



**Dictionary of Herbal Remedies
Used by Migrant
Farmworkers**

Dictionary of Herbal Remedies Used By Migrant Farmworkers

By

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For the



M I G R A N T C L I N I C I A N S N E T W O R K

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Introduction

Herbal remedies have been used to treat every illness known to man for longer than there have been written records. Herbal treatments are still the traditional medicine in a major portion of the world. The recent trend toward more natural products has spurred growth in this area, and this trend is expected to increase in the future.

Some concern exists about the safety of these products. Most herbal remedies have not been studied very extensively due to the cost of research. Herbs are natural products which cannot be patented, so it is difficult to capture significant return on capital invested in research. Therefore, companies find little financial incentive to study herbs. Consequently, not enough is known about many herbs to be able to determine safe or toxic doses.

There are many variables that affect the quality of an herbal remedy. Many distributors do not have strict quality control, so potency can vary greatly. Other factors that affect the quality of these herbals are purity, climate where they are grown, time period when they are harvested, storage conditions, and method of preparation. Contaminants in these products include molds that can cause allergic reactions, insects, and poisons such as arsenic and lead from the soil. Other areas of concern are nomenclature and appearance. One plant may be known by several names, or various plants may have similar-sounding names. Serious consequences could result due to confusion caused by similar appearances between a safe plant and a more dangerous one.

Studies indicate that migrant and seasonal farmworkers often use herbal, home, or folk remedies instead of or simultaneously with conventional medical treatment. Many modern medications, such as digoxin, warfarin, and vinca alkaloids, are derived from plant sources. These examples of herbs highlight the fact that many herbs are not innocuous, and they should not be ignored. While some herbs have positive therapeutic effects, there are some which cause adverse reactions, and could even have drug interactions with conventional medications. Some herbs may potentiate the effect of prescribed medications, while others may nullify these effects. In some cases the herbs are safe but ineffectual, causing a deterioration of the patient's condition due to ineffective "treatment." Patients do not always tell their doctor or pharmacist that they are using herbal remedies. They may not think of them as medications, or they may feel embarrassed to admit using them. Not telling their health care provider of their use of herbal remedies could have negative results, since it is possible to dangerously ignore or delay effective treatment.

It is important to know when an herbal remedy should be discontinued, as well as those that need not be. Health care providers can gain substantial rapport with their patients by being open to the use of herbal remedies when appropriate.

Many clinicians have expressed a need for an herbal formulary as a guide to prevent interactions between herbal and prescribed medications. The Migrant Clinicians Network conducted a survey of migrant health centers to gather information about herbal remedies which had been used by patients of these health centers. The resulting dictionary of herbs contains both English and Spanish names for each herb, in addition to other pertinent information.

This booklet is designed as a reference tool only. It is not intended as an instruction manual, and does not claim to be complete since so little scientific information is available on this subject. No responsibility can be assumed by the author or the publisher for the application of any of the information contained herein.

Alfalfa

Spanish Name: Alfalfa

Scientific Name: *Medicago sativa*

Form
Tea

Constituents

Saponins (2-3%), sterols, high molecular weight alcohols and paraffins

Therapeutic Effects

None proven

Safety/Toxicity

Safe in moderation; no evidence of any toxicity

Adverse Effects

Persons predisposed to systemic lupus erythematosus (SLE) should avoid this product since it may induce this condition. Large amounts could induce SLE in normal persons.

Potential Drug Interactions

None known

Comments

Reputed to relieve arthritic conditions and to stimulate appetite, thereby inducing an increase in weight. The vitamin P or rutin contained in alfalfa builds capillary strength and reduces inflammation of the stomach lining; vitamin A helps maintain stomach health; enzymes present aid in food assimilation.

Perceived Use by Patient

Used as a nutrient to increase vitality, appetite, and weight in humans; also as a diuretic and for ulcers.

Where Obtained

Health food stores

Aloe, Aloe Vera Gel (Lotion)

Spanish Name: Sabila

Scientific Name: *Aloe barbadensis*

Form
Topical lotion

Constituents

Various carbohydrate polymers (glucomannans or pectic acid)

Therapeutic Effects

Moisturizer, emollient, promotion of wound healing, promotion of cell growth

Safety/Toxicity

Safe for topical use

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

Gel from freshly cut leaves is efficacious, while commercial aloe gel products are not. The peeled fresh gel is applied to inflamed eyes and on all kinds of skin inflammations, sores, and burns. It has been recommended in the treatment of third degree x-ray and atomic radiation burns.

Perceived Use by Patient

Swelling of extremities, burns, marks, scars, asthma, cancer

Where Obtained

Home gardens

Aloe, Aloe Vera Latex (Juice)

Spanish Name: Sabila

Scientific Name: *Aloe barbadensis*

Form
Tea

Constituents

Anthraquinone glycosides, barbaloin

Therapeutic Effects

Cathartic properties acting on the colon

Safety/Toxicity

Aloe is safe as a tea for moderate ingestion, but is contraindicated in pregnancy and in individuals afflicted with hemorrhoids; also is apt to cause kidney irritation.

Adverse Effects

Overdosage causes abdominal pain, bloody diarrhea, hemorrhagic gastritis, and sometimes nephritis.

Potential Drug Interactions

None known

Comments

The laxative action of aloe occurs 8 to 12 hours after ingestion

Perceived Use by Patient

Purgative, anthelmintic

Where Obtained

Home gardens

Anise

Spanish Name: Anis

Scientific Name: *Pimpinella anisum*

Form

Tea

Constituents

1-3% volatile oils (80-90% anethole), 3-4% fixed oils, calcium oxalate, coumarins

Therapeutic Effects

Carminative, diuretic, diaphoretic, expectorant, stimulant, pesticide (topically for body lice), moisturizer

Safety/Toxicity

Its major component, anethole, has been reported to be the cause of dermatitis (erythema, scaling, and vesiculation) in some people.

Adverse Effects

1-5 ml of the oil may cause nausea, vomiting, seizures, pulmonary edema, and skin irritation.

Potential Drug Interactions

Tetracyclines, verapamil, thiazide-type diuretics, phenytoin, iron salts, quinidine, salicylates, sodium polystyrene sulfonate

Comments

Commonly used as a flavoring agent. Helpful in the relief of cough and congestion symptoms. Its healing properties emanate from its seeds.

Perceived Use by Patient

Stomach cramps, colic, to sweeten the breath, to increase mother's milk

Where Obtained

Mexican grocery or pharmacy, grocery store, herb store

Basil

Spanish Name: Albahaca

Scientific Name: *Ocimum basilicum*

Form

Infusion

Constituents

Essential oil (mainly estragol), eugenol, linalol, linalol, thymol, tannins

Therapeutic Effects

Antispasmodic, carminative, antiseptic, mild nervine, emmenagogue

Safety/Toxicity

Inbibed as an infusion by nursing mothers, basil is considered a safe, gentle tonic that helps expel gas in the infant and increases lactation in the mother.

Adverse Effects

None known

Potential Drug Interactions

Chloral hydrate, quinine sulfate, alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

Commonly used as a flavoring agent. It is especially recommended for use before and after parturition to promote blood circulation.

Perceived Use by Patient

Gastric distress, headaches, colds, suppressed menstruation

Where Obtained

Grocery store, herb store, home garden

Black Cohosh

Spanish Name: Unknown

Scientific Name: *Cimicifuga racemosa*, *Actaea racemosa*, *Macrotys actaeoides*

Form

Tea

Constituents

Triterpene glycosides, isoferulic acid, tannins and volatile oils

Therapeutic Effects

None known

Safety/Toxicity

Adverse affects are very toxic.

Adverse Effects

Bradycardia, tremors, vertigo

Potential Drug Interactions

Digoxin

Comments

There is no rationale for the use of this remedy due to its lack of efficacy and its toxicity.

Perceived Use by Patient

Used for second trimester abortion, rheumatism, bronchitis, uterine disorders, high blood pressure, and as a sedative.

Where Obtained

Health food store, curandero

Borage

Spanish Name: Borraja

Scientific Name: *Borago officinalis*

Form

Tea

Constituents

Tannins (very low concentrations)

Therapeutic Effects

Slight expectorant, slightly constipating, astringent

Safety/Toxicity

Safe in general; however, borage contains small amounts of two toxins (lycopsamine unsaturated pyrrolizidine alkaloids and supindine viridiflorate). Excessive or long-term consumption should be avoided.

Adverse Effects

None known

Potential Drug Interactions

Alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

Relatively ineffective. Has calming and cooling effects and can help break fevers. In Europe, borage tea has been used traditionally as a strengthening tonic for convulsing patients. It is suggested as a good herb for high blood pressure or for persons who are apprehensive or worry a lot.

Perceived Use by Patient

Upset stomach, fever

Where Obtained

Herb store

Chamomile

Spanish Name: Manzanilla

Scientific Name: *Anthemis nobilis*

Form

Tea, extracts, volatile oil preparations

Constituents

Volatile oils (chamazulene and (-)- α -bisabolol), bisabololoxides A and B, spiroethers, various flavones (especially apigenin, luteolin, patuletin, and quercetin coumarin derivatives)

Therapeutic Effects

Anti-inflammatory, spasmolytic, carminative, protection against peptic ulcers, antibacterial, antifungal, nervine

Safety/Toxicity

As a nervine, chamomile is safe and effective. It is gentle to the stomach, so it can also be used to treat indigestion.

Adverse Effects

May cause anaphylaxis, other severe hypersensitivity reactions, and contact dermatitis in persons allergic to ragweeds, asters, chrysanthemums, or related plants.

Potential Drug Interactions

Aspirin, warfarin (coumadin)—same as those for warfarin

Comments

A cup of chamomile tea is a classic remedy for nervous or hysterical conditions. Persons allergic to any plant in the compositae family should avoid this herb. Roman chamomile is emetic in large doses. Roman chamomile has been reported to exhibit anti-tumor activities *in vitro* against human tumor cells.

Perceived Use by Patient

Diarrhea, menstrual cramps, colic, upset stomach, insomnia, infantile convulsions, toothache, bleeding, and swollen gums

Where Obtained

Mexican pharmacy, herb store, home garden

Camphor

Spanish Name: Alcanfor

Scientific Name: *Cinnamomum camphora*

Form

Topical lotion, tea

Constituents

Camphor oil contains camphor (2-bornanone), safrole, borneol, heliotropin, vanillin, terpineol, sesquiterpene alcohols

Therapeutic Effects

Antipruritic (external only), rubefacient (external only), counter-irritant (external only), antiseptic and carminative (internal)

Safety/Toxicity

Toxic doses of camphor taken internally result in convulsions accompanied by vertigo and mental confusion, and may lead to delirium and even coma and death. 700 mg can cause narcosis.

Adverse Effects

Camphor phenol lotions have caused skin ulceration.

Potential Drug Interactions

Phenol

Comments

Camphor oil is frequently used for ear-aches.

Perceived Use by Patient

Colds, inflammation, gout, rheumatic joints. Taken internally to calm hysteria, abate convulsions and epileptic attacks; also as a carminative and respiratory and cardiac stimulant.

Where Obtained

Mexican pharmacy, herb store

Chaparral

Spanish Name: Unknown

Scientific Name: *Larrea tridentata*

Form

Tea

Constituents

Nordihydroguaiqretic acid (NDGA)

Therapeutic Effects

None known

Safety/Toxicity

This product has caused lesions in the mesenteric lymph nodes in rat studies.

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

None

Perceived Use by Patient

Unknown

Where Obtained

Unknown

Cinnamon

Spanish Name: Canela

Scientific Name: *Cinnamomum verum*

Form

Tea

Constituents

60-75% cinnamic aldehyde, 4-10% phenols, hydrocarbons, ketones, alcohols, esters

Therapeutic Effects

Carminative, astringent, local stimulant

Safety/Toxicity

Doses of the oil greater than 0.5 mg/kg may cause renal damage or coma. There have been a number of reports of sensitivity to cinnamon. Acceptable daily intake is 700 mg/kg body weight.

Adverse Effects

Ingestion of the oil may cause nausea and vomiting. Contact with skin or eyes may cause redness or burning.

Potential Drug Interactions

Diuretics, digoxin, alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

Commonly used as a flavoring agent. Cinnamon oil has exhibited antifungal, antiviral, bactericidal, and larvicidal activities.

Perceived Use by Patient

Cramps, colic, chronic diarrhea, colds, kidney troubles, hypertension, to stimulate appetite.

Where Obtained

Grocery store, herb store

Coffee

Spanish Name: Café

Scientific Name: *Coffea arabica*

Form

Ground, roasted beans

Constituents

1-2% caffeine, 10-13% fatty oil, 25% trigonelline, 3-5% tannin, 15% glucose and dextrin, 10-13% proteins

Therapeutic Effects

Caffeine is a powerful stimulant of the central nervous system, respiration, and skeletal muscles; other activities include cardiac stimulation, coronary dilation, smooth muscle relaxation, and diuresis.

Safety/Toxicity

Caffeine is teratogenic and should be avoided or limited during pregnancy. It may be linked to esophageal cancer. It has been definitely determined that coffee is capable of producing allergic response. Various symptoms have been reported, including severe migraine, gastroenteritis, headache, and widespread hives.

Adverse Effects

Nervousness, arrhythmias, increased blood glucose, increased cholesterol levels, excess stomach acid, heartburn, insomnia

Potential Drug Interactions

Theophylline, iron

Comments

Caffeine should be used in moderation. Non-pregnant adults should limit their consumption to 250 mg per day. Range of caffeine content: 40-80 mg per 5-8 oz. brewed; 30-120 mg per 5-8 oz. instant. Coffee is reported to stimulate gastric reaction and should be taken only with proper precautions by individuals with peptic ulcer.

Perceived Use by Patient

Laxative

Where Obtained

Grocery store

Coriander

Spanish Name: Cilantro

Scientific Name: *Coriandrum sativum*

Form

Tea, infusion

Constituents

1% volatile oils (including borneol, coriandrol, d-pinene, b-pinene, terpinen, geraniol, and decylaldehyde)

Therapeutic Effects

Stimulant, carminative

Safety/Toxicity

Coriander oil is reported to have weak cytotoxic activity.

Adverse Effects

Excess amounts can cause narcotic-like effects, nausea, vomiting, mental confusion, dizziness, convulsions

Potential Drug Interactions

None known

Comments

Occasionally used in medications as a flavoring agent. Coriander has been reported to have strong lipolytic activity. Coriander possesses hypoglycemic qualities in experimental animals.

Perceived Use by Patient

Stomach cramps, stomach tonic, laxative and purgative, to expel gas from the bowels

Where Obtained

Mexican pharmacy, herb store, home garden

Corn Silk

Spanish Name: Cabellos de elote, pelos de elote

Scientific Name: *Zea mays*

Form

Tea

Constituents

Starch, gluten

Therapeutic Effects

Diuretic, hypoglycemic, anti-hypertensive, demulcent

Safety/Toxicity

Generally recognized as safe

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

Corn oil is used as a solvent for injections as well as for irradiated ergosterol.

Perceived Use by Patient

Kidneys, urinary infection, enuresis, and calculus

Where Obtained

Grocery store

Perceived Use by Patient

Coughs, headaches, earaches, and sinusitis. Also used as a mouthwash and gargle for inflammations of the mouth and throat.

Where Obtained

Unknown

Flax Seed

Spanish Name: Lino

Scientific Name: *Linum usitatissimum*

Form

Tea

Constituents

30-40% fixed oils, mucilage, wax, tannins, gum, nitrates, linamarin (a cyanogenic glycoside)

Therapeutic Effects

Expectorant, emmollient, demulcent, laxative

Safety/Toxicity

Flax leaves and seed chaff contain the cyanogenic glycoside linamarine from which the enzyme linamarase is capable of releasing cyanide.

Adverse Effects

Symptoms of overdose include increased respiratory rate, excitement, gasping, staggering, weakness, paralysis, and convulsions.

Potential Drug Interactions

Alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Perceived Use by Patient

Stomach irritation

Where Obtained

Unknown

Garlic

Spanish Name: Ajo

Scientific Name: *Allium sativum*

Form

Garlic water

Constituents

Allium (s-allyl-L-cysteine sulfoxide) converted to allicin (diallyldisulfide-s-oxide) converted to ajoene

Therapeutic Effects

Potent antibacterial, antithrombotic, antifungal, decreases plasma fibrinogen, decreases serum triglycerides, decreases beta lipoproteins, decreases phospholipids, decreases blood pressure, decreases serum glucose, expectorant, diaphoretic, diuretic

Safety/Toxicity

Unknown

Adverse Effects

Allergic contact dermatitis due to garlic has been reported.

Potential Drug Interactions

None known

Comments

Garlic has considerable potential; however, more studies are needed before the therapeutic value can be determined with certainty.

Perceived Use by Patient

Blood pressure, worms, weight loss, tuberculosis, emphysema, asthma

Where Obtained

Grocery store, home garden

Horsetail (Shave Grass)

Spanish Name: Cola de Caballo

Scientific Name: *Equisetum arvense*

Form

Tea, infusion

Constituents

Flavone glycosides, saponins

Therapeutic Effects

Weak diuretic, astringent

Safety/Toxicity

Unknown

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

Horsetail has been a traditional herbal treatment for mending broken bones. It is also used as an infusion to help build kidney strength. In Europe, horsetail tea was also used to stop bleeding both internally and externally.

Perceived Use by Patient

Diarrhea in children, polyps, abdominal and oral cancer

Where Obtained

Unknown

Lemon

Spanish Name: Limón

Scientific Name: Citrus limonum

Form

Tea

Constituents

Peel: oil, bitter principle, glucoside hesperidin

Juice: 6.7-8.6% citric acid; sugar, gum

Oil: 7-8% citral, pinene, citronellal

Therapeutic Effects

Oil internally: carminative, stimulant

Oil topically: rubefacient

Juice: antiscurvy, astringent

Safety/Toxicity

Lemon oil has been reported to promote tumor formation on the skin of mice by the primary carcinogen 9,10-dimethyl-1,2-benzanthracene. Acceptable daily intake is up to 500 mg/kg of body weight.

Adverse Effects

Volatile oils may cause photosensitization.

Potential Drug Interactions

None known

Comments

None

Perceived Use by Patient

Inflammation or infection of the mouth, throat, etc; refreshment; to suppress menstruation

Where Obtained

Mexican pharmacy, grocery store

Linden Tree (Lime Tree)

Spanish Name: Tilo

Scientific Name: Tilia cordata (Tilia platyphyllos)

Form

Tea, infusion

Constituents

Flavonoid compounds (especially derivatives of quercetin and kaemferol), p-coumaric acid

Therapeutic Effects

Weak diaphoretic, diuretic

Safety/Toxicity

Using old flowers may induce narcotic intoxication.

Adverse Effects

Using this tea too often could lead to heart damage.

Potential Drug Interactions

None known

Comments

This product should not be used by anyone with any cardiac condition. Recommended for nervousness, insomnia, cramps, and indigestion which arises from an inability to relax while eating. Used as an infusion at the onset of cold symptoms.

Perceived Use by Patient

To promote sleep, treat nervousness, for burns and colds

Where Obtained

Mexican pharmacy

Marijuana

Spanish Name: Marijuana

Scientific Name: Cannabis sativa

Form

Inhalant

Constituents

Cannabinone (a resin), tetrahydrocannabinol

Therapeutic Effects

Cerebral sedative, analgesic, antispasmodic, antiemetic in patients receiving cancer chemotherapy

Safety/Toxicity

Unknown

Adverse Effects

Possible change in blood pressure, impotence, increased heart rate

Potential Drug Interactions

Theophylline, tricyclic antidepressants, anticholinergics, ethanol, antipyrene, pentobarbital, disulfiram

Comments

Possession is illegal. Marijuana affects the hepatic metabolism of some drugs. THC enhances the CNS depressant action of ethanol and reduces the metabolism of antipyrine, pentobarbital, and ethanol.

Perceived Use by Patient

Antiemetic, asthma, insomnia, alcoholism

Where Obtained

Individual dealer, home garden

Mormon Tea

Spanish Name: Canntillo

Scientific Name: *Ephedra nevadensis*

Form

Tea, infusion

Constituents

Tannins, resins, volatile oils

Therapeutic Effects

Very mild diuretic, astringent

Safety/Toxicity

Unknown

Adverse Effects

Mild constipation; frequent use may result in nervousness and restlessness.

Potential Drug Interactions

Alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

No significant therapeutic effect. It should only be used on the advice of a physician, particularly if patient suffers from high blood pressure, heart disease, diabetes, or thyroid trouble.

Perceived Use by Patient

Colds, gonorrhea, headache, nephritis, syphilis

Where Obtained

Unknown

Olive Oil

Spanish Name: Olivo (aceite de olivo)

Scientific Name: *Olea europea*

Form

Oil

Constituents

Fatty acids: 2% myristic, 9.5% palmitic, 1.4% stearic, 0.2% arachidic, 81.6% oleic, 7.0% linoleic

Therapeutic Effects

Internally: laxative, demulcent; externally: lubricant. Vehicle for topical preparations; vehicle for injections

Safety/Toxicity

Unknown

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

Used to soften the skin and crusts in eczema and psoriasis and as a lubricant for massage. Also used to soften car wax.

Perceived Use by Patient

Burns, constipation, fever

Where Obtained

Grocery store

Onion

Spanish Name: Cebolla

Scientific Name: *Allium cepa*

Form

As food; topically (mashed)

Constituents

Organic sulfur compounds, phenolic acids, flavonoids, sterols, saponins, sugars, vitamins

Therapeutic Effects

Antifungal, antithrombotic, decreases plasma fibrinogen, decreases serum triglycerides, decreases beta lipoproteins, decreases phospholipids

Safety/Toxicity

Unknown

Adverse Effects

Onions stimulate digestion and clean the intestines but they should not be eaten by those with sensitive stomachs.

Potential Drug Interactions

None known

Comments

Onion has considerable potential; however, more studies are needed before the therapeutic value can be determined with certainty.

Perceived Use by Patient

To make hair grow, asthma, burns, emphysema, to soothe coughs, to induce urination

Where Obtained

Grocery store, home garden

Orange (Sweet)

Spanish Name: Naranja

Scientific Name: *Citrus aurantium*

Form

Tea

Constituents

Oil of the peel: at least 90% d-limonene, 10% citral and citronellal

Therapeutic Effects

Antibacterial, antifungal, antiinflammatory, antihypercholesterolemic, carminative

Safety/Toxicity

Bitter orange oil is reported to have distinct phototoxic activity.

Adverse Effects

Ingestion of large amounts of orange peel by children has been reported to cause intestinal colic, convulsions, and even death.

Potential Drug Interactions

None known

Comments

The essential oil is commonly used as a flavoring agent.

Perceived Use by Patient

For sleep, nerves, shock, dyspepsia, diarrhea, blood in feces, and elevated blood pressure

Where Obtained

Grocery store

Peppermint

Spanish Name: Hierba buena

Scientific Name: *Mentha piperita*

Form

Tea, infusion

Constituents

56% free menthol, α and β pinene, limonene, cineole, ethyl amylcarbinol, menthone, carvacrol, thymol

Therapeutic Effects

Antiseptic, carminative, spasmolytic, GIT and menstrual cramping, decreases tone of esophageal sphincter to facilitate belching

Safety/Toxicity

This product should be avoided in infants and small children because the menthol may cause a choking sensation.

Adverse Effects

Peppermint oil can be an irritant and may cause allergic reactions. Heartburn has been reported.

Potential Drug Interactions

None known

Comments

A strong infusion of the herb will produce copious perspiration, so it has been used in breaking fevers.

Perceived Use by Patient

Stomach ache, dysmenorrhea, colic, baby diarrhea, colic in babies, cramps, backaches, heartburn, sore throat, wash wounds, colds, fever, hysteria

Where Obtained

Mexican pharmacy, home garden, grows wild in some areas

Potato

Spanish Name: Papa

Scientific Name: *Solanum tuberosum*

Form

Food; topically (mashed)

Constituents

78-80% water, 14-18% starch, 2% protein, 1% minerals, 0.1% fat, sugar, organic acids

Therapeutic Effects

Cardiotonic activity, hypotensive, myotropic, spasmolytic, soothing effect on GI musculature, antimicrobial activity (against gram- and gram+ bacteria)

Safety/Toxicity

The green shoots, leaves, and fruits contain toxic steroidal glycoalkaloids (solanine, emissine, and others). These can lead to dulling of the senses and death.

Adverse Effects

If ingested, solanine can cause symptoms such as headaches, vomiting, diarrhea, fever, apathy, restlessness, confusion, and hallucinations.

Potential Drug Interactions

None known.

Comments

None

Perceived Use by Patient

Burns, headache, coughs, spasm, tumors and warts.

Where Obtained

Mexican pharmacy, grocery store

Rose

Spanish Name: Rosa de Castillo

Scientific Name: Rosaceae (family)

Form

Tea (from hips)

Constituents

Ascorbic acid, 11% pectin, 3% malic and citric acid

Therapeutic Effects

Laxative, diuretic, antiscorvy

Safety/Toxicity

Unknown

Adverse Effects

Large amounts may cause diarrhea.

Potential Drug Interactions

Warfarin, dicumarol, erythromycin (parenteral), ethinyl estradiol, iron, sulfonamides, basic drugs (amphetamines, tricyclic antidepressants)

Comments

Vitamin C (ascorbic acid) is equally efficacious regardless of whether it is from rose hips or from synthetic sources. Vitamin C from rose hips costs about 25 times as much as from synthetic sources.

Perceived Use by Patient

Gastritis, stomach ache

Where Obtained

Health food store, home garden

Rue

Spanish Name: Ruda

Scientific Name: Ruta graveolus

Form

Tea

Constituents

Mixture of quinoline alkaloids, coumarin derivatives, volatile oils (including methylmethylketone, ketones, esters, and phenols), bitter principle, glycoside rutin, tannins

Therapeutic Effects

Antispasmodic, antihistaminic, anti-inflammatory, emmenagogues

Safety/Toxicity

Avoid during pregnancy due to abortifacient properties; photosensitization (may cause skin to blister after exposure to sunlight). There is much doubt about the safety and medical value of rue.

Adverse Effects

Kidney irritation and degeneration of the liver have been reported. Large doses may cause violent gastric pain, vomiting, and prostration.

Potential Drug Interactions

Aspirin, warfarin (coumadin)—same as those for warfarin, alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

Rue oil has been reported to have anthelmintic properties.

Perceived Use by Patient

Menstrual cramps, headache, earache, aborting during first and second months, nervousness, hysteria, convulsions, insanity

Where Obtained

Mexican pharmacy

Sage

Spanish Name: Salvia

Scientific Name: Salvia officinalis

Form

Tea, infusion

Constituents

α and β thujines (volatile oils), lineole, borneol, 2-methyl-3-methylene-5-heptene, sesquiterpenes

Therapeutic Effects

Antiseptic mouthwash used to treat toothaches, sore throats, inflammations of the mouth and throat. Stimulates blood flow through local irritant effect. Hypoglycemic in diabetes, especially on an empty stomach. Anhidrotic (anti-perspirant), carminative.

Safety/Toxicity

Not recommended for use due to its high thujone content. Can cause convulsions and loss of consciousness.

Adverse Effects

Mothers breast-feeding their babies should not use sage, as it will dry up their milk.

Potential Drug Interactions

Alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

Regarded as a tonic that keeps the stomach, intestines, kidneys, liver, spleen, and sexual organs healthy. Hot tea has been used to help lessen excessively heavy menstrual flow. The infusion is used to wash wounds.

Perceived Use by Patient

Gastric distress, kidneys, nerves, sore throat, worms, bleeding, fever, headache, colds

Where Obtained

Herb store, home garden

Sarsaparilla

Spanish Name: Cocolmeca

Scientific Name: Several of the species *Smilax*

Form

Tea

Constituents

Saponins derived from sarsapogenin and smilagenin, sitosterol, stigmasterol, pollinastanol

Therapeutic Effects

Astringent, strong diuretic, diaphoretic, expectorant, laxative, tonic

Safety/Toxicity

Unknown

Adverse Effects

None known

Potential Drug Interactions

Sarsaparilla facilitates the absorption by the body of other drugs.

Comments

Commonly used as a flavoring agent. It does not cure syphilis as was once thought. Used to increase flow of urine, as an eyewash, and to promote perspiration.

Perceived Use by Patient

Burns, cramps, dyspepsia, rheumatism, athlete's foot, gonorrhea, indigestion, syphilis, fever

Where Obtained

Herb store

Sassafras

Spanish Name:

Scientific Name: *Sassafras albidum*

Form

Tea

Constituents

Up to 9% volatile oil (contains 80% safrole), .02% alkaloids, resin, two ligands, starch, sitosterol, tannins

Therapeutic Effects

Sassafras oil has rubefacient properties and was formerly used as a pediculocide.

Safety/Toxicity

Safrole and other constituents have proven carcinogenic and hepatotoxic in rats and mice.

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

Sassafras has a pleasant taste and aroma which may affect its reputation. This product should not be recommended because of its potential carcinogenic effects and its lack of therapeutic efficacy.

Perceived Use by Patient

High blood pressure, bronchitis, burns, colds, dyspepsia, chicken pox, diarrhea, fever, and rheumatism

Where Obtained

Herb store

Tea

Spanish Name: Té negro

Scientific Name: *Camellia sinensis*

Form
Tea

Constituents

1-4% caffeine, catechin tannins, 15% gallotanic acid

Therapeutic Effects

CNS stimulant

Safety/Toxicity

Caffeine is teratogenic and should be avoided or limited during pregnancy. The condensed tannins are linked to esophageal cancer in areas where large amounts are consumed.

Adverse Effects

Arrhythmias, nervousness, insomnia, increased blood glucose, increased cholesterol levels, excess stomach acid, heartburn

Potential Drug Interactions

Theophylline, alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

Caffeine should be used in moderation. Non-pregnant adults should limit their consumption to 250 mg per day or less. Range of caffeine content: 20-110 mg per 5-8 oz. brewed; 25-50 mg per 5-8 oz. instant

Perceived Use by Patient

High cholesterol, headache, dysentery, excess phlegm, stomach ache

Where Obtained

Herb store, grocery store, health food store

Witch Hazel

Spanish Name: Unknown

Scientific Name: *Hamamelis virginiana*

Form
Tea, topical lotion

Constituents

Tannins, gallic acid, hamamelose, saponins, choline, resins, flavonoids

Therapeutic Effects

Tea: very slight constriction of varicose veins

Topically: astringent, used to treat hemorrhoids

Safety/Toxicity

Unknown

Adverse Effects

None known

Potential Drug Interactions

Alkaloids, salts of heavy metals, albumin, oxidizing substances (permanganates, chlorates)

Comments

It is applied externally by rubbing or fomentation to relieve congestions, bruises, hemorrhoids, and other skin irritations.

Perceived Use by Patient

To stop excessive menstruation; hemorrhages from the lungs, stomach, uterus, and bowels; to treat nosebleeds, hemorrhoids, and diarrhea

Where Obtained

Grocery store, pharmacy

Worm Seed

Spanish Name: Epazote

Scientific Name: *Chenopodium ambrosioides*

Form
Tea

Constituents

Santonin, cineole, thujone, camphene, tenusin

Therapeutic Effects

Anthelminic, diaphoretic, diuretic, fungicide, stomachic

Safety/Toxicity

This oil is quite poisonous, causing fatalities in overdoses preceded by cardiac disturbance, convulsions, respiratory disturbances, sleepiness, vomiting, and weakness.

Adverse Effects

None known

Potential Drug Interactions

None known

Comments

Epazote is used as a carminative, but no scientific studies have proven this effect. It has been discontinued because of toxicity in effective doses.

Perceived Use by Patients

Analgesic, nervine, antispasmodic, to treat asthma

Where Obtained

Unknown

Wormwood

Spanish Name: Estafiate

Scientific Name: *Artemesia absinthium*

Form

Tea

Constituents

Absinthin, anabsinthin, 0.25-1.32% volatile oils (containing thujone)

Therapeutic Effects

None proven

Safety/Toxicity

Thujone is a toxin and can cause effects similar to THC.

Adverse Effects

Habitual use or large doses cause absinthism, which is characterized by restlessness, vomiting, vertigo, tremors, and convulsions.

Potential Drug Interactions

THC

Comments

Commonly used as a flavoring agent and a fragrance.

Perceived Use by Patient

To sleep

Where Obtained

Unknown

References

- Bain, R.J. "Accidental digitalis poisoning due to drinking herbal tea." *Br.M.M.* 290(648Z):1264, June 1985.
- Boules, Loutfy. *Medicinal Plants of North Africa*. Michigan: Reference Publications, Inc., 1983.
- Duke, James A. *Handbook of Medicinal Herbs*. Boca Raton, FL: CRC Press, Inc., 1985.
- Duke, James A. "An Herb A Day...A Mystery Herb???" *The Business of Herbs* 5(1):6-7, March/April.
- Ernst, E. "Cardiovascular effects of garlic (*Allium sativum*): a review," Haemorheology Research Laboratory, University of Munich, Federal Republic of Germany. *Pharmatherapeutica* 5(2):83-9, 1987.
- Fischer, John M. *The Pharmacist's Answer Book*. Lancaster, PA: Technomic Publishing Company, Inc., 1986.
- Gennaro, Alfonso R., ed. *Remington's Pharmaceutical Sciences*. Easton, PA: Mack Publishing Company, 1985.
- Grieve, M. *A Modern Herbal*. New York: Dover Publications, Inc., 1971.
- Grindlay, D., Reynolds, T. "The Aloe Vera Phenomenon: A review of the properties and modern uses of the parenchyma gel." *Journal of Ethnopharmacology* 16(2-3):117-51, 1986.
- Leung, Albert Y. *Encyclopedia of Common Natural Ingredients Used in Food, Drugs and Cosmetics*. New York: Wiley, 1980.
- Martindale. *The Extra Pharmacopoeia*, 29th ed. London: The Pharmaceutical Press, 1989.
- Marton, Julia F. *Major Medicinal Plants: Botany, Culture and Uses*. Springfield, IL: Thomas, 1977.
- Mills, Simon Y. *The Dictionary of Modern Herbalism*. Rochester, VT: Healing Arts Press, 1985.
- Nebelkopt, Ethan. Herbal Therapy in the Treatment of Drug Use, *International Journal of Addiction* 22(8):695-717.
- Rumack, B.H., ed. "Poisindex Information System." *Micromedex* vol. 63, 1989.
- Sommer, M. "Hepatic veno-occlusive disease and drinking of herbal teas." *Journal of Pediatrics* 1154:659-60, 1989.
- Spoerke, David G. Jr. *Herbal Medications*. Santa Barbara, CA: Woodbridge Publishing Company, 1980.
- Srivastava, K.C. "Extracts from two frequently consumed spices—cumin (*Cuminum cyminum*) and turmeric (*Curcuma Longa*)—inhibit platelet aggregation and alter eicosanoid biosynthesis in human blood platelets." Dept. of Environmental Medicine, Odense University, Denmark. *Prostaglandins Leukotrienes Essential Fatty Acids* 37(1):57-64, 1989.
- Stuart, Malcolm, ed. *The Encyclopedia of Herbs and Herbalism*. New York: Grossett and Dunlap, 1979.
- Trease, George Edward. *Pharmacognosy*, 12th ed. London: Bailliere Tindall, 1983.
- Tyler, Varro E. *The New Honest Herbal*, 2nd ed. Philadelphia: George F. Stickley Company, 1987.
- Tyler, V.E., Brady, L.R., Robbers, J.E. *Pharmacognosy*, 9th ed. Philadelphia: Lea and Febiger, 1988.
- Weiss, Gaea and Shandor. *Growing and Using the Healing Herbs*. Ennmaas, PA: Rodale Press, 1985.
- Weiss, Gaea and Shandor. *An Illustrated Guide to Healing Plants*.
- White, Alan. *Herbs of Ecuador*, 3rd ed. Quito, Ecuador: Ediciones Libri Mundi, 1985.
- Windholz, Martha, ed. *The Merck Index*, 10th ed. Rahway, NJ: Merck and Company, Inc., 1983.



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