arachis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name & Synonym** | **Biological Source** | **Chemical Constitution** | **Uses** | **Marketed**  **Preparation** |
| **Arachis**  **Peanut ,Groundnut** | **Seeds of *Arachis hypogeal linne***  **Family-*Leguminoseae*** | **Fixed Oil - 20-30 %**  **Protiens – 40-50 %**  **Starch - 15-20 %**  **Fatty Acids like**  **Oleic Acid**  **CH3(CH2)7CH=CH(CH2)7COOH**  **Palmitic acid**  **CH3(CH2)14COOH**  **Arachidic acid**  **CH3(CH2)18COOH**  **Stearic acid**  **CH3(CH2)16COOH**  **Lenoleic acid & lignoceric acid** | * **Nutritive** * **Edible oil** * **Oil solvent for IM injection** * **Used in liniment , Plasters & Soap** * **Oil used as lubricant due to non drying nature** * **Peanut used in various food preparation** |  |

SESAME

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological source | Chemical constituent | Uses | Marketed Preparation |
| Sesamumindicum | It is obtained from the seed of Sesamumindicum Linn  Family-Pedaliaceae | It contain about 5% of olein, and phenol known as sesamol which is responsible for stability of oil. It also contain lignin derivatives; sesamin and sesamolin.  SesamolinImage result for sesamolin structure | It is nutritive, laxative, and demulcent; and got emollient properties.  It is used as a vehicle for intramuscular oily injections. |  |

Castor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonyms | Biological Source | Geographical source | Chemical constituents | Use |
| Ricinus | It obtained from seeds of Ricinus communis.  Family-Euphobiaceae | Tropical and sub-tropical regions, India, USA,Brazil | Triglyceride of ricinoleis acid. Isoricinoleic, linoleic, stearic and isostearic acid | Cathartic, Lubricant,  used in industry, used in textile industry, parenteral preparations, preparation of soap, paint. |

Black Papper

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonyms | Biological source | Geographical Source | Chemical constituents | Use |
| Pepper, Piper, nigrum, maricha | Peper is the dried unrip fruit of perennial climbing vine piper nigrum linn, Family- Piperacae. | South india, Indonesia, brazil, Malaysia | Alkaloid piperine(5-9%), volatile oil, pungent resin, piperine, starch. | Aromatic, stimulant, stomachic and carminative, stimulates taste buds |

Mustard seeds

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological source | Chemical constituent | Uses | Marketed Preparation |
| Black mustard | These are dried ripe seed of Brassica nigra and their varities.  Family- Cruciferae | Black Mustard seed contain about 30% Fixed oil, 20% proteins and 0.7 to 1.3% of volatile oil.  The mustard seed contain about 4% of isothiocynateglycoside calledsingrin.  Ally isothiocynate is also called as essence of mustard or volatile mustard oil.  This oil is sparingly soluble in alcohol or water but miscible with organic solvent. | It is a condiment, emetic when used internally in higher doses.  Externally it is used as a counter irritant and rubefacient. |  |

**Almond Oil**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological Source | Chemical constituents | Marketed preparations : | Uses |
| Almond Oil | Expressed from seeds of *Prunus amygdalus* var dulcis(Sweet Almond) or *Prunus amygdalus* var. amara (Bitter Almond)  Family : Rosaceae | Oleic Acid (62-86%), linoleic (17%), Palmitic (5%), myristic (1%), palmitoleic, margaric, stearic, linolenic, arachidic, gadoleic, behenicand erucic acid.  Bitter almond contains benzaldehyde and hydrocyanic acid (2-4%). | It is one of the ingredient of preparation known as Baidyanath lal tail ( Baidyanath Company)  Himcolin gel, Mentat, Tentex Royal (Himalayas Drug Company)  Sage badam roghan (Sage Herbals) | Almond Oil is an emollient and is use in cosmetics.  It is a laxative, emollient, used in preparation of toilet articles and as a vehicle in oily injections.  It is nutritive as well as a demulcent.  The volatile almond oils are used as flavoring agents. |

**Ashoka bark**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Synonyms Name*** | ***Biological Source*** | ***Family*** | ***Chemical Constituents*** | ***Uses*** | ***Market Preparation*** |
| Ashoka Bark, Sita Ashok, Sorrow-less tree. | It is obtained from dried stem bark of plant *Saraca*  *Indica Linn.* | It belong to the family Leguminosae. | The main Chemical constituents of the bark are tannin, catechol, an essential oil, organic calcium and iron compounds    Figure 1 Tannin | Bark of the tree is used as astringent, demulcent, refrigerant, styptic and febrifuge. Flower of the tree is primarily used as uterine tonic and diabetes for keeping blood sugar under control. Leaves are medicinally used as depurative. | Ashoka (SaracaIndica) Heartwood Powder, Ashokarishta. |

**NUTGALLS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological source | Characteristics | Chemical Constituents | Uses |
| Nut galls,  Blue galls,  Turkish galls.  Family- Fagaceae | Nutgall consist of the pathological outgrowth obtained from the young twigs of the dyes oak, *Quercus infectoria* Olivier | Colour-Brown to greenish black or yellow  Odour-Odourless  Taste-Astringent  Shape-Round or globular  Size-1-3cm in diameter | Nutgalls contain about 50-70% tannin mainly gallotannic acid which is official tannic acid  It also contains of 2-4% gallic acid, ellagic acid, sitosterol, methyl beulate and methyl oleanolate which are methyl esters of betulic and oleanolic acid. | Nutgall is the major source of tannic acid, which is largely used in tanning and dyeing industry and for this the manufacture of ink.  It is used medicinally as a local astringent in ointments and suppositories. |

BLACK CATECHU

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological source | Chemical constituent | Uses | Marketed Preparation |
| Kattha, Cutch, Khadir-catechu, Catechu | It consist of dried aqueous extract prepared from the heartwood of Acacia catechu wild .  Family-Leguminosae | Black catechu contain about 10% of acacatechin. It is distereoisomer of 5,7,3’,4’tetrahydroxy flavan-3-ols.  The other content of black catechu are catechu red,quercetin, gum and quercitrin.  Catechin:C:\Users\lenovo\Desktop\(+)-Catechin.png | Kattha is used as an astringent externally for boil skin eruptions and ulcers. It is also used in cough and diarrhoea.  Cutch is used as dyeing and colouring, water softening, reducing the viscosity of drill mud, protective agent in the manufacture of ion-exchange resin. |  |

COLCHICUM

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SYNONYM** | **BIOLOGICAL**  **SOURCE** | **MACROSOPY** | **CHEMICAL CONSTIUENTS** | **STANDARDS** | **USES** | **MARKETED PREPARATION** | |
| Meadow saffron seeds, autumn crocus | It consist of the dried ripe seed of *colchicum luteum baker* and *colchicum autumale linn*  FAMILY:  Liliaceae | Colour: yellowish –brown and reddish –brown testa  Odour :  Odourless  Taste: bitter taste  And acird taste  Size: seed 2-3mm in diameter  Corms 2-3 cm in diameter with 2-5 mm in thickness  Shape : reniform and ovate  They have short fracture | Col chicum seed contains 0.2 to 1 % of amino alkaloids of which colchicine is the main constituents. The seed contains upto 0.8 % of colchicine and in corms its upto 0.6% both alkaloids contain tropolone or cycloheptatrien-ol-one rind structure.**20160810_154327-1.jpg** | Colchicine is freely soluble in alcohol and chloroform soluble in 25 parts of water and in 220 parts of solvent ether. | Use in treatment of gout and rheumatism . colchicines also possesse antitumour activity .  It is also widly use as chemical agent for bringing the polyploidy and hence used in horticulture and cultivation of medicinal plants. | Colchicine capsule 6mg/1 , Colchicine tablet 0.6mg , colcrys tablet flim coated 6mg/1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SYNONYM** | **BILOGICAL**  **SOURCE** | **CHEMICAL CONSTITUENTS** | **USES** | **MARKETED**  **PREPARATION** |
| Brazilian coffee, coffee beans,coffee seeds, Arabica coffee, | Dried ripe seeds of Coffea arabica linn, family Rubiaceae. | Contains 2%-3% caffeine, 3%-5% tannin, 10%-15% fixed oils and 13% proteins, chlorogenic or caffeotannic acid and sugars in the form of dextrine glucose etc. Agreeable smell is due to an oil called caffeol composed of furfural along with minor quantities of phenol , pyridine and valerianic acid.  IMG-20160810-WA0009.jpg | Flavouring agent in ice cream, pastries, candies and liquors.  Source of caffeine dried ripe seeds are used as stimulants nervine and diuretic on CNS, kidney, heart and muscle.Used in snake bites, helping to ward off terrible coma.Soothing action on muscular systems due to volatile oil and caffeine it contains | Nescafe, Bru,Tata, Barista, |

COFFEE BEANS

 ERGOT.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SYNONYM** | **BIOLOGICAL SOURCE** | **CHEMICAL CONSTITUENTS** | **USES** | MARKETED PREPARATIONS |
| Ergot of rye, Ergota. | Dried sclerotium of fungus *Claviceps purpurea ,*  Family *Clavicipitaceae.* | Ergot contains Indole derivative Lysergic acid (0.1 to 0.25 %).  Ergometrine which is water soluble alkaloid and is medicinally active. Its dextro form, Ergometrinine is inert in action.  Ergotamine and Ergotoxine are water insoluble.  Besides alkaloids, Ergot contains pigments, ergosterol, amino acids, chitin, fixed oil 30% and moisture 8% . | Ergot and its alkaloids have different uses.  Ergot and Ergometrine maleate are used as oxytocic to enhance labour pains.  Ergotamine tartarate used in treatment of migraine.  Ergometrine and Methylergometrine are important drugs in obstetrics. |  |

Rhubarb

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SYNONYM** | **BILOGICAL**  **SOURCE** | **CHEMICAL CONSTITUENTS** | **USES** | **MARKETED**  **PREPARATION** |
| Radix rhei,Rheum,Revandchini | It consists of the dried rhizome of *Rheum officinale,Rheumemodi*(Indian rhubarb),*Rheum palmatum Linn*  Family*=Polygonaceae* | Rhubarb contains anthraquinone glycosides. The anthraquinone glycosides ranges 2-4.6% and categorized as follows:  1)Rhein and glucorhein  2)aloe emodin,emodin,chrysophanol,physcion& also their glycosidal forms  3)anthrones&dianthrones of aloe-emodin,emodin,chrysophanol&phscion  4)palmidinA,palmidin B &palmidin C. | It is used as bitter stomachic,in treatment of diarrhoea and as purgative. | Sarpagandha(antihypertensive drug) |

**WildCherry Bark**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SYNONYM** | **BIOLOGICAL SOURCE** | **CHEMICAL CONSTITUENT** | **USES** | **MARKETED PREPARATION** |
| Virginian Prune Bark , Wild Black Cherry , Cortex Pruni | Dried bark of *Prunus serotine Ehrhart* , Family Rosaceae. | Contains Mandelonitrile glucoside , called prunasin , a cyanogenetic glycoside.  Prunain in presence of water gives benzaldehyde , glucose and hydrochloric acid.  The bark collected in autum contains about 0.12 to 0.16 per cent of hydrocyanic acid.  Drug also contain p – coumaric acid , traces of benzoic acid , resin containing β – methyl aesculetin and trimethyl gallic acid. | It is used as expectorant and syrup is used as a flavouring agent. | Planetary Herbal, Old Indian Wild Cherry Bark Syrup. |

HENNA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological  Source | Chemical constituents | Uses | Marketed  Preparations |
| Hina,Henna tree,Egyptain privent | It is obtained from herbs of Lawsonia inermis  Family:Lyrthaceae | It contains phenol,antharaquinones,glycosides  Lawsone is the active constituent of d henna leaves  Other constituentare gallic acid,white resin,sugar, tannis and xanthins. | It is used as anti-bacterial,anti –fungal,  Its also used as astirngent  Used as prophylactic agent skin disease,coolingagent . | Kaveri hair henna |

Aconite

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological source | Chemical constituents | Uses | Marketed preparations |
| Aconine root ,bachnag,monkshood | Dried roots of Aconitum napellus Linn 7  Family  Ranunculaceae | Contains diterpene alkaloids like  Aconitine, hypoaconitine,  Neopelline,napellus,neoline,and traces of Sparteins and ephedrine | It is highly poisonous drug  Used externally in form liniment  In treatment of neuralgia,sciatica,rheumatism,and inflammation  Analgesic and cardiac depressant  Now-a-days restricted to homeopathic medicines |  |

KOKUM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Synonym | Biological source | Chemical constituent | Uses | Marketed preparation |
| Kokum butter, Amsul | It is a fat expressed from the seeds of Garcinia indicaChois.  Family- Guttiferae | Kokum contain glycerides of stearic acid ( 55%), Oleic (40%), hydroxycapric acid (10%), palmitic (2.5%), and linolenic acid (1.5%).  The fat is slightly bitter. | It is nutritive, demulcent, astringent, and emollient.  Locally it is used in fissures of lips and hands.  It is employed in the sizing of cotton yarn. | Commercial kokum from the market is melted; its free acidity is neutralised with the treatment of sodium carbonate solution and washed in hot water. |