Gymnema sylvester* is a perennial species of the flowering plant belonging to Family: Apocynaceae.

Gymnema sylvester also known as in Hindi: Gurmur, Australian cow plant etc.

Beneficial Parts: Leaves



Chemical constituents: Its leaves contain triterpenoid saponins, flavonols, and gurmardin. The major biologically active plant molecules are gymnemic acids, Stevia, xylitol, etc.

Pharmacological activity: Antidiabetic, eye disease, allergies, constipation, cough, obesity, dental caries, stomach ailments, and viral infections, antimicrobial, antioxidant.

Therapeutic Indications: It is used in the treatment of digestion, metabolic syndrome, malaria, cough, snake bites, diabetes, weight loss, etc.

Marketed Formulations:



Murad sheng *Helicteres isora*

Scientific Name: It consists of fruits, seeds, roots of *Helicteres isora* belonging to the family of Sterculiaceae. It is commonly known as Marodphali, other Regional Names: Marathi: muradsheng, Kewad, Hindi: Marorphali (मरुदशंग मरुदफली), Bhendu, Jonkphal

Beneficial Parts: Fruit, seed and roots



Chemical Constituents: Three new compounds; 4'-O- β -D-glucopyranosyl rosmarinic acid.

Pharmacological Activity: Antioxidant, antibacterial, anticancer activity, anti-diarrheal.

Therapeutic Indications: This is used as a folk medicine to treat snake bite, diarrhea and constipation of new born baby

Marketed Formulations:



Anantmula *Hemidesmus indicus*

Scientific Name: *Hemidesmus indicus* is a species of plant found in South Asia belonging to the family of Asclepiadaceae. Regional Name, Hindi: Anantmula, Marathi: Uparsal, English: Indian sarsaparilla

Beneficial Parts: Leaves, Flowers, Seed and Root



Chemical Constituents: Plant species reported to contains tannins 3.06%, saponins 12.55%, flavonoids 1.12%, alkaloids 1.23%, terpenoids 0.79%, coumarins 0.91% and phenols 1.1%.

Pharmacological Activity: Anti-cancer, Anti diabetic, Anti-oxidant, Anti-inflammatory, Antimicrobial activities.

Therapeutic Indications: Plant is demulcent, alternative, astringent, diaphoretic, diuretic, tonic, anti-pyretic, and blood purifier. It is used in leprosy, skin diseases, fever, asthma, bronchitis, syphilis, urinary diseases.

Marketed Formulations:



Hibiscus

Hibiscus rosa sinensis

Scientific Name: It consist of flowers of *Hibiscus rosa sinensis* belonging to Family: Malvaceae. *Hibiscus Rosa sinensis* is also known as: China rose, Chinese Hibiscus, Hawaiian Hibiscus, rose mallow and shoeblack plant.

Beneficial Parts: Flowers



Chemical constituents: It contains phytoconstituents such as alkaloids, flavonoids, tannins, steroids, carbohydrates, phenols, saponins, cardiac glycosides, protein, free amino acids, anthraquinones, quinines, terpenoids, mucilage, reducing sugar etc.

Pharmacological activity: Antiepileptic, anti-inflammatory, antidepressant, antidiabetic, antioxidant, cytotoxic activity, antibacterial, antipyretic, analgesic, antiparasitic, immunomodulatory etc.

Therapeutic Indications: It is used in treatment of wounds, inflammation, fever and cough, diabetes, gastric ulcers etc

Marketed Formulations:



Henna

Lawsonia inermis

Scientific name: It consists of leaves of *Lawsonia inermis* family Lythraceae. It also known as Henna, Marathi: Mehendi, Hindi: Hina, English: Mignonette tree.

Beneficial Parts: leaves, flower, seeds, stem bark, roots



Chemical constituents: Main components identified eugenol (17.6%), hexadecanoic acid (15.1%), Phytol (10.2%), α -terpineol (8.4%) and Etherphenylvinyl. (6.7%).

Pharmacological activity: Antioxidant, antidiabetic, hepatoprotective, hypoglycemic, antimicrobial, anticancer and wound healing properties

Marketed Formulations:



Champa

Magnolia champaca

Scientific Name: It consists of flowers, fruits & bark of *Michelia champaca* Linn., belonging to family Magnoliaceae, it is commonly known as Champa.

Regional names: Champa in hindi, in english Champak

Beneficial Parts: flower, fruit, bark



Chemical constituents: Phytochemical studies on stem bark shows the presence of triterpenoids, steroids, fatty acid 4 and other studies revealed the presence of sesquiterpene lactones, alkaloids, flavonoids, tannins and saponins in leaves, stems and roots of *M. champaca*. *Michelia champaca* reported to contain liriodenine, parthenolide and guaianolides. Volatile oil has been isolated from the leaves of *M. champaca* containing compounds like benzyl acetate, linalool, isoeugenol.

Pharmacological activity: Traditional uses of the plant in the treatment of various disease like rheumatism, gout, diuretic, febrifuge, Anxiety, Astringent, Antipyretic.

Therapeutic Indications: Traditionally it is used as disinfectant, astringent, diuretic, cooling property, parasitic infection and disease due to vitiated blood. It is used also used for fever, colic, leprosy, post-partum protection, in child birth and as febrifuge.

Marketed Formulations:



Mango

Mangifera indica

Scientific Name: It consists of fruit, bark of *Mangifera indica* Linn belonging to family Anacardiaceae. It also known as Mango, Aam.

Regional names: Sanskrit: Ambrah; Madhuuli; Madhuula; Madhuulaka; English: Mango; Hindi: Aam; Marathi: Amchur; Amba

Beneficial Parts: Bark, Flower, Fruit



Chemical constituents: Polyphenolics, flavonoids, triterpenoids. Mangiferin a xanthone glycoside major bio-active constituent, isomangiferin, tannins & gallic acid derivatives. The bark is reported to contain protocatechuic acid, catechin, mangiferin, alanine, glycine, γ -aminobutyric acid, kainic acid, shikimic acid. The leaf and flower yield an essential oil containing humulene, elemene, ocimene, linalool, nerol and many others. The fruit pulp contains vitamins A and C, β -carotene and xanthophylls.

Pharmacological activity: Anti-oxidant, anti-diabetic, antiviral, anthelmintic and anti-allergenic, antiparasitic, Anti-tumor-Anti-Hiv, antispasmodic and antipyretic, immunomodulatory

Marketed Formulations:



Chiku

Manilkara zapota

Scientific name: It consists of the fruit of *Manilkara zapota* belonging to Family: Sapotaceae
Regional Names: Hindi: *Chiku, bully tree, marmalade palm*

Beneficial Parts: Fruits, Bark



Chemical constituents: Main components identified Unsaturated fatty acids (32.32%): oleic acid (13.95%), linoleic acid (10.18%) and linoleic acid (5.96%). Isolated compounds were lupeol acetate, oleanolic acid, apigenin rhamnoside, myricetin rhamnoside and caffeic acid

Pharmacological activity: Laxative, immunity booster, absorbents

Therapeutic Indications: It is use in treatment of irregular digestion, low immunity, digestive ailments, improves vision and energy source

Marketed Formulations:



Lajalu

Mimosa pudica

Scientific name: It consists of leaves, root of *Mimosa pudica* belonging to Family: Fabaceae

Regional Names: Sensitive Plant, Sleepy Plant, Action Plant, Touch Me Not or Makahiya

Beneficial Parts: Root, Leaves



Chemical constituents: Main components identified alkaloids (9.05%), flavonoids (8.32%), saponins (8.15%), steroids (2.49%), anthocyanins (1.913%), phenols (1.02%), cyanogenic glycosides (0.122%) and tannins (0.083%)

Pharmacological activity: Anti-diabetic, antioxidant, antihepatotoxic, and wound healing activity

Therapeutic Indications: It is use in treatment of urogenital disorders, piles, dysentery, sinus treatment and wound healing

Marketed Formulations:



Banana

Musa acuminata

Scientific Name: It consists of the fruit, leaves of *Musa Acuminata* belonging to Family: Musaceae. Regional name: *Cavendish banana, blood banana*

**Beneficial Parts: Fruits, Leaves, Peel, Pseudo stem,
Corm, Flowers, Sap, Roots**



Chemical constituents: Main components identified crude fiber (21.2%), crude protein (1.53), alkaloids (3.3%), phenols (0.56%), tannins (29.1%), flavonoids (8.35%) and saponins (26.02%)

Pharmacological activity: antipyretic, absorbent, antihistaminic, antibiotic

Therapeutic Indications: It is use in treatment of fever, cough, bronchitis, allergic reactions,

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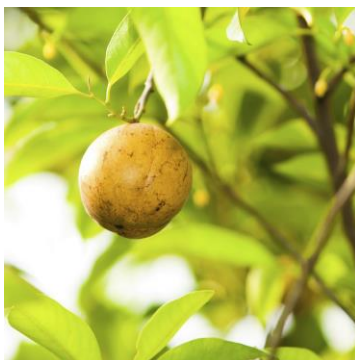


Jaiphal

Myristica fragrans

Scientific Name: Nutmeg is the seed of the *Myristica fragrans* belonging to Family: Myristicaceae
Regional names: Jaiphal, true nutmeg, Javitri

Beneficial Parts: Seed, Aril



Chemical constituents: Main components identified eugenol (19.9%), methyl isoeugenol (16.8%), methyluginol (16.7%), sabinene (11.8%) and terpinen-4-ol (8.5%)

Pharmacological activity: Emmenagogue, nervine, diuretic, diaphoretic and aphrodisiac.

Therapeutic Indications: It is use in treatment of stomach ulcers, pain relief, soothe indigestion, detoxify body, reduce insomnia, prevent leukemia

Marketed Formulations:



Allspice

Pimenta dioica

Scientific Name: Allspice is the dried fruit of the *Pimenta dioica*, *Pimenta dioica*, *Pimenta officinalis*, *Eugenia pimento* belonging to Family: Myrtaceae.

Allspice, also known as in Hindi: Kabab chini, English Spice, Jamaica Pepper, Clove Pepper, Myrtle Pepper, Pimenta, Pimento.

Beneficial Parts: Fruits, Leaves



Chemical constituents: Main components identified eugenol (6.36%), β -caryophyllene (4.58%), α -humulene (1.90%) and 1,8-cineole (1.89%); minor components included δ -cadinene (1.08%), Germacrene D (0.86%) and β -elemene (0.69%).

Pharmacological activity: Antimicrobial, anti-inflammatory, antiemetic, anticancer.

Therapeutic Indications: It is use in treatment of obesity, menstrual cramps, abdominal pain, digestive ailments, inflammatory conditions, toothache.

Marketed Formulations:



Betel leaf

Piper betel

Scientific Name: It consists of dried leaves of *Piper betel* belonging to Family: Piperaceae also known as Paan .

It also known as in Hindi: Paan, Betel, Betel vine, Betel Pepper, Sarah, Tambool, Mukhbhushan, Varnalata, Nagaballi.

Beneficial Parts: Leaves



Chemical constituents: Main components identified as Caryophyllene, cadinene, ash (1.2g), carbohydrates (5.6g), proteins (2.9g).

Pharmacological activity: CNS stimulant, Antiseptic and Breath freshener.

Therapeutic Indications: It is use in treatment of many communicable diseases like cold, cough, bronchial asthma, rheumatism.

Marketed Formulations:



Pipli

Piper longum

Scientific Name: *Piper longum* linn is a flowering vine collected for its fruit also known as long pepper, Indian long pepper or Thipalli belonging to Family: Piperaceae.

Piper longum linn also known as Hindi: Thipalli, Indian long pepper, Pipli

Beneficial Parts: Fruit, Dried Roots

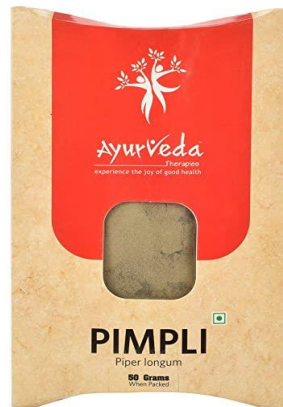


Chemical constituents: Main components identified Piperine, (2E,4E,14Z)-N-isobutyleicosa-2,2,14-trienamide, piperlonguminine.

Pharmacological activity: It is commonly used to treat asthma, bronchitis, constipation, diarrhea, cold and cough

Therapeutic Indications: It is use in treatment of Pippali is an effective herb in managing cough and cold. Pippali controls cough, releases mucus, clears air passages, thus allowing the patient to breathe freely. This is because Pippali has decongestant, bronchodilator and expectorant effects due to its Kapha balancing properties.

Marketed Formulations:



Black pepper

Piper nigrum

Scientific Name: It consists of dried fruit of *Piper nigrum* linn belonging to Family: Piperaceae. Black pepper also known as in Hindi: Kali mirch, Maricha ushana (sanskrit).

Beneficial Parts: Fruits



Chemical constituents: Main constituent is piperine, pyrrolidines and safrole, Minor constituents are carbohydrates (37.4%), proteins (25.5%), fibres (23.6%), fats (5.3%) as well as minerals.

Pharmacological activity: Anti-inflammatory, Anti – pyretic, Anti- oxidant

Therapeutic Indications: It is use in treatment of epilepsy and snake bites, cold, cough and dyspnea throat diseases

Marketed Formulations:



Karanj

Pongamia pinnata

Scientific Name: It consists of leaves, seed & fruit of *Pongamia pinnata* belonging to the Family: Fabaceae. Also known as cytissus, Pinnatus, in Hindi: Karanj Seashore, Mempari, Pongam, Indian Beech, Poonga Oil, Tree Oil.

Beneficial Parts – Seed, Leaf, Fruit



Chemical constituents: Main components identified are beta-sitosterol acetate and galactosidase, stigma sterol. Minor components are Oleic acid (44.24), stearic acid (29.64).

Pharmacological activity: Anti-inflammatory, astringent, antiemetic.

Therapeutic Indications: It is used in the treatment of inflammatory conditions and managing constipation and has a laxative property.

Marketed Formulations:



Guava

Psidium guava

Scientific Name: It consists of leaves, fruit of *Psidium guava* small tropical trees or shrub belonging to Family: Myrtaceae.

It also known as in Hindi: Amarood, Lemon Guava, Apple Guava, Abas, Goyavier, Guyabang.

Beneficial Parts: Leaves, Fruit



Chemical constituents: Main components identified quercetin, avicularin, apigenin and garlic acid, minor components included are ash, fats and carbohydrates.

Pharmacological activity: Anti-diarrheal, Antibacterial, Antimalarial.

Therapeutic Indications: It is use in treatment of diarrhea, bacterial infections, ulcers, malaria, cough, diabetes.

Marketed Formulations:



Rakta Chandana

Pterocarpus Santalinus

Scientific Name: It consists of heartwood, bark of *Pterocarpus Santalinus* belonging to family
Family: Fabaceae

Common names: Red Sanders, Red Saunders, Yerra Chandanam, Chenchandanam, Red Sandalwood, Rakta Chandana, Saunders wood,

Beneficial Parts: Heartwood and bark



Chemical constituents: carbohydrates, flavonoids, terpenoids, phenolic compounds, alkaloids, saponins, tannins, and glycosides.

Pharmacological activity: antipyretic, anti-inflammatory, anthelmintic, tonic, hemorrhage, dysentery, aphrodisiac, anti-hyperglycemic and diaphoretic.

Therapeutic Indications: antioxidative, antidiabetic, antimicrobial, anticancer, and anti-inflammatory properties, and protective effects on the liver, gastric mucosa, and nervous system

Marketed Formulations:



Satap

Ruta graveolens

Scientific Name: It consists of flowers, leaves of *Ruta graveolens*, belonging to Family: *Rutaceae* commonly it is known as rue, or herb-of-grace. *Ruta graveolens* also known as in Hindi: *Sadab*, *Satap*; English: Bitter herb

Beneficial Parts: Flowers, Leaves



Chemical constituents: 2-Undecanone (47.21%), an aliphatic ketone was found as the main component. 2-Nonanone (39.17%) was the second major aliphatic ketone detected in rue oil, followed by octyl acetate (7.31%), 2-decanone (2.03%), diethyl phthalate (1.73%), 2-dodecanone (1.53%), pentadecanamide acetate (1.02%).

Pharmacological activity: Contraceptive, Anti-inflammatory, Antimicrobial, Anti-pyretic, Antioxidant, Analgesic, Antihyperglycemic, Free radical scavenging, Hypotensive, Antiviral, and Anti-spasmodic effects.

Therapeutic Indications: It is used in the treatment of inflammatory conditions, eczema, ulcers, arthritis, fibromyalgia, antidote for venoms, insect repellent, and as an abortifacient.

Marketed Formulations:



PURMULAS

Ritha

Sapindus mukorossi

Scientific Name: It consists of the fruit of *Sapindus mukorossi* belonging to the Family: Sapindaceae.
Common Names: Indian Soapberry, Washnut or Ritha.

Beneficial Parts: FRUIT



Chemical constituents: carbohydrates, flavonoids, terpenoids, phenolic compounds, alkaloids, saponins, tannins, and glycosides.

Pharmacological activity: Spermicidal, contraceptive, hepatoprotective, anti-inflammatory and anti-protozoa

Therapeutic Indications: Cleanser for hair, skin, and clothing. These saponins are also useful as insecticides, for purposes such as removing head lice off the scalp

Marketed Formulations:



Kher

Senegalia catechu

Scientific Name: It consists of heartwood, bark of *Senegalia catechu* belonging to Family: Fabaceae

Common names: Kher, Catechu, Cachou, Cutch Tree, Black Cutch, And Black Catechu.

Beneficial Parts: Heartwood, Bark



Chemical constituents: Catechins, catechol's and catecholamines

Pharmacological activity: Antimicrobial, Anti-diabetic, Antibacterial, Antidiarrheal, Antipyretic, Anti-inflammatory and hepatoprotective activities

Therapeutic Indications: It is used as an important constituent for maintenance of oral hygiene and also as local treatment for bleeding injuries as styptic agent by virtue of its astringent properties. skin disorders, diabetes, diarrhea, fever, rheumatism, worm manifestation etc.

Marketed Formulations:



CLOVE

Syzygium aromaticum

Scientific Name: It consists of flower bud of *Syzygium aromaticum* belonging to family Myrtaceae. Common names: Lavanga, Clove

Beneficial Parts: Clove oils, dried flower buds, leaves, stems



Chemical constituents: Eugenol comprises 72–90% of the essential oil extracted from cloves, and is the compound most responsible for clove aroma

Pharmacological activity: analgesic, antimicrobial, anti-inflammatory, antioxidant, anesthetic, anticancer, antispasmodic.

Therapeutic Indications: Cloves are used in traditional medicine as the essential oil, which is used as an anodyne (analgesic) mainly for dental emergencies and other disorders

Marketed Formulations:



Jamun

Syzygium cumini

Scientific Name: It consists of fruit, leaves of *Syzygium cumini* L. belonging to the Family: Myrtaceae.

Jamun, also known as: Malabar plum, Java plum, Black plum, Jambolan, Indian blackberry.

Beneficial Parts: Fruits, Leaves, Roots.



Chemical constituents: Rich in compounds containing anthocyanins, glucoside, gallic acid, fructose, isoquercetin, kaemferol and myrecetin.

Pharmacological activity: Antimicrobial, anti-inflammatory, antioxidant, antifungal, gastroprotective, antidiabetic

Therapeutic Indications: It is use in treatment of arthritis, asthma, abdominal pain, flatulence and dysentery.

Marketed Formulations:



Tamarind

Tamarind Indica

Scientific name: Tamarind consists of dried ripe fruits (freed from the brittle epicarp) of *Tamarind indica* L. belonging to Family: Leguminosae

Tamarind, also known as: Imlee, Imlı, Tamariner, Tintiri.

Beneficial Parts: Fruits, Leaves, Seed

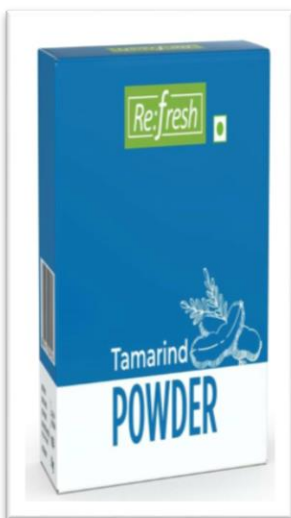


Chemical constituents: Tartaric acid (12-18%), Acetic acid, succinic acid, Pectin, Gum, Sugar, Tannins, Alkaloids, Flavonoids, Sesquiterpenes and Glycosides

Pharmacological activity: Hypolipidemic, antimicrobial, anti-inflammatory, anthelmintics, analgesic, hepatoprotective.

Therapeutic Indications: It is use in treatment of constipation, liver and gallbladder problems, stomach disorders, cold and fever, pregnancy-induced nausea.

Marketed Formulations:



Arjuna *Terminalia arjuna*

Scientific Name: It consists of dried stem bark of the plant known as *Terminalia arjuna* Rob, belonging to family Combretaceae.

Arjuna, also known as in Sanskrit: Arjuna, Kukubha, Partha; In Hindi: Kahu; In English: Black Murdah or Indian Laurel, Arjun tree.

Beneficial Parts: Bark, Leaves



Chemical constituents: Tanins (15%), triterpenoid saponin, arjunolic acid, arjunic acid, argungenin, ellagic acid.

Pharmacological activity: Anti-ischemic, antioxidant, antiplatelet, hypolipidemic, antihypertrophic, antihypertensive.

Therapeutic Indications: It is use in treatment of heart disease, asthma, skin care, cough, palpitations, ear pain, abscess, improve digestion.

Marketed Formulations:



Baheda

Terminalia bellerica

Scientific Name: Baheda is dried ripe fruits of the plant *Terminalia bellerica* Linn, belonging to Family: Combretaceae.

Baheda, also known as: *Beleric myrobalan*, baheda, Sanskrit: Bibhitaka □□□□□□, Aksha □□□□

Beneficial Parts: Fruits, Leaves



Chemical constituents: Tannins (20-30%), water soluble extract (40-45%), gallic acid, ethyl gallate, phyllembin, ellagic acid and galloyl glucose.

Pharmacological activity: Antimicrobial, antispasmodic, hepatoprotective, antioxidant, broncho dilatory activities.

Therapeutic Indications: It is use in treatment of cough and cold, constipation, weight loss, weak immunity, loss of appetite and bloating.



Hirada

Terminalia chebula

Scientific Name: Myrobalan is the mature dried fruit of *Terminalia chebula*, belonging to Family: Combretaceae.

Myrobalan, also known as: Cherry Plum, Chebolic Nyrobalan, Harde, Haritaki.

Beneficial Parts: Fruits, Leaves

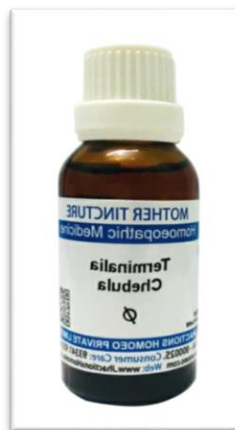


Chemical constituents: Hydrolysable tannins (30%), chebulinic acid, chebulagic acid, D-galloyl glucose, ellagic acid, gallic acid, resin myrobalanin, anthraquinone glycosides and sennosides.

Pharmacological activity: Antimicrobial, anti-inflammatory, anti-tumor,

Therapeutic Indications: It is used in treatment of dementia, constipation, diabetes, obesity, vision defects, asthma, urinary tract infections, hair and skin problems.

Marketed Formulations:



Gulvel

Tinospora cordifolia

Scientific Name: *Tinospora cordifolia* is an herbaceous vine of the family Menispermaceae indigenous to tropical regions of the Indian subcontinent.

It is also known as Guduchi, Amrita, Amritavalli, Madhuparni, Guduchika, Chinnobhava, Vatsadani, Tantrika, Kundalini, Chakralakshanika (Sanskrit), Gurcha (Hindi), Gulvel (Marathi)

Beneficial Parts: Leaves stem and roots



Chemical constituents: Alkaloids, diterpenoid lactones, glycosides, steroids, sesquiterpenoid, phenolics, aliphatic compounds and polysaccharides

Pharmacological activity: anti-diabetic, antipyretic, antispasmodic, anti-inflammatory, anti-arthritic, antioxidant, anti-allergic, anti-stress, anti-leprotic, antimalarial, hepato-protective, immuno-modulatory and anti-neoplastic activities.

Therapeutic Indications: mainly used for fever, hay fever, small cuts, diarrhea, acidity, bloating, flatulence, anemia, jaundice, and urinary tract infections.

Marketed Formulations:



Nirgudi

Vitex negundo

Scientific Name: Obtain from the leaves of the plant *vitex negundo* belonging to Family: Lamiaceae. Common name: Chinese chaste tree, five leaved chaste tree, horseshoe vitex

Beneficial Parts: Leaves



Chemical constituents: Main component are Casticin, iso-orientin, caryophyllene, terpineol, D-fructose, epiglobulol, beta-phellandrene.

Pharmacological activity: Anti-inflammatory, expectorant, tranquilizer, antispasmodic, anticonvulsant, rejuvenate, anti-arthritic, anthelmintic, anti-fungal and antipyretic.

Marketed Formulations:

