

# **MEDICINAL PLANT CONSTITUENTS**

**A 93-Page Excerpt of the 542 Page Book**

**Medicinal Plants from A to B**

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## **Introduction**

Phytomedicine is now becoming recognized as a science. This information on the constituents of the medicinal plants clarifies the uses of these plants. As more phytochemicals are being discovered and tested, traditional uses of the medicinal plants are being verified. This provides a theoretical background for empirical knowledge.

Doctors will find this reference invaluable for finding the constituents of medicinal plants that their patients may be using. Schools and Universities will find it a valuable text to introduce the student to medicinal plant phytochemicals. Libraries and researchers will find unique knowledge listed here. Pharmacists will find information relating to medicinal plant interactions with prescription drugs. Pharmaceutical companies can use it for research and to screen test subjects. Naturally, herbalists will find this information invaluable.

This excerpt is from a volume which lists 606 medicinal plants including essential oils. A listing of various names of the medicinal plants is often given. These names may come from different languages. Alternate names including botanical names and family name are given to help identify the plant. The phytochemicals are listed. Wherever possible, the part of the plant containing the constituent is given. The exact amount of the phytochemicals is given in over 15,000 cases in the full book.

This volume is based upon the extensive database, *Natural Healing Solutions*. There are over 28,000 footnotes associated with the whole book. Please see the list of references at the end of this work. Please refer to *Natural Healing Solutions* for the individual footnotes. This volume would become unwieldy and unreadable with the footnotes included in the text.

There is a companion volume titled *Constituents of Medicinal Plants* which lists each constituent first followed by the plants containing that constituent. Definitions and properties of each constituent are given where possible. *Constituents of Medicinal Plants* is also based upon the master database, *Natural Healing Solutions*.

The amount of each chemical in a particular plant varies with the location, fertilizer, watering, minerals in the soil, time of year and many other factors. I have kept the accuracy to one part per billion where possible. While I have done my best, mistakes are possible with so many numbers. Where there are two percentages on one line, the first is the zero moisture basis and the second is the dry weight basis. You may notice that these two often differ by one order of magnitude. While the numbers in this book can be a guide, individual plants vary.

## **Acacia Arabica**

ACACIA ARABICA is known by the following names: Acacia, Acacia Arabica, Babhoola - Sanskrit, Babhul - Hindi & Napalese, Babla - Bengali, Babool - Unani, Babool Baum - German, Babul, Babul Tree, Huanlong Kyain - Burmese, Indogom - Japenese, Kikar, Mughilan - Arabian and Ummughiion - Persian.

ACACIA ARABICA is noted to contain the following constituents:

Arabic Acid,  
Calcium,  
Magnesium,  
Malic Acid,  
Moisture 14% (gum),  
Potassium,  
Sugar,  
Tannin (bark),  
Tannin 22.44 (pods).

## **Aconite**

ACONITE is known by the following names: Aconite, Aconite ( Processed), Aconito - Spain, Aconito Napello - Italian, Aconitum Carmichaeli Debx., Aconitum Napellus, Aconitum Sp., Blauer Eisenhut - German, Blue Rocket, Bushi - Japanese, Duivelskruid - Dutch, European Monkshood - United States, Kaplanbogan - Turkey, Monkshood, Monkshood - English, Monkshood - Europe, Prepared Accessory Root Of Szechuan Acon, Puja - Korean, Radix Lateralis Aconiti Carmichaeli, Ranunculaceae, Ranunculaceae Family, Stormhat - Danish, Tue Loup - French, Uva Verga - Spanish and Yoshu-tori-kabuto.

ACONITE is noted to contain the following constituents:

Acetylbenzoylaconine,  
Aconine,  
Aconine In Dried Root,  
Aconitic Acid,  
Aconitic Acid (leaf),  
Aconitine(3),  
Aconitine (root),  
Aconitine And Related Alkaloids,  
Alkaloid,  
Alkaloids - Major Active,  
Alkaloids 0.12%-0.96% (leaf),  
Alkaloids 0.2%-1.5% (root),  
Benzaconine,  
Benzoylaconine,  
Caffeic Acid,  
Caffeic Acid (plant),  
Chlorogenic Acid (plant),  
Chuan-wu-base A,  
Chuan-wu-base B,

Citric Acid (plant),  
Ephedrine,  
Fat,  
Fructose,  
Fructose (plant),  
Hypaconitine,  
Hypoconitine,  
Inositol (leaf),  
Isocitric Acid,  
Itaconic Acid,  
Malic Acid (plant),  
Malonic Acid,  
Maltose,  
Maltose (plant),  
Mannitol,  
Mannitol (plant),  
Melibiose,  
Mesaconitine,  
Napelline,  
Oxalic Acid (plant),  
Picraconitine,  
Picroaconitine (leaf),  
Picroaconitine In Dried Root,  
Quinic Acid (plant),  
Resin,  
Sparteine ? (root),  
Starch,  
Starch 25% (root),  
Succinic Acid,  
Succinic Acid (plant),  
Talatisamine.

## **Adonis**

ADONIS is known by the following names: Adoine - French, Adonis, Adonis Vernal - Spain, Adonis Vernalis, Adonisroschen - German, Duivelsoog - Dutch, Eliboro Falso - Spanish, Helleboreblack - Europe, Ilkbahar Kanavci Otu - Turkey, Ox Eye - English and Yellow Pheasant's Eye.

ADONIS is noted to contain the following constituents:

Aconitic Acid (plant),  
Asparagine (plant),  
Berberine (plant),  
Caffeic Acid (plant),  
Chlorogenic Acid (plant),  
Choline (plant),  
Citric Acid (plant),  
Cymarine (leaf),

Dextrin (plant),  
Linoleic Acid (plant),  
Palmitic Acid (plant),  
Pentosans 14% (plant),  
Protein 14% (plant),  
Quercitrin (plant),  
Rhamnose (plant).

## **Agrimony**

AGRIMONY is known by the following names: Ackermennig - German, Agrimonia - Portuguese, Agrimonia - Spain, Agrimonia - Spanish, Agrimonia Eupatori, Agrimonia Eupatoria, Agrimonia Eupatorii, Agrimonia Pilosa, Agrimonia Pilosa Ledeb. Var. Japonica, Agrimony, Agrimony - English, Agrimony - Uk - Wales, Aprobjtorjan - Hungary, Church Steeples, Egrimony - Greece, Erba Da Andata - Italian, Eupatoire Des Anciens - French, Ghafath - Iraq, Herba Agrimoniae, Herba Agrimoniae Pilosae, Kasikotu - Turkey, Leverkruid - Dutch, Odermennig - Germany, Red-crowned Crane Plant, Rosaceae, Rosaceae Family, Rose Family, Senkakuso - Japanese, Sonhakch'o - Korean and Xianhecao.

AGRIMONY is noted to contain the following constituents:

Bitters,  
Catechin 2.6% (plant),  
Essential Oil(2),  
Fat 35% (seed),  
Glycosidal,  
Glycosides - Bitter,  
Iron(2),  
Mucilage,  
Nicotinic Acid,  
Nicotinic Acid Amide,  
Palmitic Acid (plant),  
Phytosterol,  
Quercetin -glucoside (plant),  
Quercitrin (leaf),  
Silicic Acid(2),  
Silicic Acid 12% (exocarp)(2),  
Stearic Acid (plant),  
Tannin - Considerable,  
Tannin 5%-8% (leaf),  
Tannins(2),  
Thiamin 0.00024% (leaf),  
Triterpenes 1.5% (plant),  
Ursolic Acid 0.6% (plant),  
Vitamin B(2),  
Vitamin K(2).

## **Alfalfa**

ALFALFA is known by the following names: Alfalfa, Alfalfa - United States, Buffalo Herb, Fabaceae Family, Jatt - Iraq, Kaba Yonca - Turkey, Leguminosae Family, Leguminoseae Family, Lucerne, Medicago Sativa, Mielga - Spain, Mu Su - China, Mu Zu - China, Purple Medic, Sai Pi Li Ka - China, Yonja - Kurdistan and Yonja - Turkey.

ALFALFA is noted to contain the following constituents:

Acetone (essential Oil),  
Adenine,  
Adenosine,  
Alpha-tocopherol 0.0026%-0.0257% (plant)(2),  
Aluminum 0.0135% (plant),  
Amino Acids - Free,  
Amylase (plant),  
Arabinose (plant),  
Ash 1.4%-10% (plant)(2),  
Ash 4.4%-4.983% (seed),  
Beta-carotene 0.000006%-0.0394% (leaf),  
Betaine,  
Biotin,  
Biotin 0.000018% (plant),  
Boron 0.0014% (stem),  
Boron 0.0017%-0.0045% (plant),  
Boron 0.0025% (leaf),  
Calcium(2),  
Calcium 0.012%-1.72% (plant),  
Campesterol (plant),  
Carbohydrates 40.1%-45.4135% (seed),  
Carbohydrates 9.5%-71.7% (plant),  
Chlorine(2),  
Chlorophyll,  
Choline,  
Chromium 0.0009% (plant),  
Citric Acid,  
Cobalt 0.0115% (plant),  
Coumestrol (plant),  
Cryptoxanthin (plant),  
Cycloartenol (plant),  
Enzymes -eight,  
Fat 0.4%-4.3% (plant)(2),  
Fat 10.1%-12.3% (seed),  
Fiber 3.1%-42.3% (plant)(2),  
Fiber 8.1%-9.1732% (seed),  
Fibre - 17 -25%,  
Flavones,  
Folic Acid,  
Folic Acid (plant),

Fructose (plant),  
Fumaric Acid (plant),  
Genistein (plant),  
Guanine,  
Homostachydrine,  
Hypoxanthine,  
Inositol,  
Iron(2),  
Iron 0.0054%-0.0333% (plant),  
Isoflavones,  
Limonene (essential Oil),  
Lutein (plant),  
Magnesium(3),  
Magnesium 0.23%-0.44% (plant)(2),  
Malic Acid,  
Malonic Acid,  
Manganese 0.00253% (plant),  
Minerals,  
Molybdenum 0.0000015% (stem),  
Molybdenum 0.0000028% (leaf),  
Neoxanthin (plant),  
Niacin,  
Niacin 0.0005%-0.0097% (plant)(2),  
Octacosanol (plant),  
Oxalic Acid,  
Pantothenic Acid,  
Pantothenic Acid 2-18 (plant),  
Pectin,  
Peroxidase (plant),  
Phosphorus(3),  
Phosphorus 0.051%-0.31% (plant),  
Potassium(3),  
Potassium 1.2%-2.03% (plant)(2),  
Propanal,  
Protein 15-25%,  
Protein 33.2%-38.5% (seed)(2),  
Protein 6%-34.7% (leaf)(2),  
Quinic Acid (plant),  
Ribose (plant),  
Saponin 0.5%-2%,  
Saponins 2-3%,  
Selenium 0% (plant),  
Selenium 0.0000015% (stem),  
Selenium 0.0000026% (leaf),  
Shikimic Acid,  
Silicon(2),  
Silicon Tr (plant),

Sitosterol (plant),  
Sodium(2),  
Sodium 0.017% (plant),  
Spinasterol (plant),  
Stachydrine,  
Stachydrine (seed),  
Stachydrine 0.14% (hay),  
Starch 3%-8% (plant),  
Stigmasterol (plant),  
Succinic Acid (plant),  
Sucrose (plant),  
Tannin 2.7%-2.8% (hay),  
Thiamin 0.00013%-0.00075% (plant),  
Tin Tr (plant),  
Trace Elements,  
Trace Minerals (ca P K Mn Fe Zn Cu),  
Triacontanol (growth Regulator - Plants),  
Tricin,  
Trigonelline (plant),  
Trigonelline - An Alkaloid,  
Trimethylamine,  
Tryptophan,  
Vitamin B6,  
Vitamin A,  
Vitamin A - Significant Amounts,  
Vitamin B1,  
Vitamin B12,  
Vitamin B2,  
Vitamin B2 0.00014%-0.00161% (plant),  
Vitamin B3 & Silicon,  
Vitamin B6,  
Vitamin B6 (plant),  
Vitamin C,  
Vitamin C 0.147%-0.9364% (plant),  
Vitamin D,  
Vitamin E,  
Vitamin E (plant),  
Vitamin K,  
Vitamin K (plant),  
Vitamins A B C E And U,  
Vitamins A E K B6 D And U,  
Vitamins D And K,  
Vitamins K B8 P,  
Water 11.7% (seed),  
Water 81.2%-82.7% (plant)(2),  
Xylose (plant),  
Zeaxanthin (plant),

Zinc Tr (plant).

## Allspice

ALLSPICE is known by the following names: Allspice, Myrataceae Family, Myrtaceae Family, Pimenta Dioica and Pimento Officinalis.

ALLSPICE is noted to contain the following constituents:

Calcium 0.661%,  
Carbohydrates - 1%,  
Caryophyllene,  
Cineole,  
Epimeric 10-cadinols - Two,  
Eugenol I (60 - 80% Of Volatile Oil),  
Iron 0.007%,  
Lipids 7%,  
Lipids 8.7%,  
Magnesium 0.135%,  
Methyleugenol,  
Niacin,  
Phellandrene,  
Phosphorus 0.113%,  
Potassium 1.044%,  
Protein 6.1%,  
Riboflavin,  
Sodium 0.135%,  
Thiamine,  
Vitamin A (540 Iu Per 100g),  
Vitamin C (39 Mg Per 100g),  
Volatile Oil 1-4% (berry),  
Zinc 0.001%.

## Aloe

ALOE is known by the following names: A. Vera L., Aloe, Aloe Prryi, Aloe - Florida, Aloe - Germany, Aloe Barbadosensis, Aloe Dera L. Var. Chinensis (Haw.) Berg, Aloe Ferox, Aloe Officinalis, Aloe Perfoliata Var Vera, Aloe Sp., Aloe Vera, Aloe Vera Leaf (Aloe Barbadosensis), Aloe Vera Resin (Aloe Ferox), Aloe Vulgaris, Aloes - Haiti, Aloes Des Jardins - Haiti, Aloes Do Cabo - Brazil, Cape Or Spiked Aloes, Dried Concentrate Of The Juice Of Aloe, Hepatic Aloes, Herba Aloes, Hsiang Tan - China, Kumari, Laloï - Haiti, Lalois - Haiti, Liliaceae, Liliaceae Family, Lu Hui - China, No Hui - China, Nu Hui - China, Sabila - Dominican Republic, Sarisabir - Turkey, Siang Tan - China, Zabida - Venezuela, Zabila - Dominican Republic, Zabila - Haiti, Zabila - Mexico and Zabila - Venezuela.

ALOE is noted to contain the following constituents:

Acemannan,  
Albumin 0.0001%-0.0005% (leaf),

Aldopentose,  
Allantoin,  
Aloe -emodin,  
Aloesin,  
Aloesin (plant),  
Aloi-emodin,  
Aloin (also Called Barbaloin),  
Aloin 0.5-25% (the Major Constituent),  
Aloin = Anthraquinone Glycosides,  
Aloins - Two,  
Aluminum 0.0022% (leaf),  
Amino Acids,  
Amorphous Aloin(2),  
Amylase 0%-0.002% (leaf),  
Anthraquinone,  
Anthraquinone Glycosides,  
Anthraquinones,  
Antibiotic Principle,  
Arabinose,  
Asparagine (plant),  
Aspartic Acid (plant),  
Barbaloin(5),  
Barbaloin 4.24%,  
Benzylacetone (plant),  
Beta-carotene 0.0003% (leaf),  
Biogenic Stimulators,  
Calcium 0.019%-0.46% (leaf)(2),  
Calcium Oxalate,  
Campesterol (plant),  
Carbohydrates 89.6% (leaf),  
Catalase (plant),  
Cellulose (plant),  
Chloride 0.001%-0.011% (leaf),  
Cholesterol 0.004%-0.012% (leaf),  
Choline (plant),  
Chrisophanic Acid,  
Chromium Tr (leaf),  
Chrysophanic,  
Chrysophanic Acid (plant),  
Chrysophanol (plant),  
Cinnamic Acid,  
Cobalt Tr (leaf),  
Coumaric Acid (plant),  
Coumarin (plant),  
Emodin,  
Emodin (plant),  
Enzymes,

Fat 0.8% (leaf),  
Fiber,  
Fiber 17.7% (leaf),  
Folic Acid 0.0027%-0.02% (leaf),  
Formic Acid (plant),  
Fructose (plant),  
Galactose (plant),  
Germanium,  
Glucomannan (plant),  
Glucomannan - In The Gel,  
Glucose(2),  
Glucose 0.028%-0.103% (leaf),  
Glycerol (plant),  
Glycosides Of Aloe-emodin,  
Iron 0.003%-0.03% (leaf),  
Iso -barbaloin,  
Isobarbaloin (plant),  
Isobarbaloin - 10-30%,  
Kilocalories 0.28% (leaf),  
Lignin (plant),  
Lipase 0%-0.0016% (leaf),  
Lupeol (plant),  
Magnesium 0.093% (leaf),  
Manganese 0.0006% (leaf),  
Mannose,  
Mannose (plant),  
Minerals,  
Mucilage (plant),  
Mucilaginous Polysaccharides,  
Nataloin,  
Nataloin (plant),  
Niacin 0.0064% (leaf),  
Niacinamide,  
Organic Acids,  
Oxidase (plant),  
P-coumaric Acid,  
Pectic Acid (plant),  
Pentosides,  
Phosphorus 0.0006%-0.094% (leaf),  
Polyphenols (plant),  
Polysaccharide,  
Potassium 0.01%-0.085% (leaf),  
Protein 1%-5.7% (leaf),  
Purine 0.0001%-0.0056% (leaf),  
Resin(3),  
Resin Of Aloes,  
Resins(2),

Rhamnose,  
Rhein (plant),  
Saponin,  
Saponins(2),  
Selenium 0.0023% (leaf),  
Silicon 0.0022% (leaf),  
Sitosterol (plant),  
Socaloin,  
Sodium 0.004%-0.051% (leaf),  
Starch,  
Steroids,  
Thiamin 0.00008% (leaf),  
Tin 0.0011% (leaf),  
Urea 0.001% (leaf),  
Uronic Acid (plant),  
Vitamin B2 Tr (leaf),  
Vitamin C 0.626% (leaf),  
Water 99.5% (plant),  
Xylose,  
Zinc 0.0011%-0.077% (leaf).

## **Alpine Ragwort**

ALPINE RAGWORT is known by the following names: Alpine Ragwort, Asteraceae Family, Compositae, Daisy Family, Heydisch Wundkrut, Senecia Nemoensis Ssp. Fuchsii and Senecio Fuchsii.

ALPINE RAGWORT is noted to contain the following constituents:

Alkaloid,  
Flavonol - Considerable,  
Rutin - Considerable,  
Senecionine.

## **Alum Root**

ALUM ROOT is known by the following names: Alum Root, Alumroot - Amerindian, Heuchera Americana and Saxifragaceae Family.

ALUM ROOT is noted to contain the following constituents:

Tannins - 9-20%.

## **Amaranth**

AMARANTH is known by the following names: Amaranth, Amaranthaceae Family, Amaranthus Caudatus, Amaranthus Hypochondriacus Et S., Chenopodium Album And Sp., Chih Hsien - China, Dirtweed, Frost Blite, Horozobigi - Turkey, Hsien - China, Hsien Tai - China, Lamb's Quarters, Love Lies Bleeding, Mutton Top, Pigweed and White Goosefoot.

AMARANTH is noted to contain the following constituents:

Alanine 0.139%-1.6722% (leaf),  
Arginine 0.121%-1.4556% (leaf),  
Ascaridol,  
Aspartic Acid 0.229%-2.7549% (leaf),  
Beta-carotene 0%-0.0508% (leaf)(2),  
Calcium - A Rich Source,  
Calcium 0.1559%-5.3333% (leaf),  
Carbohydrate 4.03%-54% (leaf)(2),  
Copper 0.0001%-0.0019% (leaf),  
Cymene,  
Cystine 0.029%-0.3489% (leaf),  
Fat 0.241%-5.3% (leaf)(2),  
Fiber 0.883%-13.5% (leaf)(2),  
Folacin 0.0001%-0.001% (leaf),  
Glutamic Acid 0.292%-3.5128% (leaf),  
Histidine 0.052%-0.6256% (leaf),  
Iron 0.0023%-0.1527% (leaf),  
Isoleucine 0.119%-1.4316% (leaf),  
Leucine 0.195%-2.3458% (leaf),  
Lysine 0.127%-1.5278% (leaf),  
Magnesium 0.055%-0.6616% (leaf),  
Methionine 0.036%-0.4331% (leaf),  
Niacin 0.0006%-0.0118% (leaf)(2),  
Phenylalanine 0.133%-1.6% (leaf),  
Phosphorus 0.0487%-1.0082% (leaf)(2),  
Potassium 0.263%-7.3503% (leaf)(2),  
Proline 0.121%-1.4556% (leaf),  
Protein 2.285%-34.2% (leaf)(2),  
Rutin (plant),  
Saponins (root),  
Serine 0.111%-1.3353% (leaf),  
Sodium 0.011%-0.2406% (leaf)(2),  
Tannin - Probably,  
Terpenes,  
Thiamin 0.0001%-0.0007% (leaf)(2),  
Threonine 0.099%-1.191% (leaf),  
Tryptophan 0.031%-0.3729% (leaf),  
Tyrosine 0.08%-0.9624% (leaf),  
Valine 0.137%-1.6481% (leaf),  
Vitamin A(2),  
Vitamin B2 0.0001%-0.0026% (leaf)(2),  
Vitamin C(2),  
Vitamin C 0.0345%-0.6263% (leaf),  
Volatile Oil 1-2%,  
Water 91.6% (leaf)(2),

Zinc 0.0009%-0.0108% (leaf).

## American Ginseng

AMERICAN GINSENG is known by the following names: American Ginseng, American Ginseng - English, American Ginseng Root, Amerikaanse Ginseng - Dutch, Amerikanischer Ginseng - German, Ginseng - United States, Panax Quinquefolium, Panax Quinquefolium L., Radix Panacis Quinquefolii, Seiyojin - Japanese and Soyangsam - Korean.

AMERICAN GINSENG is noted to contain the following constituents:

Acetic Acid 0.0126%,  
Adenine,  
Adenosine,  
Alanine 0.0209%-0.225%,  
Aluminum 0.0024%-0.0285%,  
Amylase,  
Arabinose,  
Arginine 1.153%-1.7615%,  
Arsenic 0.000025%-0.000044%,  
Asparagine,  
Aspartic Acid 0.1265%-0.431%,  
Benzoic Acid,  
Biotin 0.0001%-0.0009%,  
Boron 0.0024%-0.0096%,  
Calcium 0.234%-1.08%,  
Campesterol,  
Caproic Acid 0.0006%,  
Carbohydrates 70%,  
Caryophyllene,  
Choline 0.1%-0.2%,  
Cinnamic Acid,  
Citric Acid 0.3%,  
Cobalt 0.000006%-0.000044%,  
Copper 0.0006%-0.0013%,  
Cysteine 0.02%,  
Cystine 0.0108%,  
Dextrose,  
Diastase,  
Estradiol,  
Estrol,  
Estrone,  
Fat 1%,  
Ferulic Acid,  
Fiber 5.9%-24.5%,  
Folic Acid 0%-0.0068%,  
Formic Acid,  
Fructose 0.416%-0.5%,

Fumaric Acid,  
Galactose,  
Ginsenin,  
Ginsenoside -r-o,  
Ginsenoside -rb,  
Ginsenoside -rb-1,  
Ginsenoside -rb-2,  
Ginsenoside -rc,  
Ginsenoside -rd,  
Ginsenoside -re,  
Ginsenoside -rf,  
Ginsenoside -rg,  
Ginsenoside -rg-1,  
Ginsenoside -rg-2,  
Ginsenosides - More Than Panax,  
Glucose 0.534%-1.5%,  
Glucuronic Acid,  
Glutamic Acid 0.0396%-0.445%,  
Guanidine,  
Guanine,  
Histidine 0.032%-0.11%,  
Humulene,  
Hydroxycinnamic Acid 0.0028%,  
Hydroxyproline,  
Iodine,  
Iron 0.0049%-0.0407%,  
Isoleucine 0.0151%-0.037%,  
Isovaleric Acid 0.0007%,  
Kaempferol,  
Ketoglutaric Acid 0.55%,  
Leucine 0.042%-0.153%,  
Levulose,  
Linoleic Acid,  
Linolenic Acid,  
Lysine 0.208%-0.21%,  
Magnesium 0.098%-0.22%,  
Maleic Acid,  
Malic Acid,  
Malonic Acid,  
Maltol,  
Maltose,  
Manganese 0.0019%-0.0156%,  
Methionine 0.0034%-0.034%,  
Molybdenum 0.001%-0.0014%,  
Niacin 0.0047%-0.006%,  
Nicotinic Acid 0.0014%-0.0016%,  
Nitrogen 1.5%-2%,

Oleanolic Acid,  
Oleic Acid,  
Palmitic Acid,  
Panaquilon,  
Panax Acid,  
Panaxin,  
Pantothenic Acid 0.0007%-0.001%,  
Pectin,  
Petroselinic Acid,  
Phenylalanine,  
Phosphorus 0.27%-0.52%,  
Potassium 0.66%-3.38%,  
Proline 0.0175%-0.112%,  
Propionic Acid 0.0004%,  
Protein 12.2%,  
Pyruvic Acid 0.7%,  
Raffinose,  
Resin,  
Rhamnose,  
Saccharose,  
Salicylic Acid,  
Santalene,  
Saponin 0.75%-1%,  
Serine 0.0289%-0.124%,  
Silicon,  
Sitosterol,  
Sodium 0.05%-0.48%,  
Starch 8%-32%,  
Stearic Acid,  
Stigmasterol 0.05%,  
Strontium,  
Succinic Acid 4%,  
Sucrose 1.5%-8.5%,  
Sulfur 0.15%,  
Tannin,  
Tartaric Acid,  
Threonine 0.0584%-0.107%,  
Tiglic Acid,  
Triterpenic Saponisides,  
Tyrosine,  
Uridine,  
Uronic Acid,  
Valeric Acid,  
Valine 0.0082%,  
Vanadium 0.000002%,  
Vanillic Acid 0.0033%,  
Vitamin B12 0.00004%-0.00006%,

Vitamin B2 0%-0.0001%,  
Vitamin C 0.0039%,  
Xylose,  
Zinc 0.001%-0.0114%.

## **Amla**

AMLA is known by the following names: Amalaki, Amla, Amlaka - India, Dhatri, Emblic Myrobalan, Emblica Officinalis, Euphorbiaceae Family, Indian Gooseberry and Phyllanthus Emblica.

AMLA is noted to contain the following constituents:

Alanine 0.024%-0.119% (fruit),  
Arginine 0.0176%-0.0871% (fruit),  
Ash 0.4%-2.5% (fruit),  
Aspartic Acid 0.0361%-0.1785% (fruit),  
Beta-carotene 0%-0.0004% (fruit),  
Boron 0.0002%-0.0011%,  
Calcium 0.012%-0.266% (fruit)(2),  
Carbohydrates 14.1%-95.2% (fruit),  
Chebulic Acid (fruit),  
Chloride 0.0355%-0.1757% (fruit),  
Copper 0.0003%-0.0014% (fruit),  
Cystine 0% (fruit),  
Ellagic Acid,  
Ellagic Acid (fruit),  
Fat 0.1%-3.1% (fruit),  
Fat 16% (seed),  
Fiber 1.9%-18% (fruit)(2),  
Gallic Acid,  
Gallic Acid 5% (fruit),  
Glucose,  
Glucose (fruit),  
Glutamic Acid 0.132%-0.6535% (fruit),  
Histidine 0.0133%-0.0658% (fruit),  
Iron,  
Iron 0.0005%-0.0163% (fruit)(2),  
Isoleucine 0.012%-0.0595% (fruit),  
Kaempferol (leaf),  
Kilocalories 0.058%-0.365% (fruit),  
Leucine 0.0219%-0.1084% (fruit),  
Linoleic Acid 7.04% (seed),  
Linolenic Acid 1.405% (seed),  
Lupeol (bark),  
Lysine 0.017%-0.1168% (fruit)(2),  
Magnesium 0.0118%-0.0584%,  
Manganese 0.0011%-0.0055%,  
Methionine 0.002%-0.0355% (fruit)(2),

Myristic Acid 0.152% (fruit),  
Niacin 0.0002%-0.0012% (fruit),  
Nitrogen 0.11%-0.5445% (fruit),  
Oleic Acid 4.544% (seed),  
Palmitic Acid 0.4785% (seed),  
Pectin (fruit),  
Phenylalanine 0.0133%-0.0658% (fruit),  
Phosphorus 0.02%-0.139% (fruit)(2),  
Potassium 0.171%-1.396% (fruit)(2),  
Proline 0.0652%-0.3225% (fruit),  
Protein 0.4%-4.4% (fruit),  
Selenium 0.00024%-0.0012% (fruit),  
Serine 0.0183%-0.0905% (fruit),  
Silica 0.0235%-0.1163% (fruit),  
Sitosterol (bark),  
Sodium 0.0042%-0.1384% (fruit)(2),  
Starch 0.18%-0.891% (fruit),  
Stearic Acid 0.344% (seed),  
Sucrose 0.26%-1.297% (fruit),  
Sulfur 0.0166%-0.082%,  
Tannin 18%-2.2% (leaf)(2),  
Tannin 28% (fruit),  
Tannin 8%-2.1% (bark)(2),  
Tannins,  
Thiamin 0.00003%-0.00019% (fruit),  
Threonine 0.0135%-0.0668% (fruit),  
Tryptophan 0.003%-0.0131% (fruit),  
Tyrosine 0.0116%-0.0575% (fruit),  
Valine 0.0159%-0.0785% (fruit),  
Vitamin B12,  
Vitamin B2 0.00004%-0.00025% (fruit),  
Vitamin C,  
Vitamin C 0.276%-2.7293% (fruit),  
Water 77.1%-84.1% (fruit),  
Zinc 0.0018%-0.0089%.

## **Angelica**

ANGELICA is known by the following names: A. Dahurica ( Fisch. Ex Hoffm.), Angelica, Angelica - Europe, Angelica - Spain, Angelica Archangelica, Angelica Dahurica ( Fisch. Ex Hoffm.), Angelica Glauca, Angelica Officinalis, Angelica Root, Angelica Selvatica - Italian, Angelica Silvestris - A Wild Variety, Angelica Sp., Angerika, Apiaceae Family, Benth. Et Hook F., Byakushi - Japanese, Chien Tu - China, Chinese Angelica Root, Choraka, Dang Gui, Dong Quai, Engeliq ue Des Bois - French, Engelwurz - Germany, Garden Angelica, Masterwort, Melekotu - Turkey, Paegchi - Korean, Radix Angelicae Dahuricae, Tang Kuei, Umbelliferae, Umbelliferae Family, Umbelliferae Family ( Carrot), Wald Brustwurz - German, Wild Angelica - United States and Wilde Engelwortel - Dutch.

ANGELICA is noted to contain the following constituents:

Acetaldehyde,  
Aconitic Acid,  
Angelic Acid(2),  
Angelic Acid - 0.3%,  
Angelica Acid,  
Angelicin(2),  
Angelicotoxin,  
Archangelenone - A Flavonone,  
Archangelicin,  
Bergapten,  
Bitter Principle,  
Bitters,  
Borneol,  
Byak-angelicin,  
Byak-angelicol,  
Caryophyllene,  
Citric Acid,  
Coumarin Compounds,  
Coumarins,  
Essential Oil,  
Imperatorin,  
Isobyakangelicol,  
Isoimperatorin,  
Lactone Angelicin,  
Limonene,  
Linalool,  
Malic Acid,  
Marmesin,  
Neobyakangelicol,  
Osthenol,  
Osthole 0.2% (roots),  
Ostruthol,  
Oxalic Acid,  
Oxypeucedanin,  
Phellandrene(2),  
Phellopterin,  
Pinene,  
Resins(2),  
Scopoletin,  
Starches,  
Tannins(2),  
Umbelliferone,  
Volatile Oil - 0.3% To 1%,  
Volatile Oil 0.3 - 1%,  
Xanthotoxin(2).

## **Angelica Root Oil**

ANGELICA ROOT OIL is known by the following names: Angelica Archangelica, Angelica Oil, Angelica Root Oil and Umbelliferae Family.

ANGELICA ROOT OIL is noted to contain the following constituents:

Angelicin,  
Exaltolid,  
Methylaethylacid,  
Osthenol,  
Phellandren,  
Pinen.

## **Anise Seed**

ANISE SEED is known by the following names: Anason - Turkey, Anasur - Turkey, Anis - Spain, Anise, Anise - Europe, Anise Seed, Aniseed, Anisu, Anisun - Iraq, Apiaceae, Huai Hsiang - China, Huei Hsiang - China, Pa Yueh Chu - China, Pimpinella Anisum, Raziyana - Kurdistan, Umbelliferae Family and Velaiti Saunf - India.

ANISE SEED is noted to contain the following constituents:

Acetaldehyde,  
Anethol,  
Anethol-glycol - Major Active Ingredient,  
Anethole(2),  
Anethole 0.02% (fruit),  
Anethole 1.4%-5.4%,  
Anisaldehyde 0.03% (fruit),  
Anisic Acid (fruit),  
Ash,  
Ash 6.6%-7.7% (fruit),  
Bergapten (fruit),  
Bergatene,  
Bisabolene,  
Boron 0.002% (fruit),  
Caffeic Acid,  
Calcium,  
Calcium 0.7138%-0.7843% (fruit),  
Camphene 0.0119% (fruit),  
Carbohydrates 50.9%-55.2% (fruit),  
Carvene 0.424% (fruit),  
Carvone (plant),  
Caryophyllene,  
Chavicol,  
Chlorogenic Acid,  
Choline(3),

Copper 0.0009% (seed),  
Creosol(2),  
Cresol,  
Essential Oil(2),  
Essential Oil 1%-6%,  
Estragole (fruit),  
Eugenol,  
Fat 17.6%-30.4% (fruit),  
Fatty Oil(2),  
Fiber - Crude,  
Fiber 16.1% (fruit),  
Furfural 3% (fruit),  
Hydroquinone,  
Iron,  
Iron 0.0391%-0.0409% (fruit),  
Isoamyaline,  
Isobergapene,  
Isopimpinellin,  
Limonene 0.0025%-0.0459% (fruit),  
Linalool 0.005% (fruit),  
Magnesium 0.1878% (fruit),  
Manganese 0.0023% (fruit),  
Mannitol (root),  
Methyl,  
Myristicin,  
Ocimene 0.0025% (fruit),  
P-methoxyphenyl Acetone,  
Phellandrene 0.0408% (fruit),  
Phosphorus,  
Phosphorus 0.4862% (fruit),  
Pinene 0.0001% (fruit),  
Pinene 0.0001%-0.0306% (fruit),  
Potassium,  
Potassium 1.5923% (fruit),  
Protein,  
Protein 18.8%-21.3% (fruit),  
Quercetin - A Flavonoid,  
Quercetin -3-glucuronide,  
Quercetin -glucosides (fruit),  
Rutin (fruit),  
Scoparone (leaf),  
Scopoletin (fruit),  
Scopoletin (leaf),  
Sodium,  
Sodium 0.0177% (fruit),  
Sphondin,  
Squalene,

Starch,  
Stigmasterol,  
Sugars,  
Terpenes,  
Terpineol 0.0001% (fruit),  
Umbelliferone,  
Umbelliferone (fruit),  
Vitamin C 0.0008%-0.0009% (fruit),  
Zinc,  
Zinc 0.0059% (fruit),  
Zingiberene.

## **Aniseed Oil**

ANISEED OIL is known by the following names: Anise, Anise Seed Oil, Aniseed Oil, Pimpinella Anisum, Umbelliferae Family and Velaiti Saunf.

ANISEED OIL is noted to contain the following constituents:

Anethol,  
Chavicol,  
Choline,  
Malic Acid,  
Methyl,  
Resins,  
Starch,  
Sugar,  
Terpenes.

## **Antipyretic Dichroa**

ANTIPYRETIC DICHROA is known by the following names: Antipyretic Dichroa, Changshan, Dichroa Febrifuga, Eternal Mountain, Mount Eternity, Radix Dichroae and Saxifragaceae Family.

ANTIPYRETIC DICHROA is noted to contain the following constituents:

Alkaloids (5) - All Antimalarial Agents,  
Dichroine B.

## **Apricot Kernel**

APRICOT KERNEL is known by the following names: Apricot Kernel, Apricot Kernels, Apricot Seed, Apricot Seed Or Kernel, Bitter Almond, Kyonin - Japanese, Laetrile, Pruni Armeniaca, Prunus Armeniaca, Prunus Armeniaca L. Var. Ansu Maxim., Rosaceae, Rosaceae Family, Sain - Korean and Semen Pruni Armeniaca.

APRICOT KERNEL is noted to contain the following constituents:

Acetic Acid (essential Oil),

Alanine 0.068%-0.498% (fruit),  
Amygdalin,  
Amygdalase,  
Amygdalin(2),  
Amygdalin 8% (seed),  
Amylase (fruit),  
Arginine 0.045%-0.33% (fruit),  
Ash 0.7%-10.5% (fruit),  
Ash 1%-3% (seed),  
Aspartic Acid 0.314%-2.3% (fruit),  
Benzaldehyde From Amygdalin,  
Beta-carotene 0% (seed),  
Beta-carotene 0.0013%-0.0189% (fruit)(2),  
Boron 0.0001%-0.007% (fruit),  
Caffeic Acid (plant),  
Calcium 0.0134%-0.1899% (fruit)(2),  
Calcium 0.093%-0.1522% (seed),  
Campesterol (seed),  
Carbohydrates 11.12%-87.3% (fruit),  
Carbohydrates 14% (seed),  
Carotene (fruit),  
Chlorogenic Acid (fruit),  
Cholesterol (seed),  
Citric Acid (fruit),  
Copper 0.0001%-0.0016% (seed)(2),  
Coumaric Acid (plant),  
Cyanidin (plant),  
Cyanogenic Glycoside,  
Cymene (leaf),  
Cystine 0.003%-0.022% (fruit),  
Dextrose 8.1%-11.6% (seed),  
Emulsin (fruit),  
Essential Oil 0.8%-1.6% (seed),  
Estradiol (seed),  
Estrone (seed),  
Fat 0.22%-4.1% (fruit),  
Fat 40%-51.4% (seed),  
Fiber 0.6%-13.2% (fruit),  
Fiber 3.3% (seed),  
Folacin 0.000007%-0.00007% (fruit),  
Fructose 1.4%-4.2% (fruit),  
Geraniol (essential Oil),  
Glucose,  
Glucose 3.2%-4.8% (fruit),  
Glutamic Acid 0.157%-1.15% (fruit),  
Glycoside - Cyanogenic,  
Histidine 0.027%-0.198% (fruit),

Hydrocyanic Acid From Amygdalin,  
Iodine 0.000005% (fruit),  
Iron 0.0005%-0.0079% (fruit)(2),  
Iron 0.0042%-0.0048% (seed),  
Isoleucine 0.041%-0.3% (fruit),  
Isoquercitrin (fruit),  
Kaempferol (leaf),  
Kilocalories 0.048%-0.3515% (fruit),  
Laetrile - A Derivative,  
Leucine 0.077%-0.564% (fruit),  
Limonene (essential Oil),  
Linalool (fruit),  
Linoleic Acid 0.077%-0.564% (fruit),  
Linoleic Acid 5.6%-41.12% (seed),  
Lycopene (fruit),  
Lysine 0.097%-0.7105% (fruit),  
Magnesium 0.0076%-0.0615% (fruit),  
Magnesium 0.175% (seed),  
Malic Acid 0.7%-2.2% (fruit),  
Mandelic Nitrile Beta Glucoronide,  
Manganese 0.0001%-0.0011% (seed)(2),  
Methionine 0.006%-0.044% (fruit),  
Myrcene (essential Oil),  
Niacin 0.0006%-0.0061% (fruit),  
Niacin 0.0017% (seed),  
Oils,  
Oleic Acid 0.017%-0.1245% (fruit),  
Oleic Acid 24.8%-41.12% (seed)(2),  
Palmitic Acid 0.024%-0.176% (fruit),  
Pantothenic Acid 0.00024%-0.00176% Fruit,  
Phenylalanine 0.052%-0.381% (fruit),  
Phosphorus 0.018%-0.2982% (fruit),  
Phosphorus 0.3% (seed),  
Potassium 0.2824%-2.2565% (fruit),  
Potassium 0.418%-0.7783% (seed),  
Proline 0.101%-0.74% (fruit),  
Protein 1%-12.7% (fruit),  
Protein 31.5% (seed),  
Prunase,  
Pufa 0.077%-0.564% (fruit),  
Quercetin (plant),  
Quercitin (fruit),  
Quinic Acid (fruit),  
Rutin 1.77% (leaf),  
Serine 0.083%-0.608% (fruit),  
Sitosterol (seed),  
Sodium 0.001%-0.0088% (fruit),

Sodium 0.0018%-0.0019% (seed),  
Sorbitol,  
Squalene 0.02% (seed),  
Stearic Acid 0.003%-0.022% (fruit),  
Succinic Acid (fruit),  
Sucrose 1.4%-5.4% (fruit),  
Tannin 0.06%-0.1% (fruit),  
Tartaric Acid (fruit),  
Terpineol (essential Oil),  
Thiamin 0.00003%-0.00025% (fruit),  
Thiamin 0.00015% (seed),  
Threonine 0.047%-0.3445% (fruit),  
Tryptophan 0.015%-0.11% (fruit),  
Tyrosine 0.029%-0.2125% (fruit),  
Valine 0.047%-0.3445% (fruit),  
Vitamin B2 0.00004%-0.00044% (fruit),  
Vitamin B2 0.00053% (seed),  
Vitamin B6 0.00005%-0.0004% (fruit),  
Vitamin C 0.01%-0.0745% (fruit),  
Water 96.35% (fruit),  
Xylose,  
Zinc 0.0002%-0.0038% (seed)(2).

## **Aquilariae Lignum**

AQUILARIAE LIGNUM is known by the following names: A. Sinensis, Aloeswood, Aquilaria, Aquilaria Agallocha Roxb., Aquilariae Lignum, Ch'imhyang - Korean, Chen Xiang, Jinko- - Japanese, Lignum Aquilariae and Thymelaeaceae.

AQUILARIAE LIGNUM is noted to contain the following constituents:

Agarofuran,  
Agarofuran (wood)(2),  
Agarol,  
Agarol (stem) (wood),  
Agarospinol,  
Agarospinol (wood),  
Benzylacetone,  
Benzylacetone (26% (essential Oil),  
Nor-ketoagarofuran,  
P-methoxyacetone,  
Selinane.

## **Aristolochia**

ARISTOLOCHIA is known by the following names: Aristolochia, Aristolochia Debilis Sieb. Et Zucc., Aristolochia Fruit, Aristolochiaceae, Birthwort Fruit, Fructus Aristolochiae and Maduryong - Korean.

ARISTOLOCHIA is noted to contain the following constituents:

Aristolochic Acid,  
Aristolochinic Acid,  
Magnoflorine (a. Debilis).

## **Arjun**

ARJUN is known by the following names: Anjani - Hindi, Arjun, Arjuna, Arjuna Myrobalan, Combretaceae Family, Dhananjaya - Sanskrit, Dhavala - Sanskrit, Kahu - Bengali, Kakubha - Sanskrit, Kaunteya - Sanskrit, Kukubha, Nadisarjja - Sanskrit, Partha - Sanskrit, Terminalia Arjuna, Virataru - Sanskrit and White Murdah - English.

ARJUN is noted to contain the following constituents:

Alkaline Chlorides,  
Aluminium Salts (trace),  
Arjunetin,  
Arjunine,  
Ash 34%,  
Calcium Carbonates,  
Calcium Oxide,  
Calcium Salts 23%,  
Carbon Dioxide,  
Chlorene,  
Essential Oil,  
Glucotannic Acid 15%,  
Lactone,  
Magnesium Oxide,  
Magnesium Salts (trace),  
Phosphorous Oxide,  
Phytosterol (organic Ester),  
Potassium Oxide,  
Pyrocatechol Tannins,  
Silica Oxide,  
Sodium,  
Sulfur Dioxide,  
Tannin,  
Tannins 16%.

## **Arnica**

ARNICA is known by the following names: Arnica, Arnica - Chile, Arnica - Spain, Arnica Montana, Asteraceae Family, Compositae Family, Dagtutunu - Turkey and Leopard's Bane.

ARNICA is noted to contain the following constituents:

Angelic Acid (rhizome),

Arnigin - Bitter Principle,  
Arnidiol (flower),  
Arnisterin Arnidiol - A Steroid,  
Astragalin (flower),  
Baldrianic Acid (rhizome),  
Betaine,  
Betaine (flower),  
Caffeic Acid (flower),  
Carotenoids,  
Carotinoids - Pigments,  
Chlorogenic Acid (flower),  
Choline,  
Choline (flower),  
Dihydrohelenalin,  
Essential Oil 0.04%-0.14% (flower),  
Essential Oil 0.5%-6.31% (rhizome),  
Essential Oil 1.77%-3.74% (root),  
Faradiol (flower),  
Fatty Acids,  
Flavones,  
Flavonoids,  
Formic Acid (rhizome),  
Fructose 2.5% (rhizome),  
Fumaric Acid (rhizome),  
Gallic Acid (flower),  
Helenalin,  
Inulin,  
Inulin (flower),  
Inulin 9%-12% (rhizome),  
Isoquercitrin (flower),  
Lactic Acid (rhizome),  
Lactuciferol (flower),  
Lauric Acid (flower),  
Linoleic Acid,  
Linolenic Acid,  
Lutein (flower),  
Luteine,  
Luteolin (flower),  
Malic Acid (flower),  
Mucilage (rhizome),  
Myristic Acid,  
Palmitic Acid,  
Palmitic Acid (flower),  
Phytosterol,  
Pigments - Carotinoids,  
Resin,  
Sitosterol (flower),

Stearic Acid (flower),  
Steroid,  
Succinic Acid (rhizome),  
Sucrose 1% (rhizome),  
Tannin,  
Taraxasterol (flower),  
Terpenes - Aromatic,  
Thymol (flower),  
Thymol - Aromatic,  
Thymol Methyl Ether,  
Trimethylamine,  
Trimethylamine (flower),  
Volatile Oil 0.3%-1% (flower),  
Volatile Oils - 0.2-0.4%,  
Xanthophyll.

## **Arogyvardhini**

AROGYVARDHINI is known by the following names: Arogya Vardhani and Arogyvardhini.

AROGYVARDHINI is noted to contain the following constituents:

Kajali,  
Kauka,  
Lauh Bhasma,  
Shudha Guggulu,  
Shudha Shilajit,  
Tamra Bhasma.

## **Arrow Root**

ARROW ROOT is known by the following names: Arrow Root, Curcuma Angustifolia, Curcuma Starch, Scitamineae Family and Tavakshiri.

ARROW ROOT is noted to contain the following constituents:

Fat,  
Gum,  
Starch,  
Sugar.

## **Artichoke**

ARTICHOKE is known by the following names: Alcachofa - Dominican Republic, Alcachofera - Spain, Artichaut - Haiti, Artichoke, Artichoke - Europe, Cynara Scolymus, Daisy Family, Globe Artichoke and Tyosen-azami.

ARTICHOKE is noted to contain the following constituents:

Ash 1.06%-10.6% (flower)(2),  
Beta-carotene 0.0001%-0.002% (flower),  
Boron 0.0002%-0.0005% (flower),  
Caffeic Acid (flower),  
Calcium 0.012%-0.5286% (flower),  
Carbohydrates 10.5%-75.5% (flower)(3),  
Caryophyllene (essential Oil),  
Chlorogenic Acid (flower),  
Copper 0.0002%-0.0024% (flower),  
Cynarin,  
Cynarin 0.02%-0.03% (leaf),  
Cynaropicrin - A Sesquiterpene Lactone,  
Eugenol (essential Oil),  
Fat 0.1%-2% (flower),  
Ferulic Acid,  
Fiber 1.14%-22.4% (flower)(2),  
Flavonoids 0.1%-1% (flower),  
Folacin 0.00007%-0.00047% (flower),  
Glyceric Acid (flower),  
Inulin,  
Inulin (flower),  
Iron 0.0011%-0.0101% (flower)(2),  
Kilocalories 0.047%-0.312% (flower),  
Lauric Acid 0.002%-0.0135% (flower),  
Linoleic Acid 0.046%-0.3055% (flower),  
Linolenic Acid 0.017%-0.113% (flower),  
Magnesium 0.0555%-0.4275% (flower),  
Manganese 0.0002%-0.0017% (flower),  
Mucilage,  
Myristic Acid 0.002%-0.0135% (flower),  
Niacin 0.001%-0.0082% (flower)(2),  
Oleic Acid 0.005%-0.033% (flower),  
Palmitic Acid 0.029%-0.1925% (flower),  
Pantothenic Acid 0.0003%-0.0023% Flower,  
Phosphorus 0.086%-0.624% (flower)(2),  
Potassium 0.35%-2.978% (flower)(2),  
Protein 3.1%-27.6% (flower)(2),  
Pufa 0.063%-0.4185% (flower),  
Sesquiterpene Lactone - Cynaropicrin,  
Sitosterol (leaf),  
Sodium 0.085%-0.684% (flower)(2),  
Stearic Acid 0.003%-0.02% (flower),  
Stigmasterol (leaf),  
Tannin,  
Taraxasterol (leaf),  
Thiamin 0.00007%-0.0006% (flower)(2),  
Vitamin B2 0.00006%-0.0007% (flower)(2),

Vitamin B6 0.0001%-0.0008% (flower),

Vitamin C 0%-0.0828% (flower),

Water 77.3%-85.487% (flower)(2),

Zinc 0.0004%-0.0036% (flower).

## **Asafoetida**

ASAFOETIDA is known by the following names: A Wei, A Wei - Chinese, Asafoetida, Asafoetida Ferula, Bahlika - Sanskrit, Devil's Dung - English, Ferula Asafoetida, Ferula Foetida, Ferule De Perse - French, Hing, Hing - Hindi, Hingu, Hingu - Bengali, O Oui - Chinese, Ramatha - Sanskrit and Umbelliferae Family.

ASAFOETIDA is noted to contain the following constituents:

Arabinose (gum),

Ash 1.5%-10%,

Bassorin (gum),

Cadinene (essential Oil),

Diallyl-sulfide (gum),

Essential Oil,

Essential Oil (3-17% gum),

Farnesiferol,

Ferulic Acid,

Ferulic Acid 1.3% (essential Oil),

Galactose (gum),

Glucose (gum),

Glucuronic Acid (gum),

Glue,

Gum 25%,

Pinene (essential Oil),

Resin,

Resin 40%-64%,

Rhamnose (gum),

Sec-butylpropenyl Disulfide,

Umbelliferone (essential Oil),

Valeric Acid (essential Oil),

Vanillin 0.06% (2).

## **Ashok**

ASHOK is known by the following names: Ashok, Ashoka, Asoka, Caesalpiniaceae Family, Kankelli, Leguminosae Family and Saraca Indica.

ASHOK is noted to contain the following constituents:

Alcohol Extract (absolute) 14.2%,

Aluminum,

Calcium,

Catechin,

Ether Extract 0.235%,  
Galactose,  
Haematoxylin,  
Iron(2),  
Magnesium,  
Petroleum Ether Extract 0.307 %,  
Phosphate,  
Potassium,  
Silica,  
Sodium,  
Strontium,  
Tannin.

## **Ashwaganda**

ASHWAGANDA is known by the following names: Ajagandha - India, Ashvagandha, Ashwaganda, Ashwagandha, Balada - Sanskrit, Kanaje Hindi - Iraq, N.o. Solanaceae, Orovale - Spain, Physalis Flexuosa, Punir - Hindi, Samm Al Ferakh - Iraq, Solanaceae Family, Strychnos - Greece, Turagagandha - Sanskrit, Vajigandha, Winter Cherry and Withania Somnifera.

ASHWAGANDA is noted to contain the following constituents:

Alkaloids 0.09% (leaf),  
Alkaloids 0.13%-0.0043% (root),  
Bitter Alkaloid - Somniferin,  
Chlorogenic Acid (leaf),  
Choline (root),  
Cysteine (fruit),  
Cystine (fruit),  
Fat,  
Hydroxyproline (fruit),  
Ipuranol - Sat & Unsat Acids,  
Nicotine ? (root),  
Reducing Sugar - Phytosterol,  
Rennet(3),  
Resin,  
Scopoletin (plant),  
Sitosterol 0.02% (root),  
Starch (root),  
Sucrose 0.1% (root),  
Tropine (root).

## **Asparagus Root**

ASPARAGUS ROOT is known by the following names: Asbaragus - Iraq, Asparagus, Asparagus - Europe, Asparagus Cochinchinensis (Lour.) Merr., Asparagus Officinalis, Asparagus Root, Asparagus Tuber, Asperge - Haiti, Ch'onmundong - Korean, Esparrago - Dominican Republic, Esparraguera - Spain, Halyun - Iraq,

Kuskonmaz - Turkey, Liliaceae Family, Matuba-udo, Tenmondo - Japanese, Tien Men Tung - China and Tuber Asparagi Cochinchinensis.

ASPARAGUS ROOT is noted to contain the following constituents:

5-methoxymethylfurfural,  
Alanine 0.144%-1.8581% (seed),  
Aluminum 0.0013%-0.07% (shoot),  
Arginine 0.143%-1.8452% (shoot),  
Arsenic 0.0000004%-0.0000006% (shoot),  
Ash 0.6%-17.1% (shoot),  
Asparagin,  
Asparagine,  
Asparagine (shoot),  
Aspartic Acid 0.355%-4.5805% (shoot),  
Barium 0.0002%-0.007% (shoot),  
Beta-carotene 0.00003%-0.012% (shoot),  
Boron 0.0006%-0.0104% (shoot)(2),  
Cadmium 0.0000018%-0.000007% (shoot),  
Calcium 0.016%-0.384% (shoot)(3),  
Carbohydrates 3.6%-60.2% (shoot)(2),  
Carotene (plant),  
Choline (rhizome),  
Chromium 0.0000135%-0.00007% (shoot),  
Citrulline,  
Clycine,  
Cobalt 0.000009%-0.000012% (shoot),  
Coniferin (shoot),  
Copper 0.0001%-0.0024% (shoot)(2),  
Cresol (shoot),  
Cystine 0.036%-0.4645% (shoot),  
Diosgenin (shoot),  
Fat 0.2%-4.1% (shoot),  
Fiber 0.7%-14.1% (shoot)(3),  
Folacin 0.0001%-0.0018% (shoot),  
Fructose (rhizome),  
Glucose (shoot),  
Glutamic Acid 0.501%-6.4645% (shoot),  
Histidine 0.047%-0.6065% (shoot),  
Inositol (shoot),  
Inulin (root),  
Iron 0.0006%-0.024% (shoot)(2),  
Isoleucine 0.112%-1.4452% (shoot),  
Kaempferol (root),  
Kilocalories 0.021%-0.313% (shoot)(3),  
Lauric Acid 0.001%-0.0129% (shoot),  
Lead 0.00015%-0.003% (shoot),  
Leucine 0.133%-1.7161% (shoot),

Linoleic Acid 0.091%-1.1742% (shoot),  
Linolenic Acid 0.005%-0.0645% (shoot),  
Lithium 0.000036%-0.00006% (shoot),  
Lutein (plant),  
Lysine 0.145%-1.871% (shoot),  
Magnesium 0.0165%-0.7% (shoot)(2),  
Manganese 0.0002%-0.01% (shoot)(2),  
Mannan (rhizome),  
Mercury 0%-0.0000001% (shoot),  
Methionine 0.029%-0.3742% (shoot),  
Molybdenum 0.000063%-0.00018% (shoot),  
Mucilage,  
Myristic Acid 0.001%-0.0129% (shoot),  
Niacin 0.0011%-0.0366% (shoot)(2),  
Nickel 0.00009%-0.00018% (shoot),  
Oleic Acid 0.006%-0.0774% (shoot),  
Palmitic Acid 0.045%-0.5806% (shoot),  
Palmitoleic Acid 0.001%-0.0129% (shoot),  
Pantothenic Acid 0.0002%-0.00224% Shoot,  
Pentosans 7% (shoot),  
Phenol (shoot),  
Phenylalanine 0.072%-0.929% (shoot),  
Phosphorus 0.039%-1.0244% (shoot),  
Potassium 0.221%-5.52% (shoot)(3),  
Proline,  
Proline 0.162%-2.0903% (shoot),  
Protein 2.2%-39.484% (shoot)(2),  
Pufa 0.096%-1.2387% (shoot),  
Quercetin (root),  
Rhamnose,  
Rhamnose (shoot),  
Rutin (root),  
Selenium 0.000004%-0.0000078% (shoot),  
Serine,  
Serine 0.116%-1.4968% (shoot),  
Silver 0.000009%-0.000012% (shoot),  
Sitosterol,  
Smilagenin,  
Sodium 0.0018%-0.0685% (shoot)(3),  
Starch,  
Stearic Acid 0.003%-0.0387% (shoot),  
Strontium 0.0019%-0.02% (shoot),  
Succinic Acid (shoot),  
Sucrose,  
Sucrose (rhizome),  
Sugar 1.5% (shoot),  
Sulfur 0.0056%-0.0864% (shoot),

Thiamin 0.0001%-0.0026% (shoot)(3),  
Threonine,  
Threonine 0.085%-1.0968% (shoot),  
Titanium 0.000045%-0.018% (shoot),  
Tocopherol 0.00198%-0.0256% (shoot),  
Tryptophan 0.03%-0.3871% (shoot),  
Tyrosine 0.048%-0.6194% (shoot),  
Valine 0.118%-1.5226% (shoot),  
Vanadium 0.00003%-0.0002% (shoot),  
Vitamin A - Significant Amounts,  
Vitamin B1,  
Vitamin B2,  
Vitamin B2 0.0001%-0.0036% (shoot)(2),  
Vitamin C 0.01%-0.5714% (shoot),  
Water 91.4%-95%(2),  
Zeaxanthin (plant),  
Zinc 0.0012%-0.0124% (shoot),  
Zirconium 0.00018%-0.00024% (shoot).

## **Aster Root**

ASTER ROOT is known by the following names: Aster, Aster Root, Aster Tartaricus, Aster Tataricus L., Chawan - Korean, Compositae Family, Compositea, Purple Aster Root, Red Stalked Aster and Shion - Japanese.

ASTER ROOT is noted to contain the following constituents:

Andaromatic Acid,  
Anethole(2),  
Arabinose,  
Aromatic Acid,  
Astersaponin,  
Epifriedelinol,  
Friedelin,  
Lachnophyllol,  
Lachnophyllol Acetate,  
Oleic Acid(2),  
Quercetin,  
Quercitin,  
Saponins,  
Shionon,  
Shionone.

## **Astragalus**

ASTRAGALUS is known by the following names: A. Chinensis L., A. Membranaceus Bge. Var. M., Astragalus, Astragalus Benryi, Astragalus Boantchy - French, Astragalus Complanatus R. Br., Astragalus

Hoantchy, Astragalus Membranaceus, Astragalus Membranaceus, Astragalus Membranaceus (Fisch.) Bge., Astragalus Membranaceus (Mongbolicus), Astragalus Membranicus, Astragalus Mongolicus, Astragalus Seed, Flattened Milkvech Seed, Hsiao, Huang Chi - China, Huang Qi, Hwanggi - Korean, Leguminosae, Leguminosae Family, Membranous Milk Vetch, Milk Vetch Root, Milk-vetch Root, Ogi - Japanese, Pea Family, Radix Astragali, Radix Astragali Membranaceus, Semen Astragali Complanati, Toshitsuri - Japanese and Yellow Vetch.

ASTRAGALUS is noted to contain the following constituents:

6-dimethoxyisoflavane,  
Astragalosides,  
B-sitosterol,  
Betaine(2),  
Betaine (root),  
Calcium 0.17% (root),  
Choline(2),  
Choline (root),  
Copper 0.0001% (root),  
Dihydroxy-5 - 2'4' dihydroxy-5,  
Flavones,  
Fructose (root),  
Gluconic Acid,  
Glucuronic Acid,  
Glucose (root),  
Glycosides,  
Immuno-active Polysaccharides,  
Iron 0.046% (root),  
Kumatakenin,  
Linoleic Acid (root),  
Linolenic Acid (root),  
Magnesium 0.186% (root),  
Manganese 0.0029% (root),  
Mucilage,  
Potassium 1% (root),  
Saponin,  
Sedative,  
Sitosterol (root),  
Sodium 0.0056% (root),  
Sucrose,  
Sucrose (root),  
Zinc 0.0016% (root).

## **Atractylodes**

ATRACTYLODES is known by the following names: A. Chinensis, Atractylodes, Atractylodes (Black) Rhizome, Atractylodes (White) Rhizome, Atractylodes Alba, Atractylodes Lancea Thunb., Atractylodes Macrocephala Koidz., Byakujutsu - Japanese, Ch'angch'ul - Korean, Compositae, Compositae Family, Paekch'ul - Korean and Rhizoma Atractylodis.

ATRACTYLODES is noted to contain the following constituents:

Acetoxyatractylon,  
Arsenic 0.000001% (rhizome),  
Atractylol(2),  
Atractylol (rhizome),  
Atractylon(2),  
Atractylone,  
B-eudesmol (a. Chinensis),  
Butenolide B,  
Butenolidea,  
Calcium 0.58%-1.16% (rhizome)(2),  
Copper 0.0008%-0.0018% (rhizome)(2),  
Essential Oil,  
Eudesmol (a. Iancea),  
Hinesol,  
Hydroxyatractylon,  
Iron 0.021%-0.078% (rhizome)(2),  
Magnesium 0.076%-0.096% (rhizome)(2),  
Manganese 0.003%-0.0139% (rhizome)(2),  
Potassium 0.615%-1.17% (rhizome)(2),  
Sodium 0.022%-0.0238% (rhizome)(2),  
Vitamin A,  
Zinc 0.0026%-0.0032% (rhizome)(2).

## **Bala**

BALA is known by the following names: Abutilan Indicum, Bala, Indian Country Mallow, Indian Mallow, Kanghi - India, Malvaceae, Malvaceae Family, Marshmallow Plant ( Relative) and Sida Cordifolia.

BALA is noted to contain the following constituents:

Alkaloid Asparagin,  
Alkaloid Ephedrine,  
Aromatic Oil,  
Root.

## **Balsam Of Peru**

BALSAM OF PERU is known by the following names: Balsam Of Peru, Balsamum Peruvianum, Leguminosae Family, Myrosperum Pereira, Myroxylon Pereirae, Peru Balsam Tree and Toluifera Pereira.

BALSAM OF PERU is noted to contain the following constituents:

Benzaldehyde,  
Benzoate,  
Benzoic Acid(3),  
Benzylic Benzoate,

Cadinene(2),  
Calamenene,  
Caryophyllene,  
Cinnamaldehyde,  
Cinnamein (aromatic)(2),  
Cinnamic Acid(3),  
Cinnamic Acid (gum),  
Copaene,  
Coumarin 0.4% (seed),  
Cymene,  
Essential Oil (50-65% gum),  
Eugenol,  
Farnesol (gum),  
Nerolidol (gum),  
Ocimene,  
Peruviol(2),  
Pinene,  
Resin(2),  
Resin 20-28% (gum),  
Stilbene,  
Styrene,  
Tannin 0.4%,  
Vanillin(3),  
Volatile Oils,  
Water 4.6% (seed),  
Wax (seed).

## **Bamboo**

BAMBOO is known by the following names: Bamboo, Bamboo Shavings, Bambusa Bambos, Bambusa Breuiflora Munro, Caulis Bambusae In Taeniis, Chikujo - Japanese, Chukchu - Korean, Graminae Family, Gramineae, Nigra ( Lodd.) Munro Var. Henonis ( Mitf, Phyllostachys Species and Tzu Chu - China.

BAMBOO is noted to contain the following constituents:

Potassium Hydroxide,  
Silicone.

## **Banyan**

BANYAN is known by the following names: Alamaram - Tamil, Banyan, Banyan Tree, Bar, Bar - Napalese, Bargad - Unani, Darakht-e-reshah - Persian, Ficus Bengalensis, Figuerduebengal - French, Nya-gro-dha - Tibetan, Pyinyuang - Burmese, Vada - Hindi, Vata - Sanskrit and Zatuazzawanelia - Arabian.

BANYAN is noted to contain the following constituents:

Albuminoids (fruit),  
Caoutchouc,

Carbohydrates,  
Fiber,  
Flavonols,  
Friedelin (leaves),  
Glycemic Principal (bark),  
Glycoside (bark),  
Oil (fruit),  
Quercitin-3-galactoside (leaves),  
Rutin,  
Sitosterol (leaves),  
Subramanian (heartwood),  
Tannins 10% (bark & Buds),  
Taraxosterol - Acid Ester,  
Tigilic Acid Ester,  
Triterpene (leaves),  
Wax.

## **Baptisia**

BAPTISIA is known by the following names: Baptisie Sauvage - French, Baptisia, Baptisia - Italian, Baptisia Tinctoria, Indigo, Indigofera Tinctoria, Indigotier Sauvage - French, Indigoweed - United States, Leguminosae Family, Wild Indigo, Wild Indigo - United States, Wilde Indigo - Dutch and Wilder Indigo - German.

BAPTISIA is noted to contain the following constituents:

Baptin,  
Baptisine,  
Baptisine (root),  
Baptitoxine,  
Baptitozine,  
Cytisine (leaf) (root) (stem),  
Cytisine (leaf) (stem),  
Genistein (leaf),  
Glucosides - Two,  
Gum,  
Luteolin,  
Resin,  
Resin - Yellowish,  
Scopoletin,  
Sparteine (plant),  
Two Glucosides.

## **Barberry**

BARBERRY is known by the following names: Agracejo - Spain, Amberparis - Turkey, Barberry, Barberry Root Bark, Berberidaceae Family, Berberis Dumetorum, Berberis Repens, Berberis Sp., Berberis Vulgaris,

Cockerell, Daruharidra, Epine Vinette - France, Jaundice Berry, Oregon Grape, Pipperidge Bush and Var Aquifolium Mahonia Aquifolia.

BARBERRY is noted to contain the following constituents:

Albumin,  
Alkaloid,  
Alkaloid - Berberine,  
Alkaloids - At Least Seven,  
Aluminum 0.0489% (root),  
Ash 10% (root),  
Berbamine(2),  
Berbamine (plant),  
Berbamine - Alkaloid,  
Berberine(3),  
Berberine (principal Alkaloid),  
Berberine 1%-3%,  
Berberine Alkaloid,  
Berrubine - Alkaloid,  
Beta-carotene 0% (root),  
Caffeic Acid (plant),  
Calcium 1.91% (root),  
Capsanthin (fruit),  
Carbohydrates 79.1% (root),  
Chelidonic Acid,  
Chelidonic Acid (plant),  
Chromium 0.0012% (root),  
Citric Acid,  
Citric And Malic Acid-berries(2),  
Cobalt 0.0042% (root),  
Columbamine - Alkaloid,  
Fat(2),  
Fat 4.3% (root),  
Fiber 13.4% (root),  
Fructose,  
Glucose,  
Gum,  
Hydrastine(2),  
Iron 0.141% (root),  
Jatrorrhizine - Alkaloid,  
Kaempferol ? (plant),  
Kilocalories 0.312% (root),  
Lutein,  
Magnesium 0.143% (root),  
Magnoflorine (plant),  
Malic Acid,  
Manganese 0.006% (root),  
Myricitin - A Flavonoid,

Niacin 0.0081% (root),  
Oxyacanthine(2),  
Oxyacanthine (plant),  
Oxyacanthine - Alkaloid,  
Palmatine (plant),  
Palmatine - Alkaloid,  
Phosphorus 0.045% (root),  
Potassium 0.437% (root),  
Protein 6.6% (root),  
Quercetin ? (plant),  
Resin(4),  
Selenium 0.0034% (root),  
Silicon 0.0023% (root),  
Sinapic Acid (plant),  
Sodium 0.035% (root),  
Starch,  
Tannin(4),  
Tannin (plant),  
Tartaric Acid,  
Thiamin 0.001% (root),  
Tin 0.0026% (root),  
Triterpenes,  
Vinetine,  
Vitamin B2 0.00094% (root),  
Vitamin C 0% (root),  
Wax(2),  
Zeaxanthin,  
Zinc Tr (root).

## **Barley Grass**

BARLEY GRASS is known by the following names: Arpa - Turkey, Bakuga - Japanese, Barley, Barley - Egypt, Barley - Uk - Wales, Barley Grass, Barley Sprout, Cebada - Spain, Fructus Hordei Vulgaris, Graminaceae Family, Gramineae, Hordeum Distichon, Hordeum Vulgare, Hordeum Vulgare L., Jo - Kurdistan, Kung Mai - China, Kung Mai Nieh - China, Maek'ga - Korean, Mai Ya - China, Malt, No Mai - China, Orzo - Italian, Shair - Iraq and Ta Mai - China.

BARLEY GRASS is noted to contain the following constituents:

Aesculetin (plant),  
Aesculin (plant),  
Alpha-tocopherol 0.0003%-0.0011% (seed),  
Aluminum 0.0007% (seed),  
Aluminum 0.0212% (stem),  
Arsenic 0.000001% (sprout/seedling),  
Ash 0.9%-13.2% (seed),  
Ash 6.1%-23.5% (plant),  
Ash 8.1% (stem),

Beta-carotene 0%-0.0001% (seed),  
Beta-carotene 0.0149%-0.066% (plant),  
Beta-carotene 0.0312% (stem),  
Betaine 0.00018% (shoot),  
Betaine 0.0234% (root),  
Biotin 0.0000088%-0.0000902% (seed),  
Boron 0.0002%-0.0006% (seed),  
Caffeic Acid (seed),  
Calcium 0.016%-0.41% (seed),  
Calcium 0.072% (sprout/seedling),  
Calcium 0.08%-1.04% (plant),  
Calcium 1.1% (stem),  
Carbohydrates 26.5%-78.5% (plant),  
Carbohydrates 60.8%-86.8% (seed),  
Carbohydrates 80.1% (stem),  
Catechin (leaf),  
Cellulose,  
Cellulose 19%-32.2% (plant),  
Chlorogenic Acid (seed),  
Choline 0.0928%-0.1617% (seed),  
Chromium 0.0031% (stem),  
Cobalt 0.0049% (stem),  
Copper,  
Copper 0.0001%-0.002% (seed),  
Copper 0.0008% (sprout/seedling),  
Coumaric Acid (seed),  
Coumarin (plant),  
Cystine 0.1%-0.2% (seed),  
Fat 0.5%-5.5% (seed),  
Fat 1.9%-6.4% (plant),  
Fat 2.9% (stem),  
Ferulic Acid (plant),  
Ferulic Acid (seed),  
Fiber,  
Fiber 0.5%-15.1% (seed),  
Fiber 12.8%-44.6% (plant),  
Fiber 13.4% (stem),  
Folic Acid,  
Folic Acid 0%-0.000148% (seed),  
Fructose (seed),  
Glucose (seed),  
Glutamic Acid 3.2%-3.8% (seed),  
Gramine (leaf),  
Herniarin (plant),  
Hordenine 0.0063% (sprout/seedling),  
Hydroxycinnamic Acid (seed),  
Iron,

Iron 0.004%-0.01% (seed),  
Iron 0.01% (sprout/seedling),  
Iron 0.016% (stem),  
Jasmonic Acid (fruit),  
Leucocyanidin (leaf),  
Lignin 1.5%-7.7% (plant),  
Linoleic Acid 0.2185%-2.4035% (seed),  
Linolenic Acid 0.0022%-0.0242% (seed),  
Lutein (sprout/seedling),  
Magnesium 0.01%-0.23% (seed),  
Magnesium 0.167% (sprout/seedling),  
Magnesium 0.225% (stem),  
Maltose (seed),  
Manganese,  
Manganese 0.0002%-0.012% (seed)(2),  
Manganese 0.0026% (sprout/seedling),  
Manganese 0.006% (stem),  
Mannitol (root),  
Mercury 0.000007% (sprout/seedling),  
Methionine 0.1%-0.4% (seed),  
Minerals,  
Neoxanthin (plant),  
Niacin 0.0017%-0.0115% (seed),  
Niacin 0.0106% (stem),  
Oleic Acid 0.1325%-1.4575% (seed),  
Orientin (leaf),  
Palmitic Acid 0.037%-0.407% (seed),  
Palmitoleic Acid (leaf),  
Pantothenic Acid 0.0002%-0.0012% (seed),  
Pentosans 8.3%-23.9% (plant),  
Phosphorus 0.189%-0.92% (seed),  
Phosphorus 0.23%-0.69% (plant),  
Phosphorus 0.595% (stem),  
Phytin 1.2% (seed),  
Piperidine 0.0001% (seed),  
Potassium,  
Potassium 0.16%-0.99% (seed)(2),  
Potassium 0.613% (sprout/seedling),  
Potassium 1.988%-4.4% (plant),  
Potassium 2.5% (stem),  
Proline 0.0057%-0.0219% (root),  
Protein 2.5%-34.4% (plant),  
Protein 8.2%-21.2% (seed),  
Protein 8.9% (stem),  
Putrescine (sprout/seedling),  
Pyridoxine,  
Raffinose (seed),

Riboflavin,  
Scopoletin (plant),  
Selenium,  
Selenium 0.0024% (stem),  
Serine 0.5% (seed),  
Silicon 0.0034% (stem),  
Sinapic Acid (plant),  
Sitosterol (plant),  
Sodium 0.0256% (sprout/seedling),  
Sodium 0.224% (stem),  
Starch,  
Starch 62% (seed),  
Stearic Acid 0.013%-0.143% (seed),  
Stigmasterol (plant),  
Sulfur 0.02% (seed),  
Thiamin 0.0001%-0.001% (seed)(3),  
Thiamin 0.0013% (stem),  
Thiamine,  
Tin 0.0012% (stem),  
Tocopherols 0.0056%-0.0071% (seed),  
Trigonelline 0.0009% (seed),  
Tryptophan 0.1%-0.3% (seed),  
Tyramine (sprout/seedling),  
Tyramine 0.0026% (sprout/seedling)(2),  
Tyrosine 0.2%-0.6% (seed),  
Ubiquinone (sprout/seedling),  
Umbelliferone (sprout/seedling),  
Valine 0.6%-0.9% (seed),  
Vanillic Acid (fruit),  
Vitamin A,  
Vitamin B12,  
Vitamin B2 0.0001%-0.0009% (seed),  
Vitamin B2 0.0027%-0.0028% (stem),  
Vitamin B6 0%-0.0011% (seed),  
Vitamin C,  
Vitamin C 0% (seed),  
Vitamin C 0.33% (stem),  
Vitamin K,  
Vitamin K1 (leaf),  
Vitamins,  
Water 0.6%-17.8% (seed),  
Water 86% (stem),  
Water 88.3% (plant),  
Wax (leaf),  
Zinc 0.002% (sprout/seedling),  
Zinc 0.002%-0.003% (seed),  
Zinc 0.0021% (stem).

## **Basil**

BASIL is known by the following names: Ai Kang - China, Albahaca - Spain, Albahaca - Venezuela, Albahaca Clavo - Dominican Republic, Albahaquita - Dominican Republic, Basil, Basil - Europe, Basilic - Haiti, Basilicon - Greece, Basilique - Haiti, Bazalique - Haiti, Chahchabram - Algeria, Chiu Tseng Ta - China, Feslegen - Turkey, Hsiang Tsai - China, I Tzu Tsao - China, Labiatae Family, Lo Le - China, Me-boki, Myrica Sp., Myricaceae Family, Ocimum Basilicum, Ocimum Sp., Raihan Al Malik - Iraq, Raihana - Kurdistan, Rainan - Turkey, Tulsi and Tulsi Leaves.

BASIL is noted to contain the following constituents:

Acetic Acid (essential Oil),  
Aesculetin (leaf),  
Aesculin (leaf),  
Alanine 0.747% (leaf),  
Anethole,  
Anethole (plant),  
Anethole 0.0011%-0.0074% (plant)(2),  
Apigenin (plant),  
Arabinose (seed),  
Arginine 0.662% (leaf),  
Aspartic Acid 1.696% (leaf),  
Beta-carotene 0.0004%-0.0333% (leaf)(2),  
Bisabolol (essential Oil),  
Borneol (plant),  
Boron 0.0018%-0.0031% (plant),  
Cadinene (plant)(2),  
Caffeic Acid 1.9% (leaf),  
Calamene,  
Calcium 2.0148%-2.2112% (leaf)(2),  
Camphene 0%-0.04% (plant),  
Camphor,  
Camphor 0.0002%-0.0031% (plant)(2),  
Caproic Acid (essential Oil),  
Carbohydrate 7%-0.061% (leaf)(2),  
Carvone (plant),  
Caryophyllene 0%-0.0377% (plant)(2),  
Caryophyllene 0.0018%-0.3196% (plant),  
Cineole (plant),  
Cinnamic Acid 0.035%-0.7% (plant)(2),  
Citral 0.056%-0.7% (plant)(2),  
Citronellol 0.0003%-0.2419% (plant)(2),  
Copaene 0.002%,  
Copper 0.0014% (leaf),  
Coumaric Acid 0.076% (leaf),  
Cymene 0.0001%-0.0016% (plant),  
Cymene 0.0005%-0.0036% (plant)(2),

Cystine 0.159% (leaf),  
Elemol (essential Oil),  
Eriodictyol (leaf),  
Essential Oil,  
Essential Oil 0.15%-1% (plant),  
Estragol With Linalon,  
Estragole 0.0035%-0.9% (plant)(2),  
Eugenol 0.0013%-0.14%,  
Eugenol 0.0035%-0.8575% (leaf)(2),  
Farnesol,  
Fat 3.5752%-4.368% (leaf)(2),  
Fenchone,  
Fiber 14.579%-15.429% (leaf)(2),  
Furfural,  
Galactose (seed),  
Geraniol 0.0001%-0.1% (plant)(2),  
Glucose (seed),  
Glutamic Acid 1.565% (leaf),  
Hexenol,  
Histidine 0.287% (leaf),  
Humulene (essential Oil),  
Humulene 0.0047%-0.0313% (plant)(2),  
Iron 0.0362%-0.0478% (leaf)(2),  
Isoleucine 0.588% (leaf),  
Isoquercitrin (leaf),  
Kaempferol (leaf),  
Leucine 1.078% (leaf),  
Limonene 0.0002%-0.0934% (plant)(2),  
Limonene 0.003%-0.0933% (plant)(2),  
Linalool 0.0005%-0.873% (plant),  
Lineol,  
Linoleic Acid (seed),  
Linolenic Acid (seed),  
Luteolin (plant),  
Lysine 0.618% (leaf),  
Magnesium 0.41%-0.434% (leaf),  
Manganese 0.0032% (leaf),  
Mannose (seed),  
Menthol 0.0004%-0.0032% (plant)(2),  
Menthone 0.0001% (plant)(2),  
Methionine 0.202% (leaf),  
Mucilage 9.3% (seed)(2),  
Myrcene (plant),  
Myrcene 0.0002%-0.008% (leaf),  
Nerol 0.0015%-0.03% (plant)(2),  
Nerolidol (essential Oil),  
Niacin 0.0008%-0.0069% (leaf)(2),

Ocimene 0.0001%-0.0435% (plant),  
Ocimene 0.0003%-0.0252% (plant),  
Ocimene 0.0008%-0.0161% (plant)(2),  
Octanol,  
Oleanolic Acid 0.13% (flower),  
Oleic Acid (seed),  
Orientin (plant),  
Palmitic Acid (seed),  
Phellandrene (plant),  
Phosphorus 0.4632%-0.5168% (leaf)(2),  
Pinene 0.0002%-0.018% (plant)(2),  
Pinene 0.0003%-0.016% (plant)(2),  
Potassium 3.2321%-4.29% (leaf)(2),  
Proline 0.588% (leaf),  
Propionic Acid (essential Oil),  
Protein 11.855%-16.985% (leaf)(2),  
Quercetin (leaf),  
Quercetin -3-o-diglucoside (leaf),  
Rhamnose (seed),  
Rosmarinic Acid 0.1%-0.13% (plant)(2),  
Rosmarinic Acid 1.9% (shoot),  
Rutin (leaf),  
Safrole 0.006%-0.04% (plant)(2),  
Santalene (essential Oil),  
Serine 0.561% (leaf),  
Sitosterol 0.023% (sprout/seedling),  
Sitosterol 0.023% (stem),  
Sitosterol 0.0408% (root),  
Sitosterol 0.0896%-0.1705% (leaf),  
Sitosterol 0.1051% (flower),  
Sodium 0.0294%-0.0386%,  
Stearic Acid (seed),  
Stigmasterol (plant),  
Succinic Acid (plant),  
Tannin (tissue Culture),  
Terpinen-4-ol 0.0002%-0.012% (plant)(2),  
Terpinene 0.0001%-0.001% (plant),  
Terpineol 0.0036%-0.0239% (plant)(2),  
Thiamin 0.0001% (leaf),  
Threonine 0.588% (leaf),  
Thujone,  
Thymol 0.1415% (leaf),  
Tryptophan 0.221% (leaf),  
Tyrosine 0.432% (leaf),  
Ursolic Acid 0.0063% (sprout/seedling),  
Ursolic Acid 0.0413%-0.1143% (leaf),  
Ursolic Acid 0.0845% (stem),

Ursolic Acid 0.174% (flower),  
Valeric Acid (essential Oil),  
Valine 0.717% (leaf),  
Vitamin B2 0.0003%-0.0004% (leaf)(2),  
Vitamin C 0.0027%-0.0612% (leaf)(2),  
Xylose (seed),  
Zinc 0.0005%-0.0006% (leaf).

## **Basil Oil**

BASIL OIL is known by the following names: Basil Krishna - India, Basil Oil, Labiatae Family, Ocimum Basilicum, Ocimum Basilicum and Tulsi - India.

BASIL OIL is noted to contain the following constituents:

Estragol,  
Linalol,  
Ocimen.

## **Bay Leaves**

BAY LEAVES is known by the following names: Bay Leaves, Defne - Turkey, Gekkei-zyu, Lauraceae Family, Laurel - Spain, Laurel - United Kingdom, Lauri Baca - Europe and Laurus Nobilis.

BAY LEAVES is noted to contain the following constituents:

Acetate (leaf),  
Acetic Acid (leaf),  
Acetone (leaf),  
Bassorin,  
Benzaldehyde (leaf),  
Bisabolene,  
Bisabolene (leaf),  
Bitter Principle,  
Borneol (leaf),  
Bornyl-acetate,  
Boron 0.0009%-0.0016% (leaf),  
Cadinene (leaf),  
Calamene (leaf),  
Camphene 0.0024%-0.0186% (leaf),  
Camphor,  
Caproic Acid,  
Caprylic Acid,  
Carveol (leaf),  
Carvone (leaf),  
Caryophyllene (leaf),  
Caryophyllene 0.003%-0.018% (leaf),  
Cinnamic Acid (fruit),

Copaene,  
Copper 0.0004% (leaf),  
Cyanidin (plant),  
Cymene 0.0062%-0.034% (leaf),  
Essential Oil 1%-3% (leaf),  
Essential Oil 1%-4% (fruit),  
Eudesmol (leaf),  
Eugenol 0.0018%-0.1335% (leaf),  
Eugenol 0.0213%-0.2608% (leaf),  
Formic Acid (leaf),  
Geraniol (leaf) (fruit),  
Gum,  
Hexenol (leaf),  
Kaempferol (plant),  
Lauric Acid (fruit),  
Leucocyanidin (leaf),  
Limonene 0.008%-0.05% (leaf),  
Linalool 0.08%-0.334% (leaf),  
Linoleic Acid,  
Linolenic Acid,  
Manganese 0.0082% (leaf),  
Methanol (leaf),  
Myrcene 0.0033%-0.032% (leaf),  
Myrtenal (leaf),  
Myrtenol (leaf),  
Neral (leaf),  
Nerol (leaf),  
Neryl-acetate (leaf),  
Ocimene (leaf),  
Oleic Acid,  
Pelargonic Acid (leaf),  
Phellandral (leaf),  
Phellandrene (leaf),  
Phellandrene 0.001%-0.012% (leaf),  
Pinene 0.029%-0.208% (leaf),  
Pinene 0.038%-0.24% (leaf),  
Propionic Acid (leaf),  
Quercetin (leaf),  
Rutin (leaf),  
Terpinen-4-ol 0.0238%-0.138% (leaf),  
Terpinene 0.0023%-0.03% (leaf),  
Terpinene 0.0092%-0.0137% (leaf),  
Terpineol 0.016%-0.138% (leaf),  
Thujene 0.048%-0.06% (leaf),  
Valerianic Acid (leaf).

## **Bayberry**

BAYBERRY is known by the following names: Bayberry, Bayberry - United States, Bayberry Root Bark, Candle Berry Bark, Katphala, M Carolinensis, Mirika - Turkey, Mum Ag - Turkey, Myrica Cerifera, Myrica Sp., Myricaceae Family, Southern Wax Myrtle, Wax Myrtle and Wax Myrtle - United States.

BAYBERRY is noted to contain the following constituents:

Acid Resembling Saponin(2),  
Acrid And Astringent Resins,  
Albumen,  
Albumin,  
Aluminum 0.0151% (bark),  
Ash 12.7% (leaf),  
Ash 6% (bark),  
Beta-carotene Tr (bark),  
Calcium 1.12% (bark),  
Carbohydrates 74.3% (leaf),  
Carbohydrates 74.3% (seed),  
Carbohydrates 87% (bark)(2),  
Chromium 0.0015% (bark),  
Cobalt 0.0035% (bark),  
Essential Oil 0.2%-0.4% (plant),  
External Coating Of Wax,  
Extractive,  
Fat 0.8% (bark),  
Fat 13.3% (seed),  
Fat 2.2% (leaf),  
Fiber 11.1% (bark),  
Fiber 29.8% (leaf),  
Flavonoids,  
Gallic Acid,  
Gallic Acid (plant),  
Gum(3),  
Gum (plant),  
Iron 0.047% (bark),  
Kilocalories 0.229% (bark),  
Lauric Acid (plant),  
Lignin(2),  
Limonene (leaf),  
Linalool (leaf),  
Magnesium 0.049% (bark),  
Manganese 0.0064% (bark),  
Myricadiol,  
Myricinic Acid,  
Myricitrin (plant),  
Myristic Acid,  
Myristic Acid (fruit),  
Niacin 0.0028% (bark),

Palmitic Acid (fruit),  
Palmitin - Myricic Wax,  
Phenol (bark),  
Phosphorus Tr (bark),  
Pinene (leaf),  
Potassium 0.196% (bark),  
Protein 10.8% (leaf),  
Protein 4.9% (seed),  
Protein 6.2% (bark),  
Resin - Acrid Astringent,  
Resins - Acrid And Astringent,  
Selenium 0.0034% (bark),  
Silicon Tr (bark),  
Sodium 0.076% (bark),  
Starch(3),  
Starch (plant),  
Stearic Acid (fruit),  
Stearic Palmitic & Oleaic Acid,  
Strong Glycoside Myricitrin,  
Tannic Acid(2),  
Tannic Acid (plant),  
Tannic Acid And Gallic Acids,  
Tannin (bark),  
Taraerone,  
Taraxerol,  
Taraxerol (plant),  
Taraxerone (plant),  
Terpinene (leaf),  
Thiamin Tr (bark),  
Tin 0.0022% (bark),  
Vitamin B2 Tr (bark),  
Vitamin C 0.0656% (bark),  
Volatile Oil(2),  
Water 78.2% (bark),  
Wax 0.5%-1% (fruit),  
Wax = Glycerides,  
Waxy Alkaloid (strong Germicidal),  
Zinc Tr (bark).

## **Belladonna**

BELLADONNA is known by the following names: Atropa Belladonna, Belladonna - Spain, Belladonna Atropa, Belladonna, Deadly Nightshade and Solanaceae Family.

BELLADONNA is noted to contain the following constituents:

Aesculetin (plant),  
Alkaloids - Various,

Alkaloids 0.1%-1.2% (leaf),  
Alkaloids 0.4%-0.88% (root)(2),  
Asparagine (root),  
Atropine,  
Atropine (root),  
Choline (root),  
Flavonol Glycosides,  
Glycosides - Active Flavinol,  
Hyoscyamine,  
Hyoscyamine 0.2%-0.8712% (root),  
Hyoscyamine 0.308%-0.7656% (root),  
I-hyoscyamine,  
Nicotine (leaf),  
Pyridine (root),  
Scopalamine,  
Scopolamine (leaf) (root),  
Scopolamine 0.004%-0.0088% (root),  
Scopoletin (root),  
Starch (root),  
Succinic Acid (leaf),  
Tannin 12% (root),  
Triglycosides - A & B Flavinol,  
Tropine (root),  
Umbelliferone (root).

## **Benzoin**

BENZOIN is known by the following names: An Hsi Hsiang - China, An Hsi Yu - China, An Xi Xiang, Ansohyang - Korean, Ansokko-no-ki, Ansokuko - Japanese, Asilbent - Turkey, Benzoin, Benzoin - Asia, Benzoinum, Chu Pei Hsiang - China, Gum Benzoin - Malaya, Ngan Si Hsiang - China, S. Hypoglaurus Perk., S. Tonkinensis ( Pierre) Craib Ex., Shui An Hsi Hsiang - China, Styracaceae, Styrax Benzoin, Styrax Benzoin Dryandl and Styrax Tonkinensis.

BENZOIN is noted to contain the following constituents:

Benzaldehyde(2),  
Benzoic Acid(2),  
Cinnamic Acid(2),  
Cinnamyl Cinnamate(2),  
Coniferyl Cinnamates,  
Coniferyl Cinnamate,  
Lubanyl cinnamate,  
Phenylpropyl Cinnamate,  
Styracin(2),  
Styrene,  
Sumaresinolic Acid(2),  
Vanillin(2).

## **Berberis Aristata**

BERBERIS ARISTATA is known by the following names: Berberis Aristata, Coscinium Fenestratum, Dar Haldi - Bengali, Daru Haridra - Sanskrit, Darvi - Sanskrit, Indian Barberry, Kashmal - Hindi, Katankateri - Sanskrit, Menisperinaceae Family, Pita Daru - Sanskrit, Rasvat - Hindi and Tree Turmeric.

BERBERIS ARISTATA is noted to contain the following constituents:

Berberine,  
Saponin.

## **Bergamot Oil**

BERGAMOT OIL is known by the following names: Bergamot Oil, Citrus Bergamia and Rutaceae Family.

BERGAMOT OIL is noted to contain the following constituents:

Limonene,  
Linalol,  
Linalyl Acetate (35%-45%).

## **Betelnut**

BETELNUT is known by the following names: Areca Catechu L., Areca Peel, Areca Seeds, Arecae Catechu, Betel Husk, Betel Nut, Betelnut, Binroji - Japanese, Daifukuhi - Japanese, Palmae, Palmae Family, Pericarpium Arecae Catechu, Semen Arecae Catechu and Taebokp'i - Korean.

BETELNUT is noted to contain the following constituents:

Alkaloids 0.3%-0.6% (seed),  
Areca Red,  
Arecaidine,  
Arecolidine,  
Arecoline(2),  
Arecoline 0.1% (seed),  
Ash 1% (sprout/seedling),  
Ash 1.5% (seed),  
Beta-carotene 0 (seed),  
Calcium 0.006% (sprout/seedling),  
Calcium 0.05%-0.105% (seed)(2),  
Capric Acid (seed),  
Carbohydrates 47.2%-79.1% (seed)(2),  
Carbohydrates 9%-66.2% (sprout/seedling),  
Catechin,  
Catechin (seed),  
Cellulose 47.6% (hull/husk),  
Choline (seed),  
Copper 0.0015% (seed),  
Diosgenin (seed),

Fat 0.3%-2.3% (shoot),  
Fat 4.4%-18% (seed)(3),  
Fiber 15.9%-18.1% (seed),  
Gallic Acid (seed),  
Guvacine,  
Guvacoline,  
Homoarecoline,  
Iron 0.0015%-0.007% (seed)(2),  
Iron 0.002%-0.0147% (shoot),  
Lauric Acid 2.2%-9% (seed)(2),  
Linoleic Acid (seed),  
Magnesium 0.05% (seed),  
Manganese 0.0067% (seed),  
Mannan (seed),  
Mercury 0.000003% (seed),  
Mucilage (seed),  
Myristic Acid 0.924%-3.024% (seed)(2),  
Niacin 0.0006%-0.00068% (seed),  
Oleic Acid 1.276%-4.176% (seed)(2),  
Palmitoleic Acid (seed),  
Paracoline,  
Pararecoline,  
Phosphorus 0.063%-0.1892% (seed)(2),  
Phosphorus 0.089% (shoot),  
Potassium 0.446%-0.67% (seed)(2),  
Protein 3.3%-24.3% (sprout/seedling),  
Protein 4.9%-7.1325% (seed),  
Resin (seed),  
Sitosterol (seed),  
Sodium 0.0151%-0.0867% (seed)(2),  
Stearic Acid (seed),  
Sucrose (seed),  
Tannin 15%-25% (seed)(2),  
Thiamin 0.00017%-0.00019% (seed),  
Vitamin B2 0.00069%-0.00079% (seed),  
Vitamin C 0% (seed),  
Water 12.3%-31.3% (seed)(2),  
Water 86.4% (sprout/seedling),  
Zinc 0.0016% (seed).

## **Bhumyamalaki**

BHUMYAMALAKI is known by the following names: Bahupatra, Bhudhatri - Sanskrit, Bhuin Amala - Bengali, Bhumy Amalaki, Bhumyamalaki, Jaramla, P. Urinaria, Phyllanthe Niruri - French, Phyllanthus Niruri, Tamalaki - Sanskrit and Weisse Blatt-blume - German.

BHUMYAMALAKI is noted to contain the following constituents:

Phyllanthin.

## **Bilberry**

BILBERRY is known by the following names: Arandano - Spain, Bilberry, Blueberry - Europe, Cayuzumu - Turkey, Ericaceae Family, Huckleberry, Vacciniaceae Family, Vaccinium Myrtillus, Vaccinium Species, Vaccinium Myrtillus, Vaccinium Myrtillus - Vaccinium Sp. and Whortleberry.

BILBERRY is noted to contain the following constituents:

Acids - Various,  
Aluminum 0.0004%-0.0038% (fruit)(2),  
Anthocyanine - Myrtillin,  
Arbutin,  
Arbutin (leaf),  
Arbutin 0% (fruit),  
Arsenic <0.000001% (fruit),  
Ash 0.25%-2% (fruit)(2),  
Asperuloside (leaf),  
Astragalin (leaf) (fruit),  
Benzoic Acid (leaf),  
Beta-amyrin,  
Beta-carotene 0.000047%-0.0047% (fruit)(2),  
Blue Pigment,  
Boron 0.00006%-0.001% (fruit),  
Bromine <0.0001% (fruit),  
Cadmium 0.0000001%-0.000002% (fruit),  
Caffeic Acid (leaf),  
Calcium 0.017%-0.154% (fruit)(2),  
Caryophyllene (leaf),  
Catechin (leaf),  
Chlorogenic Acid (leaf),  
Chromium 0.000001%-0.000008% (fruit),  
Citric Acid (leaf),  
Cobalt <0.0000005% (fruit),  
Copper 0.00007%-0.00063% (fruit),  
Coumaric Acid (fruit),  
Cyanidin (fruit),  
Epicatechin (leaf),  
Epigallocatechin (leaf),  
Fat 31% (seed),  
Fatty Acids,  
Ferulic Acid (fruit),  
Fruit Acid - In The Fruit.,  
Gallic Acid (leaf),  
Glucoquinine - Lowers Blood Sugar,  
Hydroquinone,  
Hydroquinone (leaf),

Hyperoside (leaf) (fruit),  
Inositol (fruit),  
Iron 0.0004%-0.0056% (-1510) (fruit)(2),  
Iron 0.025% (leaf),  
Isoquercitrin (leaf),  
Lead 0.000004%-0.00007% (fruit),  
Lutein 0.00026%-0.0026% (fruit),  
Magnesium 0.0079%-0.07% (fruit),  
Malic Acid (leaf),  
Malvidin (fruit),  
Manganese 0.0023%-0.037% (fruit),  
Manganese 0.25% (leaf),  
Mercury <0.0000001% (fruit),  
Molybdenum <0.00001% (fruit),  
Myetillol,  
Myrtillin,  
Myrtillin (fruit),  
Myrtillin - Anthrocyanine,  
Neomyrtillin - A Glycoside,  
Niacin 0.0065% (fruit),  
Nonacosane,  
Oleanolic Acid,  
Oleanolic Acid (leaf),  
Oxalic Acid (leaf),  
Pectin,  
Pectin (fruit),  
Peonidin (leaf),  
Petunidin (fruit),  
Phosphorus 0.017%-0.1385% (fruit),  
Potassium 0.1%-0.846% (fruit),  
Protein 12.9% (fruit),  
Protocatechuic Acid (fruit),  
Quercetin (leaf),  
Quercetin -3-arabinoside (leaf),  
Quercetin -3-galactoside (leaf),  
Quercetin -3-glucoside (leaf),  
Quercetin -3-rhamnoside (leaf),  
Quercitrin (leaf),  
Quinic Acid 2%-5% (leaf),  
Quinnic Acid - Leaves,  
Rubidium 0.0005%-0.006% (fruit),  
Selenium <0.0000002% (fruit),  
Silicon 0.0005%-0.0038% (fruit),  
Sodium 0.005% (fruit),  
Succinic Acid (leaf),  
Sugar,  
Sugars,

Sulfur 0.013%-0.1075% (fruit),  
Tannin - 7%,  
Tannin - Little (leaves),  
Tannin 5%-12% (fruit),  
Tannin 6%-20% (leaf),  
Tannins,  
Thiamin 0.0007%-0.0008% (fruit),  
Ursolic Acid,  
Ursolic Acid (leaf),  
Ursolic Acid 0.25% (fruit),  
Vanillic Acid (fruit),  
Vitamin B2 0.0002%-0.0003% (fruit),  
Vitamin C,  
Vitamin C 0.0096%-0.165% (fruit)(2),  
Water 87%-93.2% (fruit)(2),  
Zinc 0.00014%-0.004% (fruit)(2).

## **Bilva**

BILVA is known by the following names: Aegle Marmelos, Bael, Bael Fruit, Bengal Quince, Bilva, Bilvadhi, Bilvam, Bilwa and Rutaceae Family.

BILVA is noted to contain the following constituents:  
Marelosin.

## **Birch Bark**

BIRCH BARK is known by the following names: Betula Alba, Betula Alba Or Lenta, Betulaceae Family, Birch Bark, Bouleau - France, Hua Mu - China, Husagaci - Turkey, Qayin Aghaji - Turkey, Qush Aghaji - Turkey and Shajarat Al Talmul - Iraq.

BIRCH BARK is noted to contain the following constituents:

Ash 7.7% (leaf),  
Bitter Principle,  
Carbohydrate 55.6% (leaf),  
Essential Oil - Traces,  
Essential Oil 0.23%-0.6% (bark),  
Essential Oil 4%-6% (bud),  
Fat 8.6% (leaf),  
Fiber 16.9% (leaf),  
Glycosides,  
Protein 28.1% (leaf),  
Salicylate 0.2231%-0.5988% (bark)(2),  
Saponins,  
Tannin.

## **Birch Oil**

BIRCH OIL is known by the following names: Betula Lenta, Betulaceae Family, Birch Oil and Tatli Husagaci - Turkey.

BIRCH OIL is noted to contain the following constituents:  
Methylsalicylate.

## **Bistort**

BISTORT is known by the following names: Bistort, Bistorta - Spain, Chuan Shen - China, English Serpentry - United States, Enjebar - Iraq, Ibuki-tora-no-o, Kurtpencesi - Turkey, Mou Meng - China, Mou Shen - China, Naterwurz - Germany, Polygonaceae Family, Polygonum Bistorta, Snakeroot - United States and Tzu Shen - China.

BISTORT is noted to contain the following constituents:  
Tannins.

## **Bitter Orange**

BITTER ORANGE is known by the following names: Bitter Orange, Fructus Citri Seu Ponciri Immatu and Rutaceae Family.

BITTER ORANGE is noted to contain the following constituents:

Acetic Acid (flower),  
Bergapten (fruit),  
Cadinene (leaf),  
Calcium 0.371%-0.423% (fruit),  
Camphene (leaf),  
Cinnamic Acid Fh (hull/husk),  
Citric Acid (fruit),  
Copper 0.0004%-0.001% (fruit),  
Coumarin (fruit),  
Dipentene (leaf),  
Essential Oil 0.1%-0.2% (flower),  
Essential Oil 0.3% (leaf),  
Essential Oil 0.7%-2.5% (fruit),  
Farnesol (leaf),  
Fat 44.86% (seed),  
Flavonoids,  
Formic Acid (fruit) (hull/husk),  
Furfurol (leaf),  
Geraniol (leaf),  
Hesperidin 0.07%-0.25% (fruit),  
Indol (flower),  
Iron 0.006%-0.026% (fruit),

Limonene (fruit),  
Limonene (leaf),  
Linalool (leaf),  
Lonicerin,  
Magnesium 0.08%-0.173% (fruit),  
Manganese 0.0008% (fruit),  
Myrcene (flower),  
Naringin,  
Naringin (fruit),  
Neohesperidin (fruit),  
Neohesperidine,  
Nerol (leaf),  
Nerolidol (leaf),  
Neryl-acetate (leaf),  
Nonanol (fruit) (hull/husk),  
Ocimene (leaf),  
Octanol (fruit) (hull/husk),  
Pelargonic Acid (fruit) (hull/husk),  
Phellandrene (fruit) (hull/husk),  
Pinene (leaf),  
Potassium 0.702%-1.38% (fruit),  
Pyrrol (leaf),  
Rhoifolin,  
Rhoifolin (plant),  
Sinensetin (fruit) (hull/husk),  
Sodium 0.0054%-0.0116% (fruit),  
Stachydrine (leaf),  
Stachydrine 0.1% (leaf),  
Tannin (fruit),  
Terpinene (fruit) (hull/husk),  
Umbelliferone (plant),  
Vitamin C,  
Vitamin C 0.3% (leaf),  
Zinc 0.0016% (fruit).

## **Bitterroot**

BITTERROOT is known by the following names: Bitterroot, *Lewisia Rediviva* and *Portulacaceae* Family.

BITTERROOT is noted to contain the following constituents:

Bitter Principle,  
Starch.

## **Bittersweet**

BITTERSWEET is known by the following names: Bittersweet, Bittersweet - Eurasia, Bittersweet - Europe, Chieh Chih - China, Dulcamara - Chile, Dulcamara - Spain, Enab Al Thalab - Iraq, Hab Al Alam - Iraq, Helwa Morrah - Iraq, Hundaebaer - Iceland, Ku Chieh - China, Maurella - Denmark, Nightshade Family, Pai Ying - China, Shu Yang Chuan - China, Solanaceae Family, Solanum Dulcamara, Solanum Dulcamera, Tre Marana - Kurdistan, Yaban Yasemini - Turkey and Zurukamara.

BITTERSWEET is noted to contain the following constituents:

Alkaloid - Solanine,  
Atropine (seed),  
Campesterol (leaf),  
Cholesterol (leaf),  
Cycloartenol (tissue Culture),  
Diosgenin (plant),  
Dulcamarin,  
Dulcamarine - Amorphous Glucoside,  
Galactose (plant),  
Glucose (plant),  
Glucoside - Dulcamarine - Amorphous,  
Glycoside,  
Gum,  
Lycopene (fruit),  
Resin,  
Rhamnose (plant),  
Saponin,  
Sitosterol (leaf),  
Solanine,  
Solasodin,  
Steroid - Precursor,  
Stigmasterol (leaf),  
Sugar,  
Xylose (plant),  
Yamogenin (plant).

## **Black Cohosh**

BLACK COHOSH is known by the following names: Actaea Cimicifuga, Actaea Racemosa, Actee A Grappes - French, American Baneberry - English, Amerikansk Slangerod - Danish, Black Cohosh, Black Cohosh - United States, Black Cohosh Root, Black Snake Root, Black Snakeroot, Black Snakeroot - English, Bugbane, Buttercup Family, Cimicifuga - French, Cimicifuga - Canada, Cimicifuga Europaea, Cimicifuga Foetida, Cimicifuga Racemosa, Cimicifuga, Macrotys Racemosa, Ranunculaceae Family, Rattle Root, Rattle Root - English, Rattle Weed, Sauco - Spanish, Sheng Ma Jou - China, Slangenwortel - Dutch, Squaw Root, Squaw Root, Squawroot - United States, Tahta Bitiotu - Turkey and Wanzenkraut - German.

BLACK COHOSH is noted to contain the following constituents:

Acetic Acid,  
Actaeine,  
Actein Cimigосide,

Albumin,  
Alkaloids,  
Aluminum 0.0226% (root),  
Beta-carotene 0.00024% (root),  
Bitter Principle - Racemosin,  
Butyric Acid,  
Calcium 0.597% (root),  
Carbohydrates 81.3% (root),  
Certain Alkaloids,  
Chromium 0.0018% (root),  
Cimicifugin(2),  
Cimicifugin (macrotin) - Active,  
Cimicifugin 15%-20% (root),  
Cobalt 0.0038% (root),  
Essential Oil 0.1%-0.4% (plant),  
Estrogen - Like Substances,  
Estrogen - Properties Of,  
Estrogenic Constituents,  
Estrogenic Principle,  
Estrogenic Substances,  
Fat 1.5% (root),  
Fat 32.6%-45.1% (seed),  
Fiber 11.9% (root),  
Formic Acid,  
Gallic Acid,  
Gallic Acid (plant),  
Glycosides,  
Gum,  
Hormone - Like Substances,  
Iron 0.038% (root),  
Isoferulic Acid(2),  
Isoferulic Acid (plant),  
Kilocalories 0.32% (root),  
Macrocin,  
Macrocin & Cimicifugin Resins,  
Magnesium 0.174% (root),  
Manganese 0.0014% (root),  
N-methycttisine - Alkaloid,  
Niacin 0.00315% (root),  
Oleic Acid(2),  
Palmitic Acid(2),  
Phosphorus 0.208% (root),  
Phytosterols,  
Potassium 1.03% (root),  
Protein 16.2%-23.8% (seed),  
Protein 8.2% (root),  
Racemosin(2),

Resin (root),  
Salicylic Acid(2),  
Salicylic Acid (plant),  
Salts Of Calcium,  
Salts Of Iron,  
Salts Of Magnesium,  
Salts Of Potassium,  
Selenium 0.0032% (root),  
Silica,  
Silicon 0.0027% (root),  
Starch,  
Starch (plant),  
Steroid Hormones,  
Tannic Acid,  
Tannic Acid And Gallic Acids,  
Tannin(2),  
Tannin (root),  
Tannins,  
Thiamin 0.0058% (root),  
Tin Tr (root),  
Traces Of Alkaloids,  
Triterpenes,  
Triterpine Glycosides,  
Vitamin B2 0.000065% (root),  
Vitamin C 0.0021% (root),  
Volatile Oil(2),  
Water 79%,  
Zinc Tr (root).

## **Black Currant**

BLACK CURRANT is known by the following names: Black Currant, Black Currant - Europe, Blackcurrant, Currant Family, Groseilles - Haiti, Grosellero - Spain, Grosellero Negro - Chile, Grossulariaceae, Ribes Nigrum, Ribes Rubrum, Saxifragaceae Family and Siyah Frenkuzumu - Turkey.

BLACK CURRANT is noted to contain the following constituents:

Acetate (fruit),  
Acetic Acid (fruit),  
Acetone (fruit),  
Alanine 0.0012% (fruit) (juice),  
Alanine 0.021% (fruit) (juice),  
Alpha-tocopherol 0.0022%-0.012% (fruit),  
Aluminum 0.0003%-0.0065% (fruit),  
Anthocyanins 1%-4% (fruit),  
Arginine 0.0035% (fruit) (juice),  
Arsenic 0.000001%-0.000006% (fruit),  
Ash 0.805%-6.11% (fruit)(2),

Asparagine 0.0087% (fruit) (juice),  
Aspartic Acid 0.0023% (fruit) (juice),  
Benzaldehyde (fruit),  
Benzoate (fruit),  
Beta-carotene 0.0001%-0.0008% (fruit),  
Black Pigment,  
Boron 0.0001%-0.0064% (fruit)(2),  
Bromine <0.0001% (fruit),  
Cadmium 0.0000001%-0.000001% (fruit),  
Caffeic Acid (fruit),  
Calcium 0.0502%-0.472% (fruit)(2),  
Camphene (fruit),  
Carbohydrates 15.38%-85.205% (fruit),  
Caryophyllene (11.9%) (fruit),  
Caryophyllene 0.0034% (leaf),  
Chlorogenic Acid (fruit),  
Chromium 0.000001%-0.000027% (fruit),  
Cinnamic Acid (fruit),  
Citric Acid 3.5% (fruit),  
Citronellol (fruit),  
Cobalt 0.0000002%-0.0000027% (fruit),  
Copper 0.00006%-0.0007% (fruit)(2),  
Coumaric Acid (fruit)(2),  
Cyanidin (plant),  
Cymene (fruit),  
Cymol 0.0003% (leaf),  
Emulsin (leaf),  
Enzyme Emulsion,  
Essential Oil - Traces,  
Essential Oil 0.02% (leaf)(2),  
Essential Oil 0.75% (bud),  
Fat 0.315%-2.7977% (fruit),  
Fat 25%-30.5% (seed)(2),  
Ferulic Acid (fruit),  
Fiber 2.4%-13.3% (fruit),  
Flavonoids 0.46% (leaf),  
Formic Acid (fruit),  
Fructose 3.67% (fruit),  
Geraniol (fruit),  
Geraniol 0.0012% (leaf),  
Glucose 2.35% (fruit),  
Glutamic Acid 0.021% (fruit) (juice),  
Glutamine 0.029% (fruit) (juice),  
Humulene (fruit),  
Humulene 0.0004% (leaf),  
Iron 0.0011%-0.0108% (fruit),  
Isoleucine 0.0028% (fruit) (juice),

Isoquercitrin (fruit),  
Kaempferol (fruit),  
Lead 0.000004%-0.00006% (fruit),  
Leucine 0.0028% (fruit) (juice),  
Limonene (fruit),  
Limonene 0.0007% (leaf),  
Linalool 0.0007% (leaf),  
Linoleic Acid 0.107%-0.5928% (fruit),  
Linolenic Acid 0.072%-0.3988% (fruit),  
Linolenic Acid 4.75%-5.795% (seed),  
Lutein 0.00044%-0.0022% (fruit),  
Magnesium 0.022%-0.172% (fruit)(2),  
Manganese 0.00005%-0.0027% (fruit)(2),  
Mercury 0%-0.000001% (fruit),  
Methanol (fruit),  
Molybdenum 0.00001%-0.00006% (fruit),  
Myrcene (leaf) (fruit),  
Myricetin (fruit),  
Niacin 0.0003%-0.0017% (fruit),  
Nickel 0.0000101% (fruit),  
Nitrogen 0.18%-1.2775% (fruit),  
Ocimene (fruit),  
Ocimene (leaf),  
Oleic Acid 0.056%-0.3102% (fruit),  
Oxalic Acid 0.02% (fruit),  
Palmitic Acid 0.02%-0.1108% (fruit),  
Palmitoleic Acid 0.007%-0.0388% (fruit),  
Pantothenic Acid 0.0004%-0.0022% (fruit),  
Pectin (fruit),  
Phellandrene (leaf) (fruit),  
Phosphorus 0.049%-0.35% (fruit)(2),  
Pinene (13%) (fruit),  
Pinene (13%) (fruit) (leaf),  
Potassium,  
Potassium 0.31%-2.111% (fruit)(2),  
Proline 0.0098% (fruit) (juice),  
Propanol (fruit),  
Protein 1.2%-8.864% (fruit),  
Protein 14.17% (leaf),  
Protocatechuic Acid (fruit),  
Quercetin (fruit),  
Quercetin -3-glucoside (fruit),  
Quercitrin (fruit),  
Quinic Acid (leaf),  
Rubidium 0.0001%-0.0028% (fruit),  
Rutin,  
Rutin (leaf) (fruit),

Salicylate (leaf) (fruit),  
Selenium <0.0000002% (fruit),  
Serine 0.006% (fruit) (juice),  
Silicon 0.001%-0.022% (fruit),  
Sodium 0.002%-0.0111% (fruit),  
Stearic Acid 0.007%-0.0388% (fruit),  
Sucrose 0.62% (fruit),  
Sugar 1.58%-10.64% (fruit),  
Sulfur 0.02%-0.1385% (fruit),  
Tannin(2),  
Tannin 8.5% (leaf),  
Terpinene (fruit),  
Terpineol (fruit),  
Thiamin 0.0001%-0.0003% (fruit),  
Threonine 0.0017% (fruit) (juice),  
Valine 0.017% (fruit) (juice),  
Vitamin B2 0.0001%-0.0003% (fruit),  
Vitamin B6 0.0001%-0.0004% (fruit),  
Vitamin C,  
Vitamin C - 2000 Mg Per Kilogram,  
Vitamin C - 500 Mg Per Liter,  
Vitamin C 0.12%-1.003% (fruit),  
Water 81.522%-82.4% (fruit),  
Zinc 0.0002%-0.0021% (fruit)(2).

## **Black Haw**

BLACK HAW is known by the following names: Amerikan Kartopu - Turkey, Amerikan Kurtbagri - Turkey, Black Haw, Black Haw - United States, Caprifoliaceae Family, Stag Bush - United States and Viburnum Prunifolium.

BLACK HAW is noted to contain the following constituents:

Acetic Acid (bark),  
Aesculetin (bark)(2),  
Aesculetine,  
Amentoflavone,  
Amentoflavone (bark),  
Arbutin,  
Arbutin (bark),  
Caprylic Acid (bark),  
Catechin (leaf),  
Chlorogenic Acid (bark),  
Citric Acid (root) (bark),  
Coumarins,  
Dextrin 0.5% (bark),  
Essential Oil 0.3% (bark),  
Formic Acid (bark),

Isovalerianic Acid (bark),  
Linoleic Acid (bark),  
Malic Acid (root) (bark),  
Myristic Acid (bark),  
Oleanolic Acid,  
Oleanolic Acid (bark),  
Oleic Acid (bark),  
Oxalic Acid (root) (bark),  
Palmitic Acid (bark),  
Pentosans 16% (bark),  
Protein 2.4% (bark),  
Resin (root) (bark),  
Saccharose 0.3% (bark),  
Salicin (bark)(2),  
Salicylic Acid (bark),  
Scopoletin (root) (bark)(2),  
Scopoletine,  
Scopolin (bark),  
Sitosterol (bark),  
Starch 5.5% (bark),  
Sterol,  
Tannin 2% (root) (bark),  
Ursolic Acid,  
Ursolic Acid (bark),  
Valeric Acid (root) (bark),  
Viburnin (bark).

## **Black Pepper**

BLACK PEPPER is known by the following names: Black Pepper, Black Pepper - India, Fructus Piperis Nigri, Hoch'o - Korean, Hu Chiao - China, Hu Jiao, Karabiber - Turkey, Kosho, Marich, Maricha - India, Pepper, Pepper - Asia, Pepper - India, Pepper - United Kingdom, Pepper - United States, Pepperblack - Uk - Wales, Pfeffer - Germany, Piper Nigrum, Piper Nigrum L., Piperaceae, Piperaceae Family, Wei Fu Chic - China and White Peppercorn - Malaya.

BLACK PEPPER is noted to contain the following constituents:

8-menthadien-1-ol,  
Amides - Hot Tasting,  
Aromatic Acids,  
Ash 4.2932%-6% (fruit)(2),  
Benzoic Acid (fruit),  
Beta-carotene 0.0000114%-0.0000128% Frt.,  
Bisabolene (fruit),  
Borneol (fruit),  
Boron 0.00005%-0.0018% (fruit),  
Cadinene (fruit)(2),  
Calamene (fruit),

Calamenene (fruit),  
Calcium 0.4286%-0.4989% (fruit),  
Camphene (fruit),  
Camphor (fruit),  
Carbohydrate 64.81% (fruit),  
Carvacrol (fruit),  
Carveol (fruit),  
Carvone (fruit),  
Caryophyllene (fruit),  
Caryophyllene Oxide,  
Chavicine,  
Chlorine 0.27%-0.51% (fruit),  
Chromium 0.0003%-0.00035% (fruit),  
Cinnamic Acid (fruit),  
Cis-p2-menthen-1-ol,  
Citral (fruit),  
Citronellal (fruit),  
Cobalt 0.00003%-0.00004% (fruit),  
Copaene (fruit),  
Copper 0.0009%-0.002% (fruit)(2),  
Cryptone,  
Cymene (fruit),  
Dihydrocarveol,  
Dihydrocarveol (fruit),  
Essential Oil,  
Essential Oil 1%-2.6% (fruit),  
Eugenol (fruit),  
Fat 3.094%-7.7% (fruit)(2),  
Fiber 13.0056%-14.8449% (fruit),  
Humulene (fruit),  
Iodine 0.000009% (fruit),  
Iron 0.0095%-0.0407% (fruit)(2),  
Kilocalories 0.255%-0.2856% (fruit),  
Lauric Acid 0.04%-0.0447% (fruit),  
Limonene (fruit),  
Linalool (fruit),  
Linoleic Acid 1.32%-1.475% (fruit),  
Linolenic Acid 0.22%-0.2458% (fruit),  
Magnesium 0.1809%-0.2319% (fruit),  
Manganese 0.0019%-0.0056% (fruit),  
Myrcene (fruit),  
Myristic Acid 0.07%-0.0782% (fruit),  
Myristicin (fruit),  
Myrtenal (fruit),  
Myrtenol (fruit),  
Nerolidol (fruit),  
Niacin 0.0009857%-0.0014541% (fruit),

Nickel 0.00007%-0.00024% (fruit),  
Nonadecane (fruit),  
Ocimene (fruit),  
Oleic Acid 1.37%-1.5309% (fruit),  
Oxalic Acid 0.4%-3.4% (fruit),  
Palmitic Acid 1.22%-1.3633% (fruit),  
Peperonal,  
Phellandrene,  
Phellandrene (fruit),  
Phosphorus 0.1638%-0.204% (fruit),  
Pinene (fruit),  
Piperanine,  
Piperidine,  
Piperidine (fruit),  
Piperine,  
Piperine - 5-9%,  
Piperine 1.7%-9% (fruit),  
Potassium 1.1718%-1.5077% (fruit),  
Protein 10.8386%-12.3888% (fruit),  
Resin 0.5% (fruit),  
Resins - Two Acrid Ones,  
Safrole (fruit),  
Santalene (fruit),  
Silica 0.075%-0.39% (fruit),  
Sodium 0.032%-0.0627% (fruit),  
Starch 28%-49% (fruit),  
Sulfur 0.175%-0.576% (fruit),  
Terpinen-4-ol (fruit),  
Terpinene (fruit),  
Terpineol (fruit)(2),  
Thiamin 0.0000712%-0.0001644% (fruit),  
Thujene (fruit),  
Trans Pinocarveol,  
Ubiquinone (fruit),  
Vitamin B2 0.0002276%-0.0002827% (fruit),  
Vitamin C 0.001% (fruit),  
Water 10.3109%-10.7091% (fruit),  
Zinc 0.00112%-0.00357% (fruit)(2).

## **Black Sesame Seeds**

BLACK SESAME SEEDS is known by the following names: Black Sesame Seeds, Goma - Japanese, Hukchima - Korean, Pedaliaceae, Pedaliaceae Family, Semen Sesami Indici Botanical and Sesami Indicum.

BLACK SESAME SEEDS is noted to contain the following constituents:

Arachic Acid,  
Calcium,

Calcium - Appreciable Amounts,  
Choline,  
Chorogenic Acid,  
Fatty Oil - Over 50%,  
Glycerol,  
Lecithin,  
Linoleic Acid,  
Linolein,  
Myristin,  
Oleic Acid,  
Olein,  
Oxylate Acid - 1%,  
Palmitic Acid,  
Palmitin,  
Sesamol,  
Sesamolin,  
Stearin,  
Vitamin A,  
Vitamin B,  
Vitamin E(2).

## **Black Walnut**

BLACK WALNUT is known by the following names: Black Walnut, Black Walnut Hulls, Juglandaceae, Juglans Nigra and Walnutblack - United States.

BLACK WALNUT is noted to contain the following constituents:

Aluminum 0.00029% (seed),  
Aluminum 0.0231% (fruit),  
Arsenic 0.000003% (seed),  
Ash 2.3%-2.4% (seed),  
Ash 2.9% (fruit),  
Barium 0.00087% (seed),  
Beta-carotene 0.00006% (fruit),  
Beta-carotene 0.0001%-0.0002% (seed),  
Boron 0.00047% (seed),  
Bromine 0.00025% (seed),  
Cadmium 0.000003% (seed),  
Calcium 0.0668% (seed),  
Calcium 0.309% (fruit),  
Carbohydrates 14.8%-15.3% (seed),  
Carbohydrates 82.1% (fruit),  
Cesium 0.00001% (seed),  
Chlorine 0.0054% (seed),  
Chromium 0.0001% (seed),  
Chromium 0.0009% (fruit),  
Cobalt 0.00003% (seed),

Cobalt 0.0036% (fruit),  
Copper 0.0019% (seed),  
Ellagic Acid,  
Ellagic Acid (fruit),  
Fat 5.2% (fruit),  
Fat 59.3%-61.2% (seed),  
Fiber 1.7%-1.8% (seed),  
Fiber 16.2% (fruit),  
Fixed Oils,  
Glycoside,  
Iodine,  
Iodine 0.00001% (seed),  
Iron 0.006%-0.0073% (seed)(2),  
Iron 0.0455% (fruit),  
Juglanic Acid,  
Juglone(2),  
Juglone (plant),  
Kilocalories 0.363% (fruit),  
Lanthanum 0.000003% (seed),  
Lead 0.00006% (seed),  
Magnesium 0.044% (fruit),  
Magnesium 0.1794% (seed),  
Magnesium Sulphate,  
Manganese 0.0023%-0.0024% (fruit),  
Manganese 0.003% (seed),  
Mercury 0.00001% (seed),  
Molybdenum 0.00004% (seed),  
Myricetin (fruit),  
Myricitrin (fruit),  
Niacin 0.0007% (fruit),  
Niacin 0.0007% (seed),  
Nickel 0.00048% (seed),  
Nucin,  
Organic Iodine,  
Phosphorus 0.107% (fruit),  
Phosphorus 0.57%-0.5882% (seed),  
Potassium 0.46%-0.5154% (seed)(2),  
Potassium 1.49% (fruit),  
Potassium Iodide,  
Potassium Sulphate,  
Protein 20.5%-21.2% (seed),  
Protein 9.8% (fruit),  
Resin,  
Rubidium 0.00093% (seed),  
Selenium 0.000002% (seed),  
Selenium 0.003% (fruit),  
Silicon 0.0022% (fruit),

Silicon 0.1387% (seed),  
Sodium 0.0003%-0.0031% (seed)(2),  
Sodium 0.013% (fruit),  
Strontium 0.00071% (seed),  
Styptic Acid,  
Sulfur 0.2652% (seed),  
Tannic Acid,  
Tannin 14.7% (fruit),  
Tannins - Large Amounts,  
Thiamin 0.0002% (fruit),  
Thiamin 0.0002% (seed),  
Tin 0.00017% (seed),  
Tin 0.0012% (fruit),  
Titanium 0.00029% (seed),  
Vanadium 0.000003% (seed),  
Vitamin B2 0.0001% (fruit),  
Vitamin B2 0.0001% (seed),  
Vitamin C 0% (fruit),  
Volatile Acid,  
Volatile Oil,  
Water 3.1% (seed),  
Water 87.6% (fruit),  
Wax,  
Zinc 0.0046% (seed),  
Zinc Tr (fruit).

## **Black Walnut Extract (Nw)**

BLACK WALNUT EXTRACT (NW) is known by the following names: Black Walnut Extract ( Nw) and Bw-t Extract ( Np).

BLACK WALNUT EXTRACT (NW) is noted to contain the following constituents:

Alcohol,  
Black Walnut Hulls,  
Distilled Water,  
Vegetable Glycerine.

## **Blackberry**

BLACKBERRY is known by the following names: Blackberry, Raspberry - Berries, Rosaceae Family, Rubus Fruticosus, Rubus Sp., Rubus Species, Rubus Villosus and Thimbleberries - Similar.

BLACKBERRY is noted to contain the following constituents:

Albumin - Fruit,  
Arbutin (leaf),  
Boron 0.00001%-0.0021% (fruit),

Chlorogenic Acid (fruit),  
Citric Acid - Fruit,  
Ferulic Acid (fruit),  
Hydroquinone (leaf),  
Inositol (leaf),  
Lactic Acid (leaf),  
Malic Acid (leaf),  
Malic Acid - Fruit,  
Oxalic Acid (leaf),  
Pectin - Fruit,  
Sitosterol (plant),  
Stigmasterol (plant),  
Succinic Acid (leaf),  
Tannin (leaf),  
Tannins - High,  
Ursolic Acid (plant),  
Vitamin C (leaf).

## **Blackthorn**

BLACKTHORN is known by the following names: Almond - Kentucky, Blackthorn, Blackthorn Sloe - Europe, Cacapolton - Mexico, Cakalerigi - Turkey, Endrino - Spain, Jui Ho - China, Pai Sui - China, Prunus Spinosa and Sloethorn - United Kingdom.

BLACKTHORN is noted to contain the following constituents:

Amygdalin (flower),  
Amygdalin (seed),  
Caffeic Acid (plant),  
Cyanidin (plant),  
Emulsin (seed),  
Ferulic Acid (plant),  
Hyperoside (flower),  
Kaempferol (flower),  
Pectin (fruit),  
Quercetin (flower),  
Quercitrin (flower),  
Rutin (flower),  
Sitosterol (fruit),  
Tannin (fruit).

## **Blessed Thistle**

BLESSED THISTLE is known by the following names: Ash Sherka Al Mubaraka - Iraq, Blessed Thistle, Blessed Thistle - South Africa, Blessed Thistle - United Kingdom, Carbenia Benedicta, Cardin, Cardo Santo - Italy, Cardo Santo - Spain, Carduus, Carduus Benedictus, Chardon Beni - France, Cnicus Benedictus, Compositae, Compositae Family, Derga Peroza - Kurdistan, Herba Cardui Benedicti - Latin Name, Holy

Thistle, Holythistle, Mubarek Diken - Turkey, Old Lady's, St Benedict Thistle, St. Benedict's Thistle, Thistle, Wrongly - Milk Thistle and Wrongly - Sylbum Marianum.

BLESSED THISTLE is noted to contain the following constituents:

Active Prin. Cnicin(like Salicin),  
Albumin,  
Aluminum 0.0085% (plant),  
Arctigenin (plant),  
Arctiin (seed),  
Ash 13.3% (plant),  
Ash 4.1% (seed),  
Benzoic Acid (plant),  
Beta-carotene 0.00133% (plant),  
Calcium 1.12% (plant),  
Carbohydrates 76% (plant),  
Chromium 0.0016% (plant),  
Cinnamaldehyde (plant),  
Citral (essential Oil),  
Cnicin (plant),  
Cnicin - A Bitter Crystalline Body,  
Cnicin - Bitter,  
Cnicine - Bitter Principle,  
Cobalt 0.0038% (plant),  
Cymene (essential Oil),  
Essential Oil - Trace,  
Essential Oil 0.3% (plant),  
Fat 1.1% (plant),  
Fat 25.8%-27.1% (seed),  
Fenchone (plant),  
Ferulic Acid (plant),  
Fiber 9.8% (plant),  
Fixed Oil,  
Flavonoids =silymarine In Milk Thistle,  
Gum,  
Histamine In Milk Thistle,  
Iron 0.024% (plant),  
Kilocalories 0.252% (plant),  
Labiatic Acid (plant),  
Linoleic Acid 5.616%-6.552% (seed),  
Lithospermic Acid (fruit),  
Luteolin (plant),  
Magnesium 0.177% (plant),  
Manganese 0.0021% (plant),  
Mucilage,  
Mucilage 12%-20% (plant),  
Niacin 0.00031% (plant),  
Oleanolic Acid (plant),

Oleic Acid 15.984%-18.648% (seed),  
Phosphorus 0.27% (plant),  
Potassium 2.6% (plant),  
Protein 13.8%-17.5% (seed),  
Protein 9.6% (plant),  
Resin,  
Salicin-like Compound (for Pain),  
Salts,  
Selenium 0.0034% (plant),  
Sesquiterpene Lactone,  
Sesquiterpenoid Lactone,  
Silicon Tr (plant),  
Sitosterol (plant),  
Sodium 0.122% (plant),  
Sterol (plant),  
Stigmasterol (plant),  
Sugar,  
Tannin,  
Tannin 8% (plant),  
Terpenoids,  
Thiamin 0.00027% (plant),  
Thyramine In Milk Thistle,  
Tin 0.0025% (plant),  
Vitamin B2 0.00021% (plant),  
Vitamin C 0.003% (plant),  
Volatile Oil(2),  
Volatile Oil - Little,  
Water 86.7% (plant),  
Zinc Tr (plant).

## **Bloodroot**

BLOODROOT is known by the following names: Bloodroot, Bloodroot - Canada, Bloodroot - United States, Kanotu - Turkey, Papaveraceae Family and Sanguinaria Canadensis.

BLOODROOT is noted to contain the following constituents:

Alkaloids,  
Alkaloids 1.8%-7% (root),  
Berberine,  
Berberine (root),  
Chelerythrine(2),  
Chelidonine,  
Coptisine (root),  
Malic Acid,  
Protopine (root),  
Resin,  
Sanguinarine,

Sanguinarine 0.6%-6% (root),  
Starch.

## **Blue Cohosh**

BLUE COHOSH is known by the following names: Aslankulagi - Turkey, Berberidaceae Family, Black Cohosh Rhizome, Blue Or Yellow Ginseng, Blue Cohosh, Blue Cohosh - United States, Blue Cohosh Root, Blueberry, Bugbane Rhizome, C. Dahurica, C. Heracleifolia Kom., Caulophyllum Thalictroides, Caulophyllum Thalictroides, Cimicifuga, Cimicifugafoetida L., Leontice Thalictroides, Papoose Root, Ranunculaceae, Rhizoma Cimicifugae, Shoma - Japanese, Squaw Root and Sungma - Korean.

BLUE COHOSH is noted to contain the following constituents:

25-o-methyliso-dahurinaol,  
Alkaloid,  
Aluminum 0.0762% (root),  
Ash 14.6% (root),  
Beta-carotene 0.0024% (root),  
Caffeic Acid,  
Caffeine,  
Calcium,  
Calcium 0.389% (root),  
Calcium Phosphate And Sulphate,  
Calcium Salts,  
Caulophylline,  
Caulophyllum,  
Caulosaponin - Saponin,  
Cerotinic Acid (root),  
Chromium 0.0012% (root),  
Cimicifugine,  
Cimigenol,  
Cimigenolxyloside,  
Citrullol,  
Cobalt 0.0036% (root),  
Dahurinol,  
Dehydroxydahurinol,  
Essential Oil (root),  
Fat 0.6% (root),  
Ferulic Acid,  
Fiber 11.2% (root),  
Gum(2),  
Iron,  
Iron 0.164% (root),  
Iron Salts(2),  
Isodahurinol,  
Isoferulic Acid,  
Kilocalories 0.295% (root),  
Leontin(2),

Leontin (root),  
Magnesium(3),  
Magnesium 0.13% (root),  
Magnoflorine (root),  
Manganese 0.0237% (root),  
Methylcytisine,  
Niacin 0.0013% (root),  
Phosphoric Acid(3),  
Phosphorus(2),  
Phosphorus 0.13% (root),  
Phytosteroids,  
Potash Salts(2),  
Potassium(2),  
Potassium 0.725% (root),  
Protein 10.3% (root),  
Resin (root),  
Resin - Soluble,  
Salicylic Acid,  
Salts,  
Saponin - Similar Substance,  
Saponin -like Substance,  
Saponin 0.1% (root),  
Selenium 0.0035% (root),  
Silica Salts(2),  
Silicon,  
Silicon 0.0063% (root),  
Sitosterol,  
Sodium,  
Sodium 0.0029% (root),  
Soluable Resin,  
Starch(2),  
Tannin [c. Foetida],  
Thiamin 0.00093% (root),  
Tin 0.0021% (root),  
Visamminol [c.dahurica],  
Visnagin,  
Vitamin B2 0.0008% (root),  
Vitamin C 0.0051%-0.0052% (root),  
Water 78.3% (root),  
Zinc Tr (root).

## **Blue Flag**

BLUE FLAG is known by the following names: Amerikan Suseni - Turkey, Blue Flag, Flag - United States, Iridaceae Family, Iridace Family, Iridaceae Family, Iris and Iris Versicolor.

BLUE FLAG is noted to contain the following constituents:

Alkaloid,  
Alpha-phytosterol,  
Camphoraceous Substance,  
Furfural (rhizome),  
Furfurol (rhizome),  
Gum(2),  
Gum (rhizome),  
Heptacosan,  
Ipuranol,  
Iridin (rhizome),  
Iridin - Sometime Called Irisin,  
Isophthalic Acid(2),  
Isophthalic Acid (rhizome),  
Lauric Acid (rhizome),  
Myricyl Alcohol,  
Oil,  
Oleoresin - Main Active Ingredient,  
Palmitic Acid (rhizome),  
Polysaccharide,  
Resin (rhizome),  
Resinous Matter - 25% Acrid,  
Salicylic Acid,  
Salicylic Acid (rhizome),  
Salicylic Acid - Traces,  
Starch,  
Starch (rhizome),  
Stearic Acid (rhizome),  
Sugar,  
Tannin(2),  
Tannin (rhizome),  
Volatile Oil.

## **Blue Vervain Liquid Herb**

BLUE VERVAIN LIQUID HERB is known by the following names: Blue Vervain Liquid Herb.

BLUE VERVAIN LIQUID HERB is noted to contain the following constituents:

Blue Vervain,  
Glycerine.

## **Bogbean**

BOGBEAN is known by the following names: Bogbean, Buckbean, Cho Tsai - China, Folia Trifolii Fibrinae, Gentianaceae Family, Marsh Buckbean - Europe, Marsh Trefoil, Menyanthe - France, Menyanthes Trifoliata, Ming Tsai - China, Mitu-gasiwa, Nd - Scandinavia, Shui Tsai - China, Suyoncasi - Turkey, Trebol De Agua - Spain, Trefle - France, Trefoilbean - Washington Dc and Tsui Tsao - China.

BOGBEAN is noted to contain the following constituents:

Beta-carotene (leaf),  
Bitter Glycosides,  
Caffeic Acid (leaf),  
Chlorogenic Acid (leaf),  
Choline (leaf),  
Essential Oil 0.067%-0.07% (leaf)(2),  
Ferulic Acid (leaf),  
Folic Acid (leaf),  
Hyperin (leaf),  
Hyperoside (plant),  
Inulin (root),  
Lupeol (root),  
Pectin (root),  
Pentosans (root),  
Protocatechuic Acid (leaf),  
Quercetin -3-galactoside (plant),  
Rutin (leaf),  
Saponin (leaf),  
Scopoletin (plant),  
Sinapic Acid (plant),  
Spinasterol (root),  
Tannin - 7%,  
Tannin 3% (plant),  
Vanillic Acid (plant),  
Vitamin C 0.2047% (leaf)(2).

## **Boldo**

BOLDO is known by the following names: Boldo, Boldo - Turkey, Monimiaceae Family and Peumus Boldus.

BOLDO is noted to contain the following constituents:

Alkaloid - Ascaridol,  
Alkaloids 0.25%-0.7%,  
Ascaridol Alkaloids,  
Benzaldehyde 0.0001% (leaf),  
Bornyl-acetate 0.004%-0.005% (leaf),  
Camphene 0.012%-0.015% (leaf),  
Camphor 0.012%-0.015% (leaf),  
Choline (leaf),  
Coumarin 0.01%-0.0125% (leaf),  
Cymene 0.715% (leaf),  
Cymol 0.6%-0.75% (leaf),  
Essential Oil,  
Essential Oil 2%-2.5% (leaf)(2),  
Eugenol (leaf),

Eugenol 0.01%-0.0125% (leaf),  
Farnesol 0.008%-0.01% (leaf),  
Fenchol 0.0034%-0.0043% (leaf),  
Fenchone 0.016%-0.02% (leaf),  
Flavonoids,  
Gum,  
Limonene 0.032%-0.04% (leaf),  
Linalool 0.34%-0.43% (leaf),  
Myrtenal (flower),  
Pinene 0.016%-0.02% (leaf),  
Pinene 0.08%-0.1% (leaf),  
Resin,  
Sparteine (leaf),  
Tannin (leaf),  
Terpinen-4-ol 0.052%-0.065% (leaf),  
Terpinene 0.02%-0.025% (leaf),  
Terpineol 0.018%-0.0225% (leaf).

## **Boneset**

BONESET is known by the following names: Boneset, Compositae Family, Eupatorium Fortunei, Eupatorium Perfoliatum, Herba Eupatorii, Japonicum, Peilan and Sister-in-law's Orchid.

BONESET is noted to contain the following constituents:

Astragalin (plant),  
Eupatorin,  
Gallic Acid(2),  
Glucosidal Tannin,  
Gum,  
Hyperoside (plant),  
Kaempferol (plant),  
Quercetin (plant),  
Resin,  
Rutin (plant),  
Tannic Acid,  
Volatile Oil.

## **Borage**

BORAGE is known by the following names: Borage, Boraginaceae Family, Borago Officinalis, Borraja - Chile, Borraja - Dominican Republic, Borraja - Spain, Bourrache - Haiti, Fleurs De Bourrache - Haiti, Hodan - Turkey and Ruri-zisa.

BORAGE is noted to contain the following constituents:

Acetic Acid,  
Alkaloids 0.0002%-0.0098%,

Allantoin (sprout/seedling),  
Arabinose (plant),  
Beta-carotene 0.0025%-0.036% (leaf),  
Calcium 0.093%-0.5005% (leaf),  
Carbohydrates 3.06%-43.758% (leaf),  
Choline (leaf),  
Cobalt,  
Essential Oil - Traces,  
Fat 0.7%-10% (leaf),  
Fat 38.3% (seed),  
Fiber 0.92%-13.156% (leaf),  
Galactose (plant),  
Glucose (plant),  
Hydroxyproline (seed),  
Iron 0.0033%-0.0472% (leaf),  
Lactic Acid,  
Linolenic Acid (seed),  
Magnesium 0.052%-0.7436% (leaf),  
Malic Acid,  
Mucilage,  
Mucilage 30% (plant),  
Niacin 0.0009%-0.0129% (leaf),  
Phosphorus 0.053%-0.7579% (leaf),  
Potassium 0.47%-6.721% (leaf),  
Protein 1.8%-25.74% (leaf),  
Protein 20.9% (seed),  
Resin,  
Rosmarinic Acid 0.05%-0.7% (plant),  
Silicic Acid 1.5%-2.2% (plant),  
Sodium 0.08%-1.144%,  
Tannin,  
Tannin 3% (plant),  
Thiamin 0.0001%-0.0009% (leaf),  
Vitamin B2 0.0001%-0.0021% (leaf),  
Vitamin C 0.003%-0.5005% (leaf)(2),  
Water 0%-93% (herb),  
Zinc.

## **Borneol Oil**

BORNEOL OIL is known by the following names: Balsamifera Dc., Borneo Camphor, Borneol, Borneol Oil, Dryobalanops Aromatica Gaertn., Dryobalanops Camphora, Dypterocarpaceae (Dryobalanops), Pingp'yon - Korean and Ryuno - Japanese.

BORNEOL OIL is noted to contain the following constituents:

Alcohol,  
Borneol,

Cineole.

## **Brahmi Bati**

BRAHMI BATI is known by the following names: Brahmi Bati and Gotu Kola Compound Tablet.

BRAHMI BATI is noted to contain the following constituents:

Black Pepper,  
Calamus,  
Gotu Kola,  
Often With Various Minerals,  
Shankhapushpi.

## **Brucea Javanica**

BRUCEA JAVANICA is known by the following names: Adancha - Korean, Atanshi - Japanese, Brucea, Brucea Javanica ( L.) Merr., Brucea Javanica, Fructus Bruceae Javanicae, Java Brucea Fruit, Simarubaceae and Simarubaceae Family.

BRUCEA JAVANICA is noted to contain the following constituents:

Alkaloid,  
Brucamarin,  
Brucamarine,  
Brucealin,  
Bruceine,  
Brucenol,  
Bruceolic Acid,  
Brusatol,  
Dosamine,  
Formic Acid,  
Glycoside,  
Quassin,  
Yatanine,  
Yatanoside.

## **Buchu**

BUCHU is known by the following names: Barosma Betulina, Bucco - Dutch, Buchu, Buchu - French, Buchu - Spanish, Buchu - United States, Bukko - German, Buko - Portuguese, Diosma - Italian, Diosme - French, Gotterstrauch - German and Rutaceae Family.

BUCHU is noted to contain the following constituents:

Aluminum 0.136% (leaf),  
Ash 8.1% (leaf),  
Barosma Camphor(2),  
Calcium 3.88% (leaf),

Camphene (leaf),  
Chromium 0.0029% (leaf),  
Cobalt 0.0087% (leaf),  
Cymol (essential Oil),  
Diasmin - A Glycoside,  
Diosmin 0.02%-0.05% (leaf),  
Diosphenal - Barosma Camphor,  
Dipentene (essential Oil),  
Enthone,  
Essential Oil,  
Essential Oil 1.5%-3.5% (leaf)(2),  
Flavonoids,  
Hesperidin 1%-3.4% (leaf),  
Iron 0.0867% (leaf),  
Magnesium 0.221% (leaf),  
Manganese 0.0675% (leaf),  
Menthone (essential Oil),  
Mucilage,  
Mucilage (leaf),  
Myrcene (leaf),  
Niacin 0.0042% (leaf),  
Phosphorus 0.678% (leaf),  
Pinene (leaf),  
Potassium 1.17% (leaf),  
Protein 9.2% (leaf),  
Quercetin (plant),  
Resin,  
Resin 5% (leaf),  
Rutin (essential Oil),  
Selenium 0.007% (leaf),  
Silicon 0.0043% (leaf),  
Sodium 0.276% (leaf),  
Terpinene (leaf),  
Thiamin 0.0007%-0.0019% (leaf)(2),  
Tin 0.0011% (leaf),  
Vitamin B2 0.00011% (leaf),  
Vitamin C 0.49% (leaf),  
Volatile Oil,  
Zinc 0.0084% (leaf).

## **Buckthorne Bark**

BUCKTHORNE BARK is known by the following names: Akdiken - Turkey, Buckthorn, Buckthorn - Europe, Buckthorne Bark, Espino Cerval - Spain, Purging Buckthorn - Europe, Ramunuszyutu-no-ki, Rhamnaceae, Rhamnaceae Family, Rhamnus Cathartica, Rhamnus Catharticus, Rhamnus Frangula and Tufty Thorn - United Kingdom.

BUCKTHORNE BARK is noted to contain the following constituents:

Aloin,  
Amygdalin,  
Anthraquinones 3%-7% (bark),  
Anthrone (bark),  
Anthroquinone Glycoside - High Emodin,  
Arachidic Acid,  
Barbaloin (bark),  
Beta-carotene (fruit),  
Catechin,  
Chrysophanol (bark),  
Emodin (bark),  
Glycosides - Various,  
Kaempferol (seed),  
Physcion (bark),  
Rhamnicoside - In Bark,  
Rhamnoemodine,  
Shesterine - In Fruits,  
Tannin (bark),  
Tocopherol 0.02% (fruit).

## **Bugleweed**

BUGLEWEED is known by the following names: Bugleweed, Bugleweed - United States, Farasyon Maiy - Iraq, Gipsywort - European Variety, Herba Lycopi Lucidi, L. Iucidus Var. Taiwanensis Hayata, L. Parviflorus, Labiatae, Labiatae Family, Labiate Family, Lycopus Europaeus - European Variety, Lycopus Lucidus Turcz., Lycopus Virginicus, Menta De Lobo - Spain, Su Ferasyunu - Turkey, T'aekuan - Korean, Takuran - Japanese and Virginian Water Horehound.

BUGLEWEED is noted to contain the following constituents:

Cadinene 0.0016%-0.004% (plant),  
Caffeic Acid (plant),  
Camphene 0.0003%-0.0008% (plant),  
Caryophyllene 0.003%-0.008% (plant),  
Chlorogenic Acid (plant),  
Ellagic Acid (plant),  
Essential Oil - Traces,  
Essential Oil 0.08%-0.2% (plant),  
Flavones,  
Gallic Acid (plant),  
Glycosides,  
Iycopose,  
Limonene 0.001%-0.0026% (plant),  
Linalool 0.002%-0.005% (plant),  
Lithospermic Acid,  
Lithospermic Acid (plant),  
Myrcene 0.0006%-0.0014% (plant),

Phenolic Substances,  
Pinene 0.0199%-0.0498% (plant),  
Pinene 0.0266%-0.0666% (plant),  
Pulegone 0.001%-0.0024% (plant),  
Raffinose,  
Rosmarinic Acid (plant),  
Saponins,  
Tannic Acid (plant),  
Tannin(2).

## **Bupleurum Root**

BUPLEURUM ROOT is known by the following names: Aefolium Wild., B. Scorzonera, Bupleurum, Bupleurum Chinense D.c., Bupleurum Falcatum, Bupleurum Root, Chai Hu - China, Hare's Ear Root, Misima-saiko - Japan, Radix Bupleuri, Saiko - Japanese, Siho - Korean, Thorowax Root, Tzu Hu - China, Umbelliferae and Umbelliferae Family.

BUPLEURUM ROOT is noted to contain the following constituents:

Adonitol,  
Arsenic 0.000068% (root),  
Bupleurumol(2),  
Calcium 0.715%-3.21% (root),  
Copper 0.0013%-0.0016% (root)(2),  
Daikogenin,  
Furfurol,  
Iron 0.073%-0.12% (root)(2),  
Isoquercetin,  
Isorhamnetin,  
Lignoceric Acid,  
Linoleic Acid (root),  
Linolenic Acid,  
Linolenic Acid (root),  
Longispinogenin,  
Magnesium 0.221%-0.339% (root)(2),  
Manganese 0.0052%-0.0114% (root)(2),  
Mercury 0.000014% (root),  
Narcissin [b. Scorzonefaefoli],  
Oleic Acid,  
Oleic Acid (root),  
Palmitic Acid,  
Potassium 0.843%-1.92% (root)(2),  
Quercetin,  
Rutin,  
Rutin [b. Chinensis],  
Saikosaponin,  
Sodium 0.0213%-0.0428% (root)(2),  
Spinasterol,

Spinasterol (root),  
Stearic Acid,  
Sterol,  
Stigmasterol (root),  
Zinc 0.0036%-0.0037% (root)(2).

## **Burdock Root**

BURDOCK ROOT is known by the following names: Arctium Lappa, Arctium Minus - Also Used, Arctium Tomentosum, Arctum Lappa, Arctum Minimus, Arqityon - Iraq, Asteracea, Bardana - Chile, Bardana - Italian, Bardana - Spain, Beggar's Buttons, Burdock, Burdock - India, Burdock - Potawatomi, Burdock Blood - Canada, Burdock Root, Burr Seed, Clotbur, Cocklebur, Compositae Family, Daisy Family, Dulavratotu - Turkey, Gobo - China, Gobo - Chinese, Gobo - Japan, Greater Burdock, Hardock, Kewe - Belgium, Kleine Klette - German, Lamparo - Spanish, Lampazo Mayor - Spain, Lampazo Menor - Spain, Lappa Major, Lappa Minor, Niu Bang - Chinese, Niu Pang Chiu - China, Niu Pang Tzu - China, Niu Tsai - China, Radix Bardanae, Shu Nien - China, Small Burdock - English, Ta Li Tzu - China, Turkey Burseed, Waisar - Kurdistan and Wu Shih - China.

BURDOCK ROOT is noted to contain the following constituents:

Acetic Acid (plant),  
Alanine 0.025%-0.125% (root),  
Alkaloid,  
Aluminum 0.0231% (root),  
Antibiotic Substances,  
Arctic Acid,  
Arctigenin (plant),  
Arctiin (plant),  
Arctiin - A Bitter Glycoside,  
Arginine 0.105%-0.525% (root),  
Ash 3.4% (root),  
Aspartic Acid 0.177%-0.885% (root),  
Beta-carotene 0.00045% (root),  
Bitter Glycosides,  
Bitter Substance,  
Caffeic Acid 0.25% (root),  
Calcium,  
Calcium 0.041%-0.851% (root)(3),  
Carbohydrates 17.35%-87.015% (root)(2),  
Chlorogenic Acid (root),  
Chromium 0.002% (root),  
Cobalt 0.012% (root),  
Copper 0.0029% (root),  
Cystine 0.006%-0.03% (root),  
Essential Oil,  
Essential Oil 0.06%-0.18%,  
Eudesmol (leaf),  
Fat 0.15%-0.8% (root)(3),

Fiber 1.94%-9.7% (root)(2),  
Fixed And Volatile Oils(3),  
Flavonoid Glycosides,  
Glutamic Acid 0.157%-0.785% (root),  
Histidine 0.031%-0.155% (root),  
Insulin,  
Inulin(6),  
Inulin (27-45%),  
Inulin - A Polysaccharide,  
Inulin - Nearly 45%,  
Inulin 19%-50% (root)(2),  
Iron(4),  
Iron 0.0008%-0.147% (root)(4),  
Isoleucine 0.03%-0.15% (root),  
Isovaleric Acid (plant),  
Kilocalories 0.072%-0.379% (root),  
Lappin (bitter Crystalloid)(3),  
Lauric Acid,  
Leucine 0.032%-0.16% (root),  
Ligans - Lignaol A & B,  
Lignin,  
Little Resin(3),  
Lysine 0.067%-0.335% (root),  
Magnesium 0.393%-0.537% (root)(2),  
Manganese 0.0055%-0.006% (root)(2),  
Mercury 0.000127% (root),  
Methionine 0.009%-0.045% (root),  
Mucilage(4),  
Mucilage 5%-12% (plant),  
Myristic Acid (plant),  
Niacin,  
Niacin 0.0003%-0.0015% (root)(2),  
Niacin In Seed(2),  
Nonhydroxy Acids,  
Palmitic Acid,  
Phenylalanine 0.033%-0.165% (root),  
Phosphorus,  
Phosphorus 0.051%-0.437% (root)(3),  
Polyacetylene,  
Polyacetylenes,  
Potassium 0.308%-1.68% (root)(3),  
Proline 0.052%-0.26% (root),  
Propionic Acid (plant),  
Protein 1.5%-12% (root)(3),  
Resin,  
Riboflavin,  
Selenium 0.0014% (root),

Serine 0.025%-0.125% (root),  
Silicon 0.0225% (root),  
Sitosterol,  
Sodium,  
Sodium 0.005%-0.152% (root)(3),  
Stearic Acid,  
Stigmasterol,  
Sugar(4),  
Tannic Acid,  
Tannin,  
Taraxasterol,  
Thiamin 0.0001%-0.0011% (root)(2),  
Thiamine,  
Threonine 0.026%-0.13% (root),  
Tiglic Acid,  
Tin 0.0021% (root),  
Tryptophan 0.006%-0.03% (root),  
Tyrosine 0.018%-0.09% (root),  
Ulcers,  
Valine 0.033%-0.165% (root),  
Vitamin B2 0.0001%-0.00034% (root)(3),  
Vitamin C,  
Vitamin C -rich In(3),  
Vitamin C 0.003%-0.0151% (root),  
Volatile Acids,  
Volatile Oil,  
Volatile Oils(2),  
Water 74%-86% (root)(2),  
Zinc 0.0022%-0.0039% (root)(2).

## **Burdock Seed**

BURDOCK SEED is known by the following names: Arctium, Arctium Lappa, Arctium Lappa L., Burdock, Burdock Seed, Compositae, Compositae Family, Fructus Arctii Lappae, Goboshi - Japanese, Great Burdock Fruit and Ubangja - Korean.

BURDOCK SEED is noted to contain the following constituents:

Arachidic Acid,  
Arctigenin,  
Arctiin(2),  
Essential Oil,  
Essential Oils,  
Fatty Oil,  
Fatty Oils,  
Gobosterin,  
Gogosterin,  
Isoarctigenin,

L-arctigenin.

## **Burnet Root**

BURNET ROOT is known by the following names: Burnet Root, Pimpernel - Uk - Wales, Pimpinella Mayor - Spain, Rosaceae Family, Sanguisorba Officinalis, Ti Yu - China, Tibbi Kanotu - Turkey and Ware-moko.

BURNET ROOT is noted to contain the following constituents:

Flavones,  
Sapanoside,  
Tannin.

## **Butcher's Broom**

BUTCHER'S BROOM is known by the following names: Asparagus Sub-family, Brusca - Europe, Butcher's Broom, Butchers Broom - Mediterranean, Cobanpuskulu - Turkey, Kneeholm, Kneeholy, Liliaceae Family, Lilly Family, Pettigree, Rusco - Spain, Ruscus Aculeatus, Ruscus Aculeatus L. ( Liliaceae) and Sweet Broom.

BUTCHER'S BROOM is noted to contain the following constituents:

Aluminum 0.131% (root),  
Ash 6.3% (root),  
Beta-carotene 0.000015% (root),  
Calcium 0.725% (root),  
Chromium 0.0025% (root),  
Chrysophanic Acid (plant),  
Cobalt 0.0128% (root),  
Essential Oil 0.1%-0.3% (plant),  
Essential Oils,  
Fat 2% (root),  
Fiber 10.8% (root),  
Iron 0.164% (root),  
Kilocalories 0.295% (root),  
Magnesium 0.234% (root),  
Manganese 0.007% (root),  
Minerals - Trace,  
Mucilage 10%-15% (plant),  
Neoruscogenin(2),  
Neoruscogenin (root),  
Niacin 0.0081% (root),  
Phosphorus 0.167% (root),  
Potassium,  
Potassium 0.934% (root),  
Protein 8.4% (root),  
Resin (root),  
Resins,  
Ruscogenin(3),

Ruscogenin (plant),  
Rutin 0.03%-0.04% (plant),  
Saponin 0.4%-0.46% (plant),  
Saponins(2),  
Saponins - Steroid,  
Selenium 0.0024% (root),  
Silicon 0.028% (root),  
Sodium 0.00005% (root),  
Steroid Saponins,  
Sucrose 3.6% (root),  
Thiamin 0.00083% (root),  
Tin 0.0021% (root),  
Trace Minerals,  
Vitamin B2 0.0014% (root),  
Vitamin C 0.0021% (root),  
Water 69.8% (plant),  
Zinc Tr (bark).

## **Butterbur**

BUTTERBUR is known by the following names: Butterbur, Compositae, Daisy Family, Mweje Racene - Belgium, Petasites Albus - Similar Species, Petasites Hybridus, Petasities Officinalis ( Formerly) and White Butterbur - Similar Species.

BUTTERBUR is noted to contain the following constituents:

Angelic Acid (bud),  
Angelic Acid Ester Of Sesquiterpenes,  
Arsenic Nd (plant),  
Ash 1.46%-2.6545% (petiole),  
Barium 0.004%-0.005% (plant),  
Beta-carotene 0.000003%-0.00005%(petiol),  
Bromine 0.0018%-0.004% (plant),  
Calcium 0.103%-1.8725% (petiole),  
Calcium 1.3%-1.4% (plant),  
Caproic Acid (flower),  
Caprylic Acid (flower),  
Carbohydrates 1.9%-65.636% (petiole)(2),  
Chlorine 1%-1.1% (plant),  
Chromium 0.002%-0.0023% (plant),  
Copper 0.0015%-0.0016% (plant),  
Fat 0.04%-0.727% (petiole),  
Fiber 1.3%-23.636% (petiole),  
Inulin (root),  
Iodine Nd (plant),  
Iron 0.0001%-0.0018% (petiole),  
Iron 0.2%-0.21% (plant),  
Isopetasin,

Kaempferol (plant),  
Kilocalories 0.014%-0.2545% (petiole),  
Lead Nd (plant),  
Magnesium 0.014%-0.2545% (petiole),  
Manganese 0.007%-0.01% (plant),  
Molybdenum Nd (plant),  
Mucilage (root),  
Niacin 0.0002%-0.0036% (petiole),  
Nickel Nd (plant),  
Pectin (root),  
Petasin,  
Phosphorus 0.012%-0.218% (petiole),  
Phosphorus 0.04%-0.18% (plant),  
Potassium 0.655%-1.19% (petiole),  
Potassium 3.5%-4.2% (plant),  
Protein 0.39%-7.09% (petiole),  
Rubidium 0.0018%-0.0026% (plant),  
Santalene (rhizome),  
Senecionine (plant),  
Sesquiterpene Alcohols,  
Sitosterol (plant),  
Sodium 0.007%-0.127% (petiole),  
Strontium 0.0036%-0.016% (plant),  
Sulfur 0.65%-0.73% (plant),  
Thiamin 0.00002%-0.00036% (petiole),  
Titanium 0.017%-0.02% (plant),  
Vitamin B2 0.00002%-0.00036% (petiole),  
Vitamin C 0.0315%-0.5725% (petiole),  
Water 94.5% (petiole),  
Zinc 0.0021%-0.006% (plant).

## **Buttercup**

BUTTERCUP is known by the following names: Buttercup, Buttercup - United States, Crowfoot, Crowfoot - United Kingdom, Ranunculaceae Family and Ranunculus Bulbosus Et Species.

BUTTERCUP is noted to contain the following constituents:

Anemonin (plant),  
Protoanemonin (plant).

## **Butternut Bark**

BUTTERNUT BARK is known by the following names: Amerikan Ceviz Agaci - Turkey, Butternut, Butternut - United States, Butternut Bark, Juglandaceae Family, Juglandaceae Family, Juglands Nigra, Juglans Cinerea, Noce Commune - Italy, Nogal - Chile, Nogueira - Portugal, Noyer - France, Walnut - Germany, Walnut - United States and Walnut Bark.

BUTTERNUT BARK is noted to contain the following constituents:

Alanine 1.3724%-1.4194% (seed),  
Aluminum 0.00026% (seed),  
Arginine 4.862%-5.03% (seed),  
Arsenic 0.000002% (seed),  
Ash 2.515%-3.0466% (seed),  
Aspartic Acid 3.096%-3.203% (seed),  
Barium 0.00016% (seed),  
Boron 0.0007% (seed),  
Bromine 0.00015% (seed),  
Cadmium 0.000003% (seed),  
Calcium 0.0512%-0.0724% (seed)(2),  
Carbohydrates 12.05%-12.4664% (seed),  
Cesium 0.000002% (seed),  
Chlorine 0.0078% (seed),  
Chromium 0.00014% (seed),  
Cobalt 0.00002% (seed),  
Copper 0.0004%-0.00084% (seed)(2),  
Cystine 0.484%-0.5007% (seed),  
Fat 56.44%-59.5044% (seed),  
Fiber 1.737%-2.0721% (seed),  
Glutamic Acid 6.084%-6.2942% (seed),  
Histidine 0.808%-0.8359% (seed),  
Iodine 0.00001% (seed),  
Iron 0.0038%-0.0076% (seed)(2),  
Isoleucine 1.179%-1.2197% (seed),  
Juglandic Acid (bark),  
Juglandin (bark),  
Juglone (bark),  
Kilocalories 0.612%-0.6331% (seed),  
Lanthanum 0.000003% (seed),  
Lead 0.00003% (seed),  
Leucine 2.199%-2.275% (seed),  
Linoleic Acid 33.727%-34.8924% (seed),  
Linolenic Acid 8.718%-9.0192% (seed),  
Lysine 0.77%-0.7966% (seed),  
Magnesium 0.2212%-0.2676% (seed)(2),  
Manganese 0.0031%-0.0072% (seed)(2),  
Mercury 0.000001% (seed),  
Methionine 0.6111%-0.6321% (seed),  
Molybdenum 0.00004% (seed),  
Nickel 0.00043% (seed),  
Oleic Acid 10.352%-10.7097% (seed),  
Palmitic Acid 0.872%-0.9021% (seed),  
Phenylalanine 1.442%-1.4918% (seed),  
Phosphorus 0.4085%-0.4834% (seed),

Potassium 0.4044%-0.7493% (seed)(2),  
Proline 1.236%-1.2787% (seed),  
Protein 23.547%-27.1587% (seed),  
Pufa 42.741%-44.2179% (seed),  
Rubidium 0.00025% (seed),  
Selenium 0.00001% (seed),  
Serine 1.64%-1.6967% (seed),  
Silicon 0.145% (seed),  
Sodium 0.00027%-0.0012% (seed)(2),  
Stearic Acid 0.425%-0.4397% (seed),  
Strontium 0.00003% (seed),  
Sulfur 0.287% (seed),  
Tannin (bark),  
Threonine 0.94%-0.9725% (seed),  
Tin 0.00007% (seed),  
Titanium 0.00027% (seed),  
Tryptophan 0.366%-0.3786% (seed),  
Tyrosine 0.977%-1.0108% (seed),  
Valine 1.541%-1.5942% (seed),  
Vanadium 0.000002% (seed),  
Water 3%-3.6% (seed),  
Zinc 0.0026%-0.0037% (seed).

## **Butterwort**

BUTTERWORT is known by the following names: Butterwort, Butterwort Family and Lentibulariaceae Family.

BUTTERWORT is noted to contain the following constituents:

Aromatic Cinnamic Ester,  
Proteolytic Enzyme,  
Trans-cinnamic Acid.

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